

Extracted from Final Report submitted by the National Expert

ABBREVIATIONS

CAA	-	Consumer Affairs Authority
CBO	-	Community Based Organization
CCA	-	Ceylon Cinnamon Association
CCC	-	Ceylon Chamber of Commerce
CinCA	-	Cinnamon Cultivators Association
DEA	-	Department of Export Agriculture
EBT	-	Enterprise Based Training
EDB	-	Export Development Board of Sri Lanka
FAO	-	Food and Agricultural Organization
GAP	-	Good Agricultural Practices
GMP	-	Good Manufacturing Practices
GIZ	-	German Technical Cooperation (formally GTZ)
HACCP	-	Hazard Analysis Critical Control Point
HS	-	Harmonized Commodity Description and Coding System
IFRC	-	International Federation for Red Cross and Red Crescent Societies
Ind-Expo	-	Ind-Expo Certification (Pvt) Ltd
ISO	-	Organization for International Standards
ITI	-	Industrial Technology Institute
M&E	-	Monitoring and evaluation
MOH	-	Ministry of Health
NAITA	-	National Apprentice and Industrial Training Authority
NIPM	-	National Institute for Plantation Management
NQS	-	National Quarantine Service
NSC	-	National Seed Council
OECD	-	Organisation for Economic Co-operation and Development
PMSME	-	Promotion of Micro, Small, and Medium Enterprises
ProCom	-	Project Coordinating Committee
PSC	-	Project Steering Committee
PSP	-	Private Sector Promotion Project
R&D	-	Research and Development
ROP	-	Registrar of Pesticides
SCPPC	-	Seed Certification and Plant Protection Center
SLAB	-	Sri Lanka Accreditation Board
SLSI	-	Sri Lanka Institute of Standards
SPS	-	Sanitary and Phyto-sanitary Standards
STDF	-	Standard and Trade Development Facility
TBT	-	Technical Barriers for Trade
TCI	-	Competitiveness Initiative
ToR	-	Terms of Reference

TSC	-	The Spice Council
TVEC	-	Tertiary and Vocational Education Commission
UNIDO	-	United Nations Industrial Development Organization
USAID	-	United States Agency for International Development
VCP	-	Value Chain Component Project.
VEGA	-	Volunteers for Economic Growth Alliance
VTA	-	Vocational Training Authority

MEASUREMENTS AND UNITS

1acre	-	0.4ha
Ha	-	Hectare
LKR	-	Sri Lanka Rupee
US\$	-	United State Dollar
Ppm	-	Parts per million (mg/ kg)
T	-	Tons (x 1,000kg)
US\$1.00	-	LKR112.00

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A. CONTEXT

1. Sri Lanka/Ceylon Cinnamon Value Chain

1.1. End-markets and Trade

The Ceylon Cinnamon (*Cinnamomum zeylanicum* Blume), which is also known as true cinnamon or queen of spices (herein further referred to as cinnamon) is the oldest plantation crop in Sri Lanka. It is also, one of the oldest export trades in the world. In the Old Testament of the Holy Bible, cinnamon is mentioned as a special offering of incense on the altar in Jerusalem Temples, as an important component of the temple service¹. Cinnamon was a highly prized commodity amongst the ancient cultures, where they regarded it as a gift fit for monarchs and deities. It was too expensive to be commonly used on funeral pyres in Rome, but Emperor Nero is said to have burned a year's worth of the city's supply at the funeral for his wife Poppaea Sabina in A.D. 65².

Continuing the tradition, in modern times as well, spices, including cinnamon have been a major export trade for Sri Lanka. But they are considered to be non-traditional export crops, which refers to crops other than tea, rubber, and coconut.

According to the export statistics for the past three years, the turnover from spices and essential oil exports constitutes an average 57% (with an average annual turnover of US\$155.7million)³ of the total export value of the non-traditional crops. Amongst the spices, cinnamon is the single largest non-traditional export crop. According to Table 1, during the past three (03) years, the share of cinnamon, on an average, has been just above 55% (with an average turnover of US\$79.89million).

Table 1: Export turnover performance of cinnamon against all spices and essential oils

	Annual export turnover (US\$, in millions)					
	2008		2009		2010	
	Value	%	Value	%	Value	%
Cinnamon (without essential oils)	82.7	55%	74.18	64%	82.79	46%
All spices (without essential oils)	151.46		115.11		178.73	

(Data Source: Central Bank of Sri Lanka/ Department of Customs of Sri Lanka, 2010)

During the past five (05) years, in terms of value (turnover), the country's cinnamon export trades have shown a steady growth with a rate of little over US\$4million per year (see Figure 1).

(Data Source: EDB, 2010)

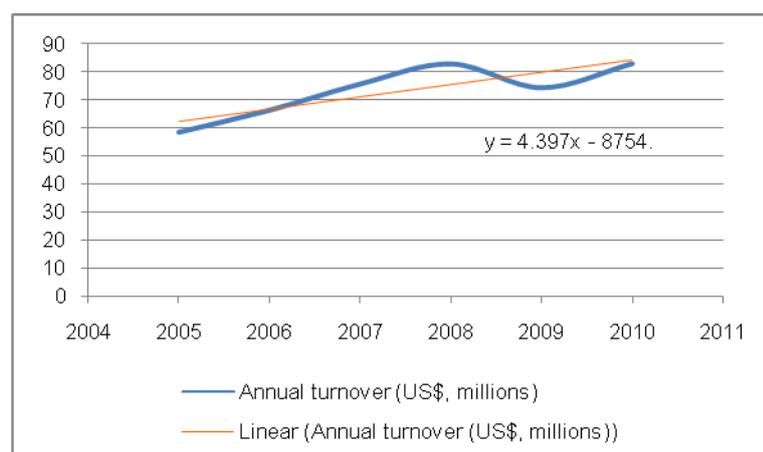


Figure 1: Cinnamon export turnover for the past five years (without the turnover from essential oils)

¹ Reference: Toussaint-Samat 2009, p. 437

² Reference: Encyclopaedia Britannica. 2008. Toussaint-Samat 2009, p. 437f.

³ Source: Central Bank of Sri Lanka and Sri Lanka Customs, 2010

Despite this increasing trend in the annual turnover from cinnamon exports, for the past five (05) years, the annual export volumes of cinnamon remained almost constant at an average of 12,336t⁴. Hence, these figures indicate a trend of increasing unit farm gate price of cinnamon, and according to Table 2, on average it increases at a rate of 16% per year (US\$0.67).

Table 2: Annual performance of farm gate price for cinnamon

	Annual average farm gate price (US\$/ kg)									
	2005		2006		2007		2008		2009*	
	Value	% change	Value	% change	Value	% change	Value	% change	Value	% change
Cinnamon (quills only)	2.99	0%	3.19	7%	4.74	48%	5.48	16%	5.19	-5%

* Provisional

(Data source: Central Bank of Sri Lanka)

Furthermore, these statistics indicate that during this time period, there has been a growing trend of increase in cost of production and demand for cinnamon at the international markets (hence, the increased export turnover). The average price of 1kg of cinnamon was US\$4.32, during 2005 and 2009. Although Sri Lanka enjoys the increased export turnover from cinnamon, the trend of high price for this commodity is affecting the industries competitiveness at the markets, which will be discussed later in this document.

Sri Lanka exports cinnamon to over seventy (70) countries, spreading across almost all continents (see Table 3). From the global market perspective, of the true cinnamon trade, Sri Lanka holds a dominating position with a 90% market share, where the captive markets are placed in the South and Central American countries. The other two countries that export true cinnamon to world markets are Seychelles and Madagascar (collectively, with only a 10% market share).

Table 3: Cinnamon export markets by regions and countries

Market region	Countries
Europe	United Kingdom (UK), Italy, Germany*, Spain, Netherlands, Switzerland, France, Poland, Belgium, Sweden, Austria, Denmark, Norway, Czech Republic, Portugal, Ireland, Swaziland, Greece, Cyprus, Finland
Middle East	Lebanon, United Arab Emirates (UAE), Kuwait, Saudi Arab, Qatar, Israel, Egypt, Bahrain, Morocco, Jordan, Turkey, Oman
North America	United State of America (USA)*, Canada
South Asia	India*, Bangladesh, Maldives, Pakistan, Nepal
South and Central America	Mexico*, Colombia*, Peru*, El Salvador, Guatemala, Bolivia, Argentina, Honduras, Equivador, Chile, Nicaragua, Costa Rica, Guatemala, Panama
South-East Asia	Japan*, Singapore, South Korea, China, Hong-Kong, Philippines, Cambodia, Brunei, Malaysia, Taiwan
Others	Australia*, Nigeria, Latvia, Botswana, South Africa, Mauritius Islands, Zimbabwe, and unspecified

* Main country of export to

(Data source: Sri Lanka Customs Department, 2010)

Out of the Latin American countries, Mexico is the major cinnamon importer for Sri Lanka, and in terms of total average annual export volume, it bears a market share of almost 50% (see Figure 2). Particularly, during the past three (03) years (between 2008 and 2010), Mexico has imported a total of

⁴ The calculations were made on the data made available by EDB on 07/ 04/ 2011.

16,893t from Sri Lanka, with an average of 5,631t per year⁵. The total value of the exports to Mexico during this time period was about US\$121million, at an average of about US\$40million per year.

(Data source: Sri Lanka Customs Department, 2010)

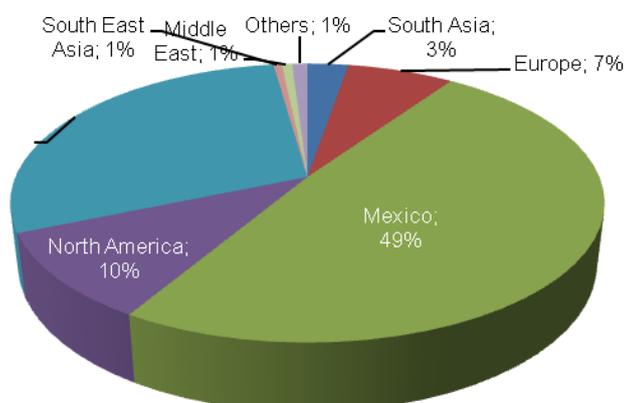


Figure 2: Cinnamon export market share by average import volumes (from 2008 to 2010)

The main export market form for cinnamon is in bulk form with a share of 65% of the total cinnamon exports, while the share of value added cinnamon products (such as cut cinnamon, oil forms, oleoresins, powdered forms, tablets, etc) is only 35%⁶. There are 12 different (according to the designated HS codes) products being exported as bulk forms. The table below provides a HS code wise segregated list of products for the bulk markets.

Table 4: List of HS code wise segregated cinnamon products for exports (as of 2010)

HS code	Product type
09061090	Cinnamon and cinnamon tree flowers
09061002	Cinnamon and cinnamon tree flowers
09061110	Quills cut, in retail packs of 1kg or less
09061120	Other cinnamon quills
09061130	Cinnamon quillings
09061140	Cinnamon featherings
09061150	Chips
09061190	Other
090619	Other
09062010	Cinnamon (<i>Cinnamomum zeylanicum</i> Blume) crushed
09062020	Cinnamon (<i>Cinnamomum zeylanicum</i> Blume) ground
09062090	Other

(Source: Sri Lanka Department of Customs, 2010 and Mr Sarada de Silva, former Chairman of TSC, 2011)

The contemporary cinnamon market also constitutes a segment of certified produced, which are manufactured, packaged, and stored according to the international food safety and process

⁵ Calculations were made by using data forwarded by Ceylon Chamber of Commerce (as of 12/ 02/ 2010); which were based on Sri Lanka Customs Department's statistics

⁶ Source: Personal communication with TSC/ EDB, 2011

standards, viz. Good Manufacturing Practices (GMP), Hazard Analysis and Critical Control Points, and International Standards Organization (HACCP).

The main markets for cinnamon exported from Sri Lanka the main markets Sri Lanka exports cinnamon, in bulk form, are Mexico, other Central and South American countries, and North America. For During the past three years (between 2008 and 2010), Sri Lanka has exported 30,440t of cinnamon to these markets, in an average of 10,147t per year, which represent 88% of the share on both the export volume and turnover generated from cinnamon.

Unlike the strongly established bulk market, Sri Lanka only has a 10% share in the global value added cinnamon markets, where the trade for these products are limited to USA, Europe, Japan, and Mexico. The industry stakeholders find this market position is not sufficient, compared to the potential of the industry; particularly the product development potentials in oils, oleoresins, gift packs, and packaging.

In terms of commercial applications of the cinnamon bark, as well as the other cinnamon products in value added product segments such as food, perfumery, pharmaceutical, and essence industries, have been widely known. Cinnamic aldehyde, the major constituent of the cinnamon bark oil, is an important food flavoring agent. Cinnamon oleoresin, an important product of cinnamon, has similar applications in the food industry. Eugenol, an aromatic compound, extracted from cinnamon leaf oil is often used for flavoring toothpaste along with mint and eucalyptus oils.

1.2. Production Base (Cultivation)

Cinnamomum Zeylanicum Blume, belongs to the Family Lauraceae, usually grows up to 5m - 6m high (but pruning is carried out to maintain a desired height) and blooms whitish small flowers with a unique fragrance and bears small, green colour fruits. However, only its bark leaves, and wood (after peeling) are the economically viable parts. But sometimes, the plant's roots are being used to extract camphor-rich, pharmaceutically valuable oils⁷.

Cinnamon is a hardy plant, which grows in a broad agro-climatic (soil and weather conditions) scope. However, to yield the intrinsic flavour and aroma, the cultivation conditions should be carefully checked). The extensive cultivation of the plant is mainly in the climatic zone of Wet Zone, and secondly in the Intermediate Zone. In Dry Zone areas, cinnamon could be found, but in a lesser density. Cinnamon can be grown on various soil types including loam, sandy, and gravelly soils of laterite type. The most suitable temperatures are between 20⁰C and 30⁰C with an annual rain fall between 1,250mm and 2,500mm. Cinnamon can be seen growing favourably at elevations between 300m and 350m of Mean Sea Level.

In the past, cinnamon was cultivated in rows of 4feet spacing, and as a mono-crop. Systematic control of weeds and properly maintained bushes would assure a good yield of a cinnamon plantation. A cinnamon plantation is usually harvested once in eight (08) months.

Seven (07) types (cultivars) of commercially valuable cinnamon are found in Sri Lanka (see Table 5); which are differentiated primarily based on their aromatic (pungency of bark and petiole), textural (of bark), and structural (of leaves) attributes⁸.

Table 5: Different cultivars of *Cinnamomum zeylanicum* in Sri Lanka

Type	Common name (available only in Sinhala)
Cinnamomum Type1	Pat Kurundu or Mapat Kurundu
Cinnamomum Type2	Na Kurundu
Cinnamomum Type3	Pani Miris Kurundu
Cinnamomum Type4	Weli Kurundu

⁷ Reference: Faculty of Agriculture, University of Peradeniya of Sri Lanka, Agronomy of Cinnamon, time unknown, Peradeniya,

⁸ Reference: DEA, Technical Bulletin No. 5, 1996

Cinnamomum Type5	Sewala Kurundu
Cinnamomum Type6	Kahata Kurundu
Cinnamomum Type7	Pieris Kurundu

(Source: DEA)

Apart from these types, DEA⁹ has introduced two (02) new varieties of cinnamon, namely Sri Gamunu and Sri Wijaya; which give more harvest (about 50%) and result in a high quality produce for oil extraction.

The propagation of the plant is carried out by using seeds or vegetative parts (mainly by stem cuttings)¹⁰. Regardless of the propagation mean, the selection of a suitable mother plant is based on the bark's aromatic and textual characteristics, along with the growth parameters and tolerance to pest and diseases.

Cinnamon cultivation is traditionally a part of the life style of the people of Galle and Matara Districts of Southern Province. Particularly, in Galle, most of the cinnamon plantations (small as well as large) are placed, not more than 3km away from the coastline while in Matara, cinnamon plantations are more to the interior, about 12km from the coast. Of recent times, extension of this cultivation to several other districts, namely Hambantota (in Southern Province), Ratnapura (Sabaragamuwa Province, mid-country), and Badulla (Uva Province, up-country) has been noticed.

According to DEA, as of 2009, the total cultivated land extent of cinnamon is 29,415ha. Galle District is the main cinnamon cultivation area with 41% of share in the total cultivated extent, followed by Matara and Ratnapura Districts with 21% and 14% of shares respectively. The balance 25% of the cultivated land extents being shared amongst Hambantota, Badulla, Kalutara, and other districts (see Figure 3).

(Data source: DEA, 2010)

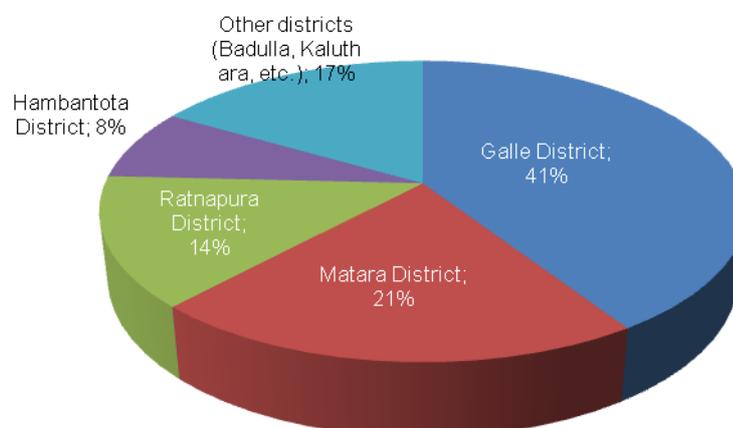


Figure 3: Distribution of cinnamon cultivated lands by districts

The total annual production from these lands is little over 15,000t, of which 13,000t is being exported with the assumption that the balance quantities being utilized for the local markets¹¹.

According to DEA, the productivity of a well managed, well matured cinnamon plantation is estimated as 1,000kg/ ha per a year, and this level of production could be maintained up to 40 years. According

⁹ R&D was carried out and introduced by the Cinnamon Research Center, Palolpitiya, Tihagoda.

¹⁰ In Sri Lanka, the commercial use of micro-propagation like tissue culture technique not observed. The open layer system, which is mainly used for Cassia is also not observed to be practiced on the Sri Lankan cinnamon.

¹¹ The local consumption volume is estimated on the assumption of the balance produce of the total national production, after deducting the export volume. It is however, could constitute production losses because of not meeting the export quality and standards.

to Anura Heath (2003), however, the actual productivity is much less than this estimated figure and ranges from 388kg/ ha (under a mixed cropping) to 623kg/ ha¹² (under a mono-cropping) per harvest. He further found that this gap between the estimate and the actual is mainly because of lack of investment attitudes of growers due to the high labour involvement in cinnamon peeling. Furthermore, as of 2009, the estimated national average is about 510kg/ ha.

The majority (likely to be 90%) of cinnamon plantations, particularly the large holdings are cultivated as a mono-crop while the balance 10% is cultivated as a mixed crop, particularly in areas such as Kalutara and Ratnapura Districts, intercropped with other perennial crops like coconut¹³.

Usually, the financial returns of a cinnamon (as a mono-crop) plantation starts two (02) years after its establishment, and it will culminate (in an ideal situation) in the seventh (7th) year of the plantation being established. Productive life cycle period of a cinnamon plantation is, usually, 40 years.

Costs of labour and material inputs such as agro-chemicals (chiefly on fertilizers) comprise the cost component (cost of production) of a cinnamon plantation (see Figure 4). Of these two expenditures, on average, the labour cost is 67% whilst the balance 19% is the average cost for the material inputs. Usually, across the 40 years of a plantation life cycle, the labour cost increases at a rate of approximately 1% per year, before it comes to a constant, at 76% of the production cost, in the eighth (8th) year after the establishment. The range of cost share for the labour requirement is between a minimum 58% in the second (2nd) year before the first harvest and a maximum 80% during the first fifth (5th) and sixth (6th) years of a plantation. Inversely, the cost of material inputs reduces across the plantation life cycle at a rate of about 3%, before it comes to a constant at 12% in the eighth (8th) year. The range of material cost's share is between a minimum 12% from the eighth (8th) year onwards and a maximum 42% in the second (2nd) year.

(Data source: DEA, 2003)

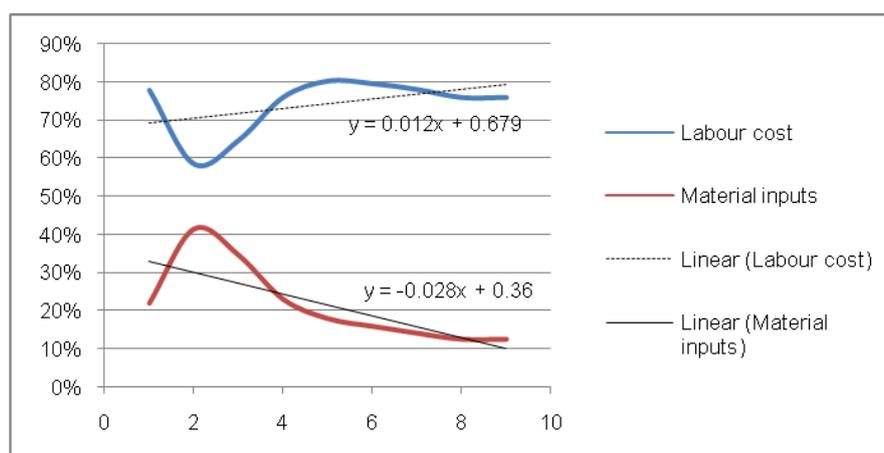


Figure 4: Constituents of cinnamon production cost and their dynamics

Therefore, cinnamon is a labour intensive crop, with the cost of labour deciding its cost competitiveness. Presently, this has a greater weight age, where on cinnamon production (this is in fact the primary processing of peeling off the bark from the stem) the workers (commonly referred to as cinnamon peelers) are demanding 33% or 50% of the harvest. This unusual situation is arising because of the scarcity of cinnamon peelers at cinnamon plantations and ¹⁴lack of inclination of the holders to upgrade the production conditions and means.

¹² Although DEA states the national average to be in this range, some producers estimate the productivity to be at much higher a range, i.e. between 850kg/ ha and 900kg/ ha (Reference: Key person interviews with Mr Mahendara Wickramasinghe, Managing Director, Tropical Island Products (Pvt) Ltd, Mr Janaka Wickramasinghe, Director, Tropical Island Products (Pvt) Ltd, Mr Sarada de Silva, Managing Director, Intercom (Pvt) Ltd on 28th March 2011 and 1st April 2011)

¹³ Reference: DEA (2003)

¹⁴ Reference: Anura Herath (2003)

From a materials perspective, cinnamon is a less material input intensive crop that can be grown under natural and low external inputs conditions; therefore, this shows lower dependency (and effect on the production cost) on external input cost such as fertilizers and other agro-chemicals, unless the plantation is not managed with proper (or good) agricultural practices. The crop has a relatively short breakeven point, which is about two and a half year (see Figure 5). The payback period of the crop is also relatively shorter, within just three (03) years of its establishment (see Figure 6). Furthermore, the business profitability¹⁵ of cinnamon cultivation is relatively high. In fact it is higher than the annual income of an average grade public officer; which is LKR180,000 (at a rate of LKR15,000 per month)^[General remark]. For instance, in 2003, the business profitability of a cinnamon plantation at the eighth (8th) year or above was little over LKR260,000 per ha¹⁶.

(Data source: DEA, 2003)

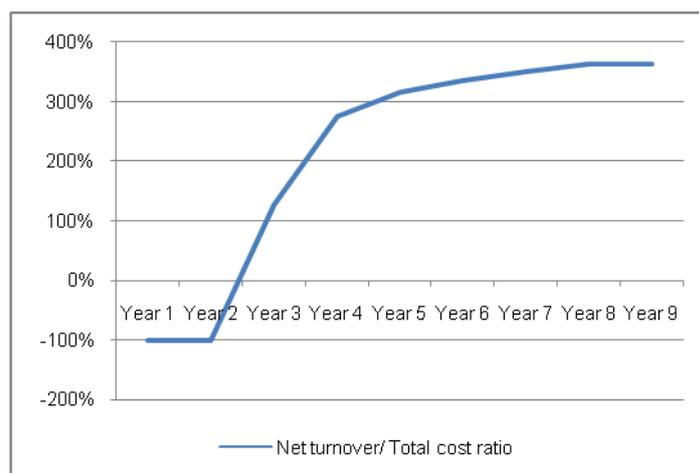


Figure 5: Breakeven point of a regular cinnamon plantation

(Data source: DEA, 2003)



Figure 6: Payback period of a regular cinnamon plantation

An estimated 350,000 households^(an estimated figure) benefit from the cinnamon industry. The grower base mainly comprises smallholders of over 70,000 population^(an estimated figure). Therefore, the Sri Lankan

¹⁵ In here the business profitability is defined as gross profit before taxes, post-harvest losses, macro-economic losses like inflation and currency depreciation, depreciation on assets, and opportunity cost. But it includes the capital expenditure and cumulative value of un-covered recurrent cost (labour and material costs). However, in this assessment, the capital expenditure is taken as included in the recurrent expenditure for the first two years of the investment.

¹⁶ This figure is based on the data available by DEA as of 2003.

Government emphasises on developing the cinnamon industry by providing subsidies, credits, extension, and research inputs and assistance for cinnamon production. For instance, between 2001 and 2003, the Government has invested, about US\$0.4million, in the industry for new planting, replanting, and rehabilitation¹⁷.

1.3. Activity Linkages (Sourcing Inputs and Supplies)

Following the standard approach of the value chain analysis framework, the activities related to the cinnamon industry (for a competitive advantage¹⁸) are categorized into the two categories of primary and support activities. The primary activities of the value chain are concerned with the production and supplies from raw materials to end-markets and consumers whilst the support activities include input supplies, services, and regulation and conformity (see Figure 7).

Like most agro-value based chains, the primary activities of the cinnamon value chain are carried out by the private sector firms or entrepreneurs. These value chain stakeholders could be small, medium, or large. Micro scale business units could be found, mainly, amongst the producers (growers) at the bottom of the cinnamon value chain.

The primary (blue colour boxes) and supportive activities (orange colour boxes) of the value chain are geographically bounded and segregated as local (domestic) and international (off-shore) value chain. These value chain segments are divided by the international – local value chain border. Some activities and issues of the value chain are only limited to a one segment of the value chain, but some, like quality and standard conformity, transcends the boundaries and inter-relates to affects the concerned activities and corresponding linkages.

Upstream activities: The upstream of the cinnamon value chain comprises the producer base and cinnamon peelers involved in the primary activities. Sometimes, small scale producers could also be cinnamon peelers. In generally however, cinnamon peelers are a specialized skilled group in the local society.

Cinnamon peeling is a traditional art, which is handed over from one generation to the other through informal learning. Young peelers are given the opportunity to practice cinnamon peeling as apprentices, under the supervision of a veteran (master) peeler. Usually, this skill is passed by parents to their children.

The high price of payments to the cinnamon peelers results in high cost of production. At present cinnamon peelers are paid by share of the harvest. At areas in Galle District, this is 1/3 of the harvest whilst in areas of Matara areas and other cinnamon cultivating districts, the share is ½; such high payments due to the scarcity of peelers¹⁹. Cinnamon peelers work as a group (in the native tongue, it is referred to as “kalliya”), who perform the job of cutting down and bringing in cinnamon trees to the peeling shed and peeling; sometimes they also do the weeding and pruning the crop. The linkage between cinnamon peelers and producers is very strong; but at present, it is the cinnamon peelers posses more control over the transactions between the two.

¹⁷ Reference: Administrative Report of DEA (2003)

¹⁸ The competitive advantage or competitiveness of a value chain, according to Michel Porter (1985) pursue through (a) cost advantage; and (b) differentiation. The cost advantage is pursued by cost reduction on individual value chain activities or by reconfiguring the chain. The differentiation advantage of a value chain achieved through by either changing its individual activities or reconfiguring the chain. Often differentiation results trade-offs between cost and differentiation.

¹⁹ Reference: Personal communication with several producers, exporters, and other industry stakeholders (2005 – 2011).

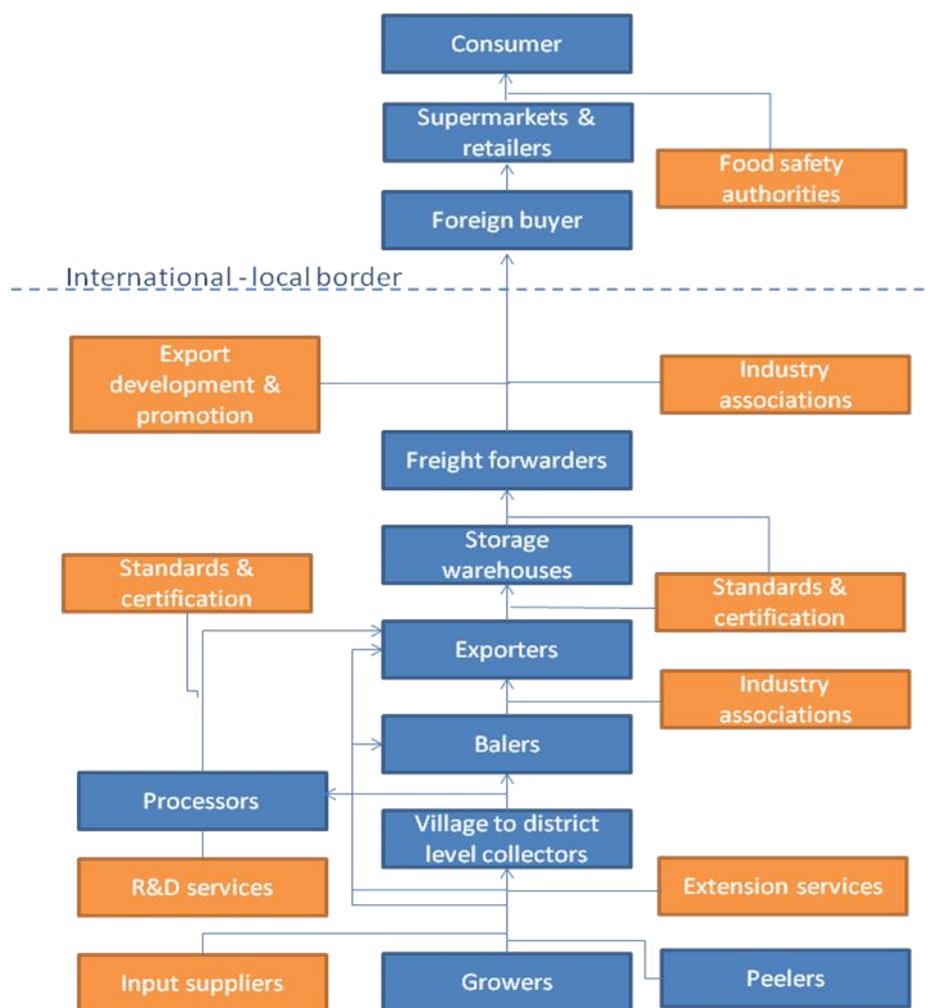


Figure 7: Structure of the cinnamon export industry value chain

Since there are no confirmed population statistics on both the producers and peelers, with the expectation of an estimated figure of 30,000 peelers as of 2010, it is hard to know how many producers exist and their categories. It is only known, but not verified, that there are over 70,000 small-holder cinnamon producers (with an average extent of 0.5ha) and they are the majority of the growers while only 5% to 10% are the considerably large plantations (with an extent of 8ha to 20ha)^{20,21}. The majority of producers (about 90%) do not cultivate cinnamon as fulltime engagement; most of these growers are part-time, engaged in other professions as their main livelihood. They hire personnel to manage their crop-holdings. As a result of their part-time engagement, these holders lack the proper knowledge and strong commitment to manage their holdings properly (with correct agronomy)²². Alternatively, some producers are at, at least the third (3rd) generation of cinnamon cultivating, and they demonstrate strong commitment to their plantations. Such producers carry extensive experience and hands-on knowledge about the crop.

The supply chain rising from small-holders seems bit complex comparison with the supply chain from the large plantations. With the exception of some small-holders, the majority of the small-holders do not possess transportation capacity to deliver the produce to their immediate market, known as balers.

²⁰ Source: Economic Research Report No. 18, DEA (2003)

²¹ However, during the information survey, it was informed that there has an initiative been taken by DEA to register the cinnamon producers.

²² Reference: Key person interviews with Dr IR Ferdinand, Owner, an estate in Tihagoda, Mr Chandana de Silva, Owner of Attadiya Estate (Pvt) Ltd, Mr Munasianghe, Manager, Batuhena Estate (Pvt) Ltd, and Mr Wijith De Zoysa Jayathilake, Managing Director, Dasanayake Walawe Plantation (Pvt) Ltd on 31st March 2011 and 6th April 2011

The majority of small-holders supply to village level collectors (dealers), who normally come to their lands to purchase the produce²³.

The producer associations are the main horizontal linkage in this part of the value chain. Ceylon Cinnamon Association (CCA), also known as “Lanka Kurundu Sangamaya” is the pioneer amongst these. Cinnamon Cultivators Association (CinCA) is the other main producer association. It was established in 2006 by DEA²⁴. TSC also has a good collection of producers, but mostly with large and medium level holdings.

Although cinnamon peelers have not become a part of such associations, they have an established network, but of segmented groups (or gangs). Most of these gangs comprise family members, relatives, or own community members, and mainly coordinate (to be consistent) on their payment demands.

The main support activities at this part of the value chain are: (a) input suppliers like fertilizer and other agro-chemical dealers, plant nurseries, and other farm implement and material suppliers; and (b) extension services on cultivation which are provided by DEA and; include holding field demonstrations, “training” (but not regularized), advisory, and fertilizer and plant subsidies. The input suppliers are mainly, private sector firms. Recently, large scale producers have started to obtain services of the private sector companies for fertilizer demand analysis and recommendations²⁵.

Mid-stream activities: Middle part of the value chain comprises the collectors or commonly called dealers, and the balers (as the primary activity stakeholders). The collectors do the collection and distribution of raw material supplies (cinnamon quills) across the chain and the balers attend to the sorting, grading, and fumigating (with sulphate) of the cinnamon supplies.

During the past five years, the population of dealers has increased because of the increased price for cinnamon. The negative aspect of this population increase is the reduced traceability and quality control²⁶. Furthermore, during the fact finding missions, it was learned that the governance of cinnamon supply chain is mainly controlled by the collectors or dealers; but, they demonstrate very little accountability in assuring and maintaining product standards and quality. It was also learned that there is an auction for those acting as a buyer – seller market place (to channel supplies to the exporters). This auction is known as the Colombo Auction, however it has become almost non-functional, with most of the supplies channelled either through the collectors or directly to the exporters.

Business dealings amongst the collector base are complex. Unlike the business between the growers and exporters (based on trust and long-lasting relationships), collectors tend to do business through competitive bidding and maintaining reputation on purchasing power (clout). Hence, demonstrating strong competition and mistrust; consequently vulnerability to manipulation and violations of trade standards and norms arises (hence, frequently affected with the credit issues).

Apart from being in large numbers, dealers form a complex network that starts from village level and extends up to the district level; sometimes, this network can go beyond to other districts as well.

It is rather interesting to observe that at this stage of the value chain no supportive activities are linked to the primary activities.

Downstream activities: Processors, exporters, storage warehouses, and freight forwarders comprise the downstream, but local segment of the value chain. The international segment of the downstream activities consists of off-shore buyers, supermarkets and retailers, and the consumer.

²³ Reference: Key person interviews with Mr Lyina Nalaka Dushmantha Mudali, Mr Jayaratne Pitiyanage, Mr Senanyake Cecil, Mr Samson Karunaratne, Mr Muthumune Ajantha, and Mr Gamini Zoysa on 6th April 2011

²⁴ Reference: www.alibaba.com/member/cinca.html

²⁵ Large enterprises like Ceylon Chemical Industries (CIC) provide this service.

²⁶ Reference: Mr Mahendara Wickramasinghe, Managing Director, Tropical Island Products (Pvt) Ltd, Dr Janaka Wickramasinghe, Director, Tropical Island Products (Pvt) Ltd, Mr Sarada de Silva, Chairman, Intercom (Pvt) Ltd on 28th March 2011 and 1st April 2011

There are 254 registered private sector companies in Sri Lanka which export cinnamon to commodity or bulk markets²⁷. There are another 34 private sector companies, which export value added products such as cinnamon oils (leaf, bark, and essential oils) and cinnamon flavoured tea bags (likely to be a one company). These companies range from small and medium to large.

Currently, there are (likely to be) only three (03) companies that manufacture cinnamon based value added products, mainly essential oils, for the export market.

Some exporters and manufacturers (processors) deal directly with the producers (growers) to source the produce. But most of the exporters source their supply volumes through the collectors (dealers). Either way the producers have to channel them through the “dealer-balers” for sorting, grading, and fumigation, with the exception of some exporters, who have backward integrated to take up baling for better control over quality and standards assurance (e.g. Intercom (Pvt) Ltd).

Storage warehouses are used by both the exporters and processors (manufacturers). The exporters use this facility for storing until the consignment is freighted to the off-shore (foreign) buyers while the manufactures use it for storing until the processing takes place. But some exporters and processors forward integrate to take up storing as well. The advantage for them in undertaking this task is the assurance that their stocks are free from contamination. Examples of these enterprises are Intercom (Pvt) Ltd, Tropical Products (Pvt) Ltd, and Eoas Organic (Pvt) Ltd.

The significant aspect of this part of the value chain is the presence of an active industry association, viz. TSC. This association is established to be the apex body for the spices and allied products sectors, and includes all key stakeholders, representing exporters, producers and manufacturers, public institutions, R&D institutions, and other industry specific organizations. DEA, EDB, and ITI are mandatory board members of TSC, where DEA holds the position as the vice-chairperson. TSC was founded in December 2003 as a not-for profit organization registered under the Registrar of Companies Act No. 17 1982, Section 15 (1). The organization stated its activities in February 2004.

The main supportive activities that linked to the primary activities of this value chain section are: (a) R&D services; (b) standards and certification, and (c) export development and promotion.

The key R&D institutions are: (a) ITI for product related chemical analysis and diagnostics and product development; (b) DEA for productivity related research and technical support; and (c) state universities like Ruhuna and Moratuwa Universities for research and technological innovations. The linkage between the existing R&D services and exporters and producers founds to be weak. The exporters and producers find that the existing R&D services should improve their services on by being time and cost effective, competitive and enforce standards, and to be demand responsive²⁸. However, contrary to this situation, recently, TSC has established a research partnership with the Medical Faculty of University of Peradeniya to analyze the medicinal properties, particularly the anti-oxidant nature of cinnamon. This research project is funded by the Sri Lankan Government.

ITI is the pioneer R&D institution that has been linked with the cinnamon value chain. They have been working for the cinnamon industry since, 1960's. ITI holds the honour of characterizing and identifying the Ceylon Cinnamon (*by Prof. ROB Wijesekera*). Following this achievement, they managed to identify and establish the available cinnamon varieties, cinnamon bark and leaf oil extraction, and contrasting with ill effects (coumarine) from cassia. The way forward from the chemical identification of Ceylon Cinnamon, ITI is attempting to establish genetic bar coding for this crop. But this endeavor is facing the challenge of limited bio-technological capacity. In addition, ITI has tested and proven at laboratory level, the bio activities of cinnamon on anti-oxidant and anti-diabetic nature of cinnamon, and the findings and a request were lobbied to the National Research Council for clinical trials on human subjects.

The other key R&D institution for the cinnamon value chain is DEA. This is a state institution for supporting the production of all non-traditional export crops (spices, fruits, vegetables, etc.).

²⁷ <http://www.alibaba.com/products/cinnamon/LK>

²⁸ Reference: Mr Mahendara Wickramasinghe, Managing Director, Tropical Island Products (Pvt) Ltd, Mr Janaka Wickramasinghe, Director, Tropical Island Products (Pvt) Ltd, Mr Sarada de Silva, Chairman, Intercom (Pvt) Ltd on 28th March 2011

Therefore, the R&D interest of DEA, naturally, is focused on production and immediate processors of cinnamon. For this purpose, they have established several research stations around the country. The main research station is at Matale, Central Province while in Tihagoda, Matara, they have a research station dedicated for cinnamon. As discussed earlier, DEA has successfully introduced two improved varieties, viz. Sri Vijaya and Sri Gamunu. Furthermore, DEA has explored beyond the production aspect and advanced into value added product development; consequently, developed a carbonated cinnamon drink and a cinnamon based candy (toffee), but still not advanced from there to a commercial scale production. Apart from these achievements, several research activities were implemented to find solution for cultivation issues including pests and diseases.

The Agriculture Faculty of Rhuna University has made a R&D initiative (over 10 years before) to mechanize cinnamon peeling process. This initiative was to replace manual exercise of rubbing the scraped cinnamon stems with a simple machine. However, unfortunately this rubbing machine could not perform to the expectations, even after improvements made thrice (03). Another achievement of this university in this interest was the Processing Table – Chair Unit, which is an implement that enables to do the scarping off the ground. In parallel to this mechanical innovation, University of Moratuwa also has embarked on improving the mechanization aspect.

In parallel to these R&D endeavours, some processors (firm value chains²⁹) have built up in-house R&D capacities for making this supportive activity a primary activity. Eoas Organic (Pvt) Ltd is one such processor (and exporter) company, which has made a significant investment to develop a sophisticated R&D technology and systematically apply them for developing new products.

The services for exporters and producers to certify their products and operations are provided by internationally accredited certification agents. These agents could be private sector firms such as SGS (Pvt) Ltd and Control Union (former SKAL International) or public institution like Sri Lanka Standards Institute (SLSI) or non-profit organizations like Ind-expo Certification (Pvt) Ltd. These organizations provide a vital input to the value chain; which enables it to link with markets that have specific (e.g. organic, fair trade) quality and/ or stringent (e.g. ISO, HACCP) food safety standard conformities.

The service of export development and promotion to the value chain is provided by EDB. This is a state institution, which comes under the purview of the Ministry of Industries and Commerce. The services that EDB provides include market information, networking, facilitating trade fairs (local and international), policy advocacy, financing, and strategy guidance.

The international segment of the value chain is mainly decided by the consumer and food safety authorities. The food safety standards conformity parameters are strictly adhered in the countries belong to Organisation for Economic Co-operation and Development (OECD). In the present context however, Sri Lanka's main market for cinnamon are non-OECD countries. Sri Lanka's market share in OECD countries has been limited due to these entry barriers, where the country's most of the supplies fall-short on complying to these food safety parameters³⁰.

1.4. Production Capacity and Technology

As discussed above, cinnamon peeling is a highly skilled technique, which is traditionally transferred from one generation to the other, by informal learning manner. This occupation is physically demanding and has to work in hard conditions, and carrying out tedious tasks for long hours. These de-factor circumstances, continuing for long time, had developed a social stigma on cinnamon peeling vocation.

Cinnamon is harvested twice a year, starting when the trees are two (02) to three (03) years old, from the crop establishment. The first harvest is taken, at least pruning the plants one time. Cinnamon is

²⁹ A firm's value chain is a part of a larger system that includes the value chains of upstream suppliers and downstream channels and customers (Reference: NetMBA.com> Strategic Management> Value Chain [date unknown])

³⁰ Reference: Mr Mahendara Wickramasinghe, Managing Director, Tropical Island Products (Pvt) Ltd, Mr Janaka Wickramasinghe, Director, Tropical Island Products (Pvt) Ltd, Mr Sarada de Silva, Chairman, Intercom (Pvt) Ltd on 28th March 2011

always harvested immediately after each of the two rainy seasons (peaks overlapping mid March and mid December of year), when the rain-soaked bark can be more easily stripped from the trees.

Harvesting of cinnamon plants, usually, starts in early morning by experienced and skilled personnel, while the other workers, who could be with lesser competencies, would collect the cut cinnamon trees, do the bundling, and bring those bundles to a peeling shed or factory. For cutting cinnamon trees from a bush, the workers use a tool called “keththa”, which is sharp, large knife. After bringing the cut trees, experienced workers start the peeling process of cinnamon. The removal of the rough outer bark of the trees is the first step of this process. For this, they use a sickle kind of knife called “kokeththa”. Following the removal of the outer bark, rubbing of the inner bark will take place, until the stem started to “sweat” (squeezing out the moisture in the bark) and become loos. For this they aid a 10inch brass rod. Further to the rubbing, the trees’ inner bark, which is the economically most valued part of the crop, will be removed from their stem by use of a sharp, stainless steel tool named “thalana kokeththa”. This task of the process should be carefully executed. The removed barks will be left to curl and wither under mild sunlight. After being dried, the cut cinnamon pieces will be joined and cut out the uneven edges by using a pair of scissors, to make quills of 42inch. The smaller pieces of cinnamon would be filled up the cavity of these quills (commonly called as “bada ambareema”). The quills then will be left on line-racks to further dry by the most experienced workers. After drying, the quills will be subjected to pressure roller to assure the uniformity. Finally, the cinnamon quills will be graded, bundled, packed, and stored.

Despite it is being a financially rewarding occupation, there is a significant drop of cinnamon peeler population has been observed. This situation has caused scarcity of skilled personnel for crop maintenance and peeling of cinnamon³¹. Because of the long-lasting social stigma, physically exhaustive nature of the vocation, and less attractive work environment, the younger generation lost interest in taking up the vocation, despite the high income from it (in one case, a peeler receive LKR17,000, only for working nine days)³².

Although it is a highly skilled occupation, there is no institutionalized training on cinnamon peeling. The existing mechanism (which was started in 1988) for developing skills on this occupation is the field level, five (05)-day, training program that is carried out by DEA for the new comers to cinnamon peeling (following the training, the participants would be provided with farm implements for starting the peeling). According to DEA, during the period between 1988 and 2010, the total number of people trained on cinnamon peeling is 10,000, but only 30% of them had continued on the occupation. Understanding the low retention rate of this training, DEA has decided to streamline the training. As a result of this, they have embarked on a project, funded by the Government, to construct a training facility (with an estimated cost of LKR10million) in Tihagoda, Matara. DEA expects to finish and start operations by end of June 2011. This training facility would accommodate (but without residential amenities) about 40 trainees and the training contents would cover GAP and GMP practical application requirements³³.

The definition of Tertiary Education and Vocational Education Commission (TVEC), which is the policy making and regulatory national body for this forte, on training is recognized as a *system and a process, which enable people to be competent on skills requirements that would be assessed by an industry; or in other wards a delivery mechanism that result a competent human resource, according to the skills benchmark against the industry requirements*³⁴. Through the fact finding missions, it was learned that most of the people (70% of the total attendants) at the existing training programs of DEA, would not take up the occupation, and rather leave for some other occupations.

³¹ Reference: Key person interviews with Dr IR Ferdinand, Owner, an estate in Tihagoda, Mr Chandana de Silva, Owner of Attidiya Estate (Pvt) Ltd, Mr Munasianghe, Manager, Batuhena Estate (Pvt) Ltd, and Mr Wijith De Zoysa Jayathilake, Managing Director, Dasanayake Walawe Plantation (Pvt) Ltd on 31st March 2011 and 6th April 2011

³² Reference: Key person interviews with Mr Lyina Nalaka Dushmantha Mudali, Mr Jayaratne Pitiyanage, Mr Senanyake Cecil, Mr Samson Karunaratne, Mr Muthumune Ajantha, and Mr Gamini Zoysa, who are small-holders and peelers. The interviews were held on 6th April 2011.

³³ Reference: Key person interview with Dr WDL Gunaratne, Deputy Director and Mr MKA Rupasinghe, Deputy Director (Technical) of DEA on 11th May 2011.

³⁴ Reference: Key person interview with Dr TA Piyasiri, Director General, Mr BHS Suraweera, Deputy Director General, Mr SUK Rubasinghe, Deputy Director (Standard and Accreditation), and Mr Gamini Gunasinghe, Consultant (TVET Planning) of TVEC on 27th April 2011

The implements that are used in cinnamon peeling are shown a little advancement from the days that they started to being using³⁵. Although there have been some efforts made during past 10 or so years, still mechanization is unable to capture the interest and fell-short in fulfilling the critical requirements of improving the work and time efficiency of the cinnamon production³⁶. However, contrast to the production technology, the processing technology has developed significantly, particularly in oleoresin and essential oil extractions. This advancement has to be largely credited to the commitment and investment of some private sector companies like Eoas Organic (Pvt) Ltd.

The existing infrastructure for cinnamon production is basic and like the technology, has not developed over the years. Majority of cinnamon peeling is carried out in a veranda of the producer's house or a shed (commonly called as "wadiya", which is place for 30 to 40 people to work) made out of local timber poles and roofed with corrugated tin sheets or Cajuns. Only very few growers have upgraded infrastructure (to factory level) for peeling cinnamon. As a whole, the lack of proper production infrastructure is a major problem for the industry, particularly on conformity issues and enabling an attractive and worker friendly environment for the cinnamon peelers.

Compare to the production infrastructure, the manufacturing infrastructure of cinnamon is developed³⁷. Some of these manufacturers are having state of the art facilities with modern technology applications.

Training infrastructure for fulfilling the industry specific skills requirements is a missing element in the value chain, and overlaps with the slow advancement of the production infrastructure and technology. Nevertheless, there is a high demand from the producers (large and small holders) for establishing a dedicated training facility³⁸, mainly because of training personnel for crop management and peeling, according to required standards and quality; and to fill up the workforce need to carry out cinnamon production efficiently³⁹.

The production capacity and technology aspect of the cinnamon export value chain of the country could be considered as its weakest dimension.

1.5. Governance and Socio-cultural Aspects

The cinnamon value chain has a complex governance⁴⁰ arrangement. There are there are two (02) sub-sets, i.e. commodity (bulk) and value added in the cinnamon value chain. The predominant sub-set of the two is the commodity market based segment.

In the commodity (bulk) market based value chain sub-set can find two types governance; which are: (a) Market⁴¹; and (b) Relational⁴², whereas for value added value chain sub-set, the governance type is Hierarchy⁴³.

³⁵ Reference: Upul Ranaweera, A rapid survey on the use of tools, equipments and machines in Cinnamon industry of Sri Lanka (2005)

³⁶ Reference: Key person interview with Mr KGG Wijesinghe, Research Officer In-charge, Research Sub-station of DEA in Tihagoda, Matara on 31st March 2011

³⁷ Most of the manufacturers are not only limited to cinnamon; they do other crop products, like pepper, nutmeg, cloves, etc. as well.

³⁸ This statement is based on the findings from the key person interviews.

³⁹ Reference: Key person interviews with Dr IR Ferdinand, Owner, an estate in Tihagoda, Mr Chandana de Silva, Owner of Batapola Estate (Pvt) Ltd, Mr Munasianghe, Manager, Batuhena Estate (Pvt) Ltd, and Mr Wijitha De Zoysa Jayathilake, Managing Director, Dasanayake Walawe Plantation (Pvt) Ltd on 31st March 2011 and 6th April 2011

⁴⁰ The theory on value chain governance generates five (05) types of global value chain governance (i) Hierarchy; (ii) Captive; (iii) Relational; (iv) Modular, (v) and Market - which range from high to low levels of explicit coordination and power asymmetry (Reference: Gary Gereffia, Humphreya John, and Sturgeona Timothy, *The governance of global value chains, Review of International Political Economy, Volume 12, Issue 1, 2005, Pages 78 – 104*)

⁴¹ Market governance means: when transactions are easily codified, product specifications are relatively simple, and suppliers have the capability to make the products in question with little input from buyers, asset specificity will fail to accumulate and market governance can be expected. In market exchange buyers respond to specifications and prices set by sellers.

The business transactions between the off-shore buyer and the local exporter (downstream channels) of the commodity market based value chain sub-set are governed by the markets. The buyer specifications for cinnamon are simple in this sub-set, and hence, exporters find easy to conform. In the value chain, these specifications for cinnamon are called as grades. There are four (04) main grades, viz. Alba (the best), Continental (C grade), Mexican (M grade), and Hamburg (H grade); and each of these grades further divided into sub-grades (see Table 6) to make up to a total of 12 categories.

Table 6: Grades and sub-grades of Ceylon Cinnamon Quills

Alba	None
Continental (C)	C00000 special, C0000, C000, C00, C0
Mexican (M)	M00000 special, M00000, M0000
Hamburg	H1, H2, H3

Source: ISO6539 – 1997(E)

Whereas, in the mid and up-streams, the governance is relational. The relationships amongst the exporters, producers, and other operators alike, are the basis of their business transactions. Codified grades are respected, but not necessarily applied in a codified manner; in many cases it is found that they are carried out on verbal agreements and covenants. Therefore, the social network, especially amongst the exporters and producers, is an important and strong feature of this value chain.

The business culture as such, these entrepreneurs carries themselves with a great pride of the suppliers of the world's best cinnamon.⁴⁴ For them the quality trade mark on their supplies is significant and bears a great weight-age in their social reputation. Another distinctive feature of this value chain is that the passion and commitment of the exporters and producers to see that the industry performs well and sustain; in colloquial term, they use to say "cinnamon is in our blood". Most of these entrepreneurs are, at least, the third (3rd) generation exporters or producers. Some of these entrepreneurs even relate the industry to their childhood experience, while some of them recall the stature of their ancestors in the local aristocratic legacy, bearing governing roles like "Mudliyar" or "Muhandirum", whom could be equivalent to the stature of a lord or count in a European society.

The social stigma on the contemporary cinnamon peelers is a major impediment for the industry. This outcome has caused, mainly, because of the hard and tedious nature and the poor working conditions of the vocation. Some of the people already carrying on with this vocation are leaving this vocation because of this low profile outlook from the society, while the young people were discouraged of taking over it. There is an incident, where a *cinnamon peeler, cut half the handle of his knife (keththa) for him to hide it, not allowing the others to be seen, while travelling in bus to home*⁴⁵. This true happening would illustrate the seriousness of this issue and the socio-psychological impact created on the people.

Like with the commodity market sub-set of the cinnamon value chain, in the other sub-set of it, viz. value added market segment, the governance between the exporters and off-shore buyer is also the market. The other linkages of this sub-set chain however, are established hierarchy governance for differentiating the value chain for uniqueness and for consequent enhanced competitiveness. In this value chain, the specifications for the products are complex, based on different buyer requirements. However, sourcing competent support services to meet the buyers' product requirements is restricted in the supportive input providers. Therefore, the exporters had to lead the process (as lead firms) to

⁴² Relational governance means: when product specifications cannot be codified, transactions are complex, and supplier capabilities are high, relational value chain governance can be expected. The mutual dependence that then arises may be regulated through reputation, social and spatial proximity, family and ethnic ties, and the like.

⁴³ Hierarchy governance means: When product specifications cannot be codified, products are complex, and highly competent suppliers cannot be found, then lead firms will be forced to develop and manufacture products in-house.

⁴⁴ Cinnamon industry to Sri Lanka is synonym to wine industry for the Western Europe, where they hold a great pride about the industry and its history and the tradition.

⁴⁵ Source: Key person interview with Mr JK Lindara, Assistant Director, DEA (2011)

coordinate all the supply and input channels to assure that the buyer requirements are met and quality product is developed, viz. the exporters have undertaken R&D role and changed it as a primary activity (a structural change) of the value chain. A good example for this is Eoas Organic (Pvt) Ltd, which has invested on a state of the art chemical analytical laboratory to carry out analysis for product development and quality assurance.

1.6. Past, On-going, and Planned Development Assistance

Institutional Development: Before 2004, a very little emphasis was given on the cinnamon industry in the development sector. Somewhere during the period of 2002 and 2003, this situation was started to change and couple of initiatives could be seeing taking place. First such an initiative was the Competitiveness Initiative (TCI) of United States Agency for International Development (USIAD). TCI was an industrial cluster based project to support the industry stakeholders to formulate initiatives to enhance the competitiveness. Spices were selected as sector that constitutes several key industries including the cinnamon. What, at that time, the industry stakeholders felt was a need of unifying the different industries in this sector for a better lobbying and advocacy. The birth of TSC was a result of this motivation.

The inception of TSC, in 2004, brought a new outlook and a clout to all the industries amalgamated under the spice sector; including the cinnamon industry.

Competitiveness enhancement: Concurrent to the formation of TSC, another bi-lateral organization, German Technical Cooperation (formally GTZ, but now GIZ) was showing a keen interest on the spice sector, particularly cinnamon industry. Private Sector Promotion (PSP) Project of GIZ initiated a value chain approach for coordinating development assistances to this sector. PSP in collaboration with Ceylon Chamber of Commerce (CCC) carried out a value chain analysis on several key sectors, including spices, to find out development needs and gaps. Parallel to this exercise, PSP, in collaboration with the World Trade Center, Geneva was assisting EDB to formulate export strategic plans for 27 thrust sectors, which included the spice sector, and hence, the cinnamon industry. Following this analysis, in latter part of 2004, PSP advanced to formulate a value chain based project called Value Chain Component (VCP) Project. VCP was focusing on several sectoral or industrial value chains, which included spices; and accordingly, formed Core Groups, assembling key industry stakeholders of the focused sectors, and for spices sector TSC was a Core Group member. The key assistances from this project to the sectors or the industries were mainly, coordination and technical advisory, limited grants for conducting industry or issue based studies, and carrying out capacity building measures.

Specifically on the cinnamon industry, VCP extended their cooperation to TSC for carrying out several studies on mechanization and quality and standards conformity issues. One of the outcomes of these studies was GAP and GMP manuals and guidelines on cinnamon. These studies were carried out during the first (1st) and second (2nd) quarters of 2006.

Tsunami rehabilitation: In 2005, just after the Asian tsunami, TSC in collaboration with USAID, implemented an immediate rehabilitation project under a bigger response action named REVIVE Project. This joint project was to support the tsunami affected cinnamon peelers and small-holders in the southern coast. This project provided implements to the affected cinnamon peelers and for the small-holder who were affected received seedlings and fertilizers.

In 2006, the district office of DEA to Galle District, jointly with International Federation for Red Cross and Red Crescent Societies (IFRC), embarked on a project to support cinnamon producers. The goal of this project was to boost the finances of over 300 families dependent on small cinnamon plots by repairing or replacing cinnamon trees damaged by the tsunami in Hikkakuwa, Ambalangoda, and Ahungalla; which are the three (03) of the worst-affected divisions in Galle District. This project was planned to implement in four (04) phases with an estimated time period of two and half years. The project was also established cooperation with four (04) farmer associations. The project assisted the targeted small-holders to either revive plants that could be saved or clear destroyed trees and prepare their land for re-cultivation. Jointly, DEA and IFRC have also executed training for farmers in proper

irrigation of cultivation plots, use of fertilisers, pest control, pruning, and processing". Furthermore, they were envisaging as well, conducting training on marketing the products⁴⁶.

Standards and quality: Following the successful completion of supportive action under the REVIVE Project, TSC embarked on a project to upgrade and certify the production infrastructure of cinnamon industry to GMP or HACCP or ISO22000 level. This project was titled as U10. Promotion of Micro, Small, and Medium Enterprises (PMSME) project of GIZ funded it. The aim of this project was to provide financial assistance to 10 plantations to upgrade their existing production units (sheds) and obtain due certification. Nevertheless, the project beneficiary producers were expected to produce matching funds and to be responsible for the upgrading civil works. However, the project only managed to upgrade eight (08) plantations, but all these upgraded units (factories) were certified on GMP or ISO22000. Furthermore, the selected producers were asked to form a company (named as U10 [Pvt.] Ltd) to directly export certified cinnamon produce.

During the period between 2005 and 2007, EDB (partly) supported TSC's member company, viz. Dasanayake Waluwe Plantation in Kosgoda. The support was LKR1million (US\$89,290) worth a grant to construct a factory up to GMP standards. Following the successful completion of this pilot project, EDB extended their assistance to 20 small-holders (15 in Galle and 5 in Matara) to upgrade their peeling sheds up to GMP standard. Furthermore, EDB has a financial assistance scheme to support food producers for upgrading quality and standards (GMP/ GAP and HACCP/ ISO).

Started from 2010, to date DEA is implementing a project with the support of the Ministry of Finance (the treasury) to construct a training facility in Tihagoda, Matara (this was discussed in a earlier paragraph). The estimated cost of the project is about LKR10million (equivalent to US\$89,286). This facility will provide training to people who are interested in joining cinnamon peeling, based on GAP and GMP principles. The facility would have the capacity to train 45 people.

Marketing: During 2004 and 2005, TSC with the support of TCI of USAID, implemented action to differentiate true cinnamon from cassia at the world market. After successful lobbying, finally TSC managed to have a different HS code for the true cinnamon.

After achieving the registration of true cinnamon under a separate HS code, the industry stakeholders are in pursuit of developing and launching a brand for it, viz. Ceylon cinnamon. EDB, in close coordination with TSC, leads the way to formally recognize the Ceylon cinnamon brand, after obtaining the Government's approval.

Concurrent and in parallel to this action, EDB with the support of Volunteers for Economic Growth Alliance (VEGA) of USAID, recently concluded an assessment to formulate a marketing strategy for promoting Ceylon cinnamon brand in USA markets. In this strategy, the issues such as quality assurance, standards conformity, suitability of bearing the logo, and enforcement to assure the brand will be used properly, will also be included.

2. The Problem or Challenge that needs to be resolved

TSC, representing all key stakeholders in the cinnamon industry, bears a strong opinion that the country's cinnamon trades in the world market, especially the European (for past three years shown drop at a rate 1% per year)⁴⁷ and North American markets are gradually diminishing to the cheaper substitute of cassia (*Cinnamomum cassia*) from the Far East⁴⁸. This trend was started in the 1970s and was gradually continued into 1990s, until Sri Lanka reduced her world market share by 50% (at a rate of 2.5% per year) and restricting to just below 19%⁴⁹. When it reached the new millennium, the situation became worse, further reducing the world market share for the Sri Lanka cinnamon, by 58% from the existing share, down to 8% in an average (Data source: FAO STAT, from 2005 to 2008);

⁴⁶ Reference: Key person interview with Mr JK Lindara, Assistant Director (former Deputy Assistant Director for Galle District), DEA; and official website of the International Federation of Red Cross and Red Crescent Societies (IFRC)

⁴⁷ Data source: Sri Lanka Customs Department, 2010

⁴⁸ Reference: GreenTech Consultant, Pilot study on establishing and improving linkages between exporters and rural producers and sub-contractor, October 2003, Colombo

⁴⁹ Reference: Kannan S and MS Madan, Economics and marketing of Cinnamon and Cassia – A Global View, CRC Press, 2003

virtually, Sri Lanka has lost about 50% of the global trade for cinnamon during the past 10 years, despite having 90% share of the international markets for the true cinnamon. In other words, during this decade, each year, Sri Lanka was losing 5% of its global trade for cinnamon. Ironically, Sri Lanka is dominating a rapidly shrinking market.

The enterprises engaged in the cinnamon industry see that being lesser price competitive (compare to cassia) and inability to supply demanded scales because of falling short in conforming to the buyer product specifications and the food and hygienic standards at these markets, are the main reasons for losing its competitiveness in the world market. But having said that, it is bit more complex than this, where several other factors like human resource availability, applied skills, training infrastructure, etc. are affecting and causing these impediments in a vicious cycle (see Figure 8).

The labour cost is very high in the production cost of cinnamon; which is above 60% (cross reference: paragraph 1.2); consequently, the farm gate price increases, annually, at a rate of 13% (cross reference: paragraph 1.1 and Table 2). Contrary to the cassia exporting countries like China, Vietnam, and Indonesia, which based on comparatively low labour cost and large scales, are exerting a server pressure on prices (better price competitive) and penetrating and expanding into the international markets (Andreas Stamm *et al* [2003])⁵⁰. For instance, during the past couple of years, the market demand for the special grade (C4 special) was reduced because of the high price (US\$10.50 to 11.50 per kg). While the demand for the special grade declines, it has shifted towards lesser grades like off-cuts and quilings (US\$3 to US\$6 per kg)⁵¹.

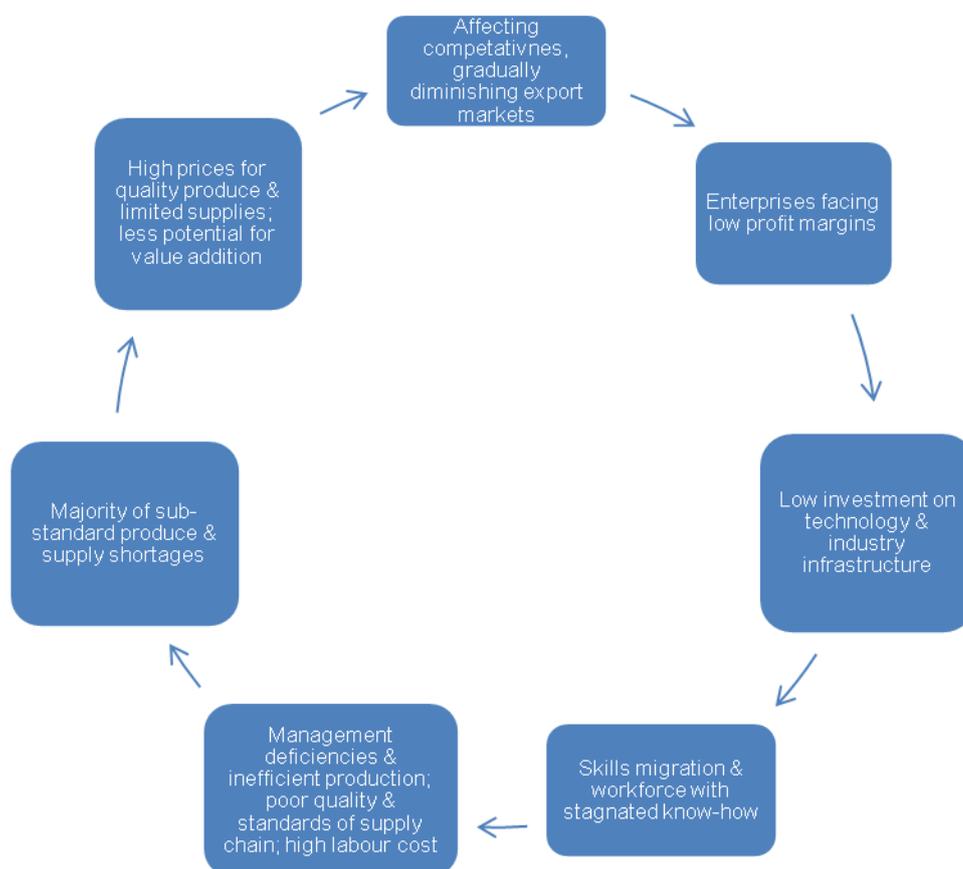


Figure 8: Vicious cycle of the issues affecting the cinnamon industry

⁵⁰ Reference: Stamm Andreas, Chritoph Jost, Constanze Kreiss, Katharina Meier, Mike Pfister, Phillip Schukat, and Henning A Speck, Strengthening Value Chains in Sri Lanka's Agribusiness: A Way to Reconcile Competitiveness with Socially Inclusive Growth?, Studies #15, 2003, German Development Institute, Bonn

⁵¹ Reference: Key person interviews with Mr Mahendara Wickramasinghe, Managing Director, Tropical Island Products (Pvt) Ltd, Dr Janaka Wickramasinghe, Director, Tropical Island Products (Pvt) Ltd, Mr Sarada de Silva, Chairman, Intercom (Pvt) Ltd on 28th March 2011

The high prices of the supplies are caused because of limited volumes to the expected quality and standards requirements (apart from the high cost of production). Only very few producers and exporters (likely to be 4% - 8% of the total volume⁵²) provide certified products to the cinnamon supply chain. The majority of the balance supply volume (mainly from the small-holders) has to be mended (about 40% of the supplies received at a baler⁵³) to the expected market quality and standards parameters, but with an added cost. The main quality and standard parameter that they see being shortfall in the supplies, is achieving the accepted moisture content (14% w/w). This is a challenge that the dealer-balers, large plantation producers, and exporters alike face. Under this circumstance, the measure that the industry takes in order to prevent any microbial growth on this produce, is the use of sulphur dioxide fumigation. Presently, the majority of the operators applies sulphur dioxide within the permissible level of 150ppm (150mg/ kg)⁵⁴, which has been stipulated by the Codex Alimentarius; however, the industry feels that maintaining the required moisture level from the peeling shed to the exporter is the best and ideal solution for this practice. The challenge that they find in achieving this improvement is that the poor knowledge about the export markets and their quality and standards requirements amongst the small-holders and cinnamon peelers, and the consequent poor attitude.

Some enterprises engaged in the cinnamon industry feel that 70% to 75% of the production volume does not meet the due quality⁵⁵ (mainly the moisture content) and have to be re-processed to upgrade the quality and standard parameters. This re-processing, sometimes, would only result 15% to 20% economically viable quantities, and because of the high cost of production and operations, the profit margin of these enterprises has limited to 3% to 5%.

Despite being consistent over the years on exporting 12,336t per year, in 2010 Sri Lanka recorded low export volume of 10,291t (Data source: Sri Lanka Customs Department, 2010); which was a little over 16% lesser than the previous year's export volume. Many exporters and producers see this drop because of low production⁵⁶. According to Mr Mahendara Wickramasinghe, Managing Director, Tropical Island Products (Pvt) Ltd, Sri Lanka completely lost a higher end market (US\$12 per kg) because of not being able to supply the required amounts on time and to the quality parameters (this was a 30% loss over the business turnover). For instant, Sri Lanka lost the confectionery and restaurant markets in USA and Europe because of the high prices of commodities and unable to meet the required quality and standards. This opportunity was used by the cassia exporting countries to capture these markets by supplying adequate volumes. Many of the exporters fear that if this price advantage of cassia continues, there would be danger of further diminishing the market share of cinnamon in the world exports.

As mentioned above the gradual drop of trades at markets in Europe (at a 1% rate) and in USA markets, the inevitability of Food Safety Modernization Act (FSMA) coming to an effect from 2011, pose a greater challenge than before, of upgrading the cinnamon supply chain to meet the food safety conformity requirements, viz. GMP, HACCP, and ISO certification. Furthermore, although Sri Lanka cinnamon industry enjoys the "soft options" of low entry barriers for quality requirements at non-OECD⁵⁷ countries like Latin American countries, but in long run, the industry must adapt its supply chain to face more stringent quality requirements. Because there is high chance that these countries will also adopt higher food safety trade barriers like the OECD countries in immediate future (Andreas Stamm *et al.* pp. 52 [2003]).

In this scenario, it is a must for the industry to obtain food safety standards certification for exporting to countries, even like non-OECD countries, where many of the producers would not be able to sell

⁵² Source: Presentation of the draft strategy for promoting the Ceylon Cinnamon brand by Mr Harold Handley, consultant for VEGA Project of USAID, at EDB on 9th May 2011

⁵³ This is a ballpark value, based on the findings from the discussion with Mr PMS Gunasekara on 6th April 2011

⁵⁴ Reference: Sulphur dioxide in cinnamon, Letter from the SPS Chairperson and Response from the Codex Alimentarius Commission, G/SPS/GEN/716, Committee on Sanitary and Phyto-sanitary Measures, 25 July 2006

⁵⁵ Reference: Key person interviews with Mr Mahendara Wickramasinghe, Managing Director, Tropical Island Products (Pvt) Ltd and Dr Janaka Wickramasinghe, Director, Tropical Island Products (Pvt) Ltd, on 28th March 2011

⁵⁶ To a certain extent, the increased fertilizer prices reduced fertilizer application in the plantations hence, decreased productivity.

⁵⁷ Organization for Economic Cooperation and Development (OECD) is an international economic organization of 34 countries founded in 1961 to stimulate economic progress and world trade.

their produce for the export markets, at least for couple of years to lapse. Because, only 4% to 8% of the cinnamon produced in the country is certified for food safety⁵⁸. At the same time, demands from OECD countries and other economies would become much broader, wanting wider range of products and special packaging designs. Thus, these become high-end markets and would demand greater value addition (Andreas Stamm *et al* pp. 49 [2003]).

Scarcity of skilful people for managing plantations and carrying out the primary processing (cinnamon peeling) is a long-standing issue. As discussed earlier because of the way and working conditions for this vocation has consequent a social stigma, alienating people already engaged, as well as the new comers to the vocation. Because of this downward look on the occupation, the work environment, as well as the methods, has shown little or no improvement. The long hours of work and use of tools and equipments, which sometimes ergonomically mismatch the task to be performed, discouraged people to continue on or join new to the occupation. In the mean time, the low profit margins at the enterprises are not encouraging the industry to investment on technological and infrastructural advancements; consequently, upgrading of the production infrastructure has become very little, and hence, the working conditions for the cinnamon peelers remain as the same, in most of the places.

It has proven that through cinnamon peeling (at least for about 10months per year), a person can earn a monthly income ranges from LKR25,000 to LKR40,000 (this is more than the monthly salary of a Class IV officer in the public sector; which could ranges from LKR15,000 to LKR18,000). Despite this fairly high monthly income, due to the social stigma and hard working nature of the vocation, people are discouraged to join, while those who are engaged, leaving to other vocations.

Lack of a proper, methodically performed, and certified or accredited training system and supportive infrastructure have been a bottleneck for lifting the outlook of this occupation and upgrading the skills to meet the contemporary trade demands, particularly food safety standards and certification prerequisites like best practices for food hygiene. In many instants, it has been cited that the way the cinnamon peeling is executed, does not meet at least the minimum sanitary and hygienic standards, i.e. GMP. While appreciating the inputs from DEA in carrying out five-day training scheme (cross reference paragraph 1.4) on cinnamon peeling, for beginners, it has to be noted that unfortunately, probably due to the abovementioned social and occupational issues, the output efficiency of this scheme is about 30%⁵⁹, which is far below the expectation. Furthermore, it has been observed that a very little efforts been taken in upgrading the production and processing methods and standards. As a consequence, only 4% to 8% of the producers and exporters are capable of producing certified products (as mentioned above), while the rest of the 90% or more do not have sufficient workforce (and infrastructure) to carry out peeling according to the desired standards. The availability of skilled workforce is imperative. Undermining this de-factor need is detrimental to the industry.

From the lessons learned from U10 project of PMSME Project of GIZ, it is very clear that having merely the infrastructure and expect the firms (or factories) to take up the training, is a futile approach. Because the producers will have to bear 30% to 50% production loss⁶⁰, at least for six (06) months of the training period, but again the success of the outcome will depends on the in house capacity for training and managing such apprentice group of peelers. Only two plantations, viz. Dassanayake Waluwe Plantation and Batuhena Plantation in Kosgoda and Hakmana respectively, were successful in this type of industry based training. Out of the eight upgraded U10 factories, only two (02) are functioning according to the standards, while the rest are closed or functioning as ordinary (but not at "hut level" operations) manner⁶¹, mainly because of scarcity of skilful workforce to carry out peeling and maintaining the plantation well.

Introducing proper training (and education) mechanism, covering whole supply chain, for upgrading quality and standards of cinnamon production and processing, thus is utmost vital for the growth and survival of the industry. In par with such capacity building process, the attempts should be taken for regularizing the production and processing chains of cinnamon, with the support of the state.

⁵⁸ Reference: Personal communication with Handley Harold, Senior Agri-business Advisor, International Executive Service Group (IESG) on the draft report to EDB on formulating a brand marketing strategy for the Ceylon Cinnamon (9th May 2011)

⁵⁹ Reference: Personal communication with Mr NKA Rupasinghe, Deputy Director, DEA on 11th May 2011

⁶⁰ Source: Mr Munasianghe, Manager, Batuhena Estate (Pvt) Ltd, 31st March 2011

⁶¹ Statement is derived after field observations and personal communication with two U10 factory owners, viz. Dr IR Ferdinand and Mr Chandana de Silva.

As mentioned above, in most cases, down at the supply chain, the suppliers would not understand about importance of maintaining the sanitary requirements of cinnamon produce. Most of them still do not completely understand that the major portion of cinnamon supplies is for direct consumption purpose of people. Making these supply chain actors aware about this end market purpose and importance maintain sanitary standards is important.

Scarcity of peelers causes severe drawbacks for the industry, mainly because of restricting the produce channeling through the supply chain. Many producers feel that annually, only about 25% of cinnamon plantations including small-holdings being harvested twice a year, while about 65% of these lands being harvested only once per year and worst, about 10% is not harvested at all. The severity of this issue is so much recently, a plantation holding had to burn completely 17 acres of cinnamon because of not harvesting the land for over two (02) years⁶² or worse, for three (03) or four (04) years. Once a year harvesting leads to quality depletion. This is because the plants' bark becomes coarse and hard to peel (results low grades like M4 and M5). In cases where the producers cannot harvest on time, often they have to sell the harvest for a nominal price (sometimes at a rate of LKR70 per kg [US\$0.6], instead of selling at a rate of LKR1,000 per kg [just about US\$9]). In this kind of situation, the producers find themselves hard to be consistent with the quality parameters and hygienic standards.

The loss of quantity would be about 60%⁶³, compare with the twice a year harvesting. The quantity loss is because of the over maturity of the barks and growth retardations⁶⁴. Low harvests do not encourage the industry to look for value addition. In a backdrop of growing, stiff competition at commodity markets from other countries because of larger scales and cheaper prices, value addition evermore become important for reaching high-end markets (Andreas Stamm *et al* [2003]).

The reduced production makes the demand to rise, and hence, the price as well. Shortage of cinnamon peelers, on the other hand make the labour requirement limited resource and hence, increase their price for services. Presently, a cinnamon peeler (and his or her gang) demands part of the harvest, either 33% or 50%. Assuming a scenario of an average conditions and results, a producer, from 1ha, would loss between LKR165,000 (US\$1,470) and LKR250,000 (US\$2,205), from the income. This high cost labour procurement arrangement drives a producer to raise the farm gate price and slack on the quality and hygienic standards, as well as retaining moisture for increasing weight.

According to Mr Samson Karunaratne and Mr Lyina Nalaka Dushmantha Mudali (6th April 2011), who are small-holders in Kosgoda, the poor commitment and agronomic skills of small-holders also contribute to low productivity of lands and sub-standards produce. Either because of small-holders ignorance or lack of commitment, pruning is carried out at wrong time of pruning (practically it is known that at least one month before harvesting the land) and/ or inadequate care for maintaining bushes (tying bushes). The majority of growers (about 90%) do not cultivate cinnamon as fulltime engagement; most of these growers are part-timers, engaged in other occupations as the main livelihood. They hire personnel to manage their plantations. Since their part-time engagement, these holders lack the proper knowledge and strong commitment to manage their holdings properly (with correct agronomy).

The awareness about sanitary standards on cinnamon is very little, sometimes totally absent in small-holder, peeler, and collector levels. Although they have good understanding about the quality parameters (the grades), but having a very little idea (or it also could be the attitude of being concerned) about the consequences of not conforming to these parameters at the markets. According to Mr Janaka K Lindara⁶⁵, an Assistant Director at DEA, the small-holders, particularly those who own less than 0.4ha (1acre) plantations, produce 2kg to 3kg of cinnamon, as a subsistence livelihood to support the household income; which could be more of a cottage-level (home) industry. These small

⁶² Reference: Key person interviews with Mr Mahendara Wickramasinghe, Managing Director, Tropical Island Products (Pvt) Ltd, Mr Janaka Wickramasinghe, Director, Tropical Island Products (Pvt) Ltd, Mr Sarada de Silva, Managing Director, Intercom (Pvt) Ltd on 28th March 2011

⁶³ This is a ballpark value for the harvest loss, according to the informant. But this could also be lesser value like 40%.

⁶⁴ Reference: Mr Samson Karunaratne, a small-holder, Kosgoda (6th April 2011)

⁶⁵ Reference: Personal communication with Mr Lindara on 2nd July 2011.

scale operators, usually, use veranda of their houses to carry out the peeling. Because of their knowledge gap on the export markets and capital deficiency, the physical conditions may not be ideal for assuring a hygienic produce inputting to the supply chain. The basic infrastructure, in most of the cases, would be a series of coir ropes, uses for drying fresh cinnamon barks; which would not result the desired moisture content in the produce. Mr Lindara feels there is a great deal of work to be done for upgrading the production standards of these small operators, despite the extensive work already has been accomplished on this problem by DEA, like carrying out awareness programs, during past couple of years. It could be thought that the inconsistency of cinnamon grades takes place due to the non-accountable nature of the small-holders and dealers. The existing purchasing method and schedule are not favoring to improve the quality assurance in the supply chain. The present arrangement of dealers to purchase cinnamon from growers (small-holders) is the “average grade”. The growers would not sort and grade the produce. They sell it to a dealer on an average grade, bearing the knowledge that both high and low grades comprise in the purchase. At any time dealer does not have the authority to check on the quality of the produce, and has to accept what the grower is offering. This chain of non-transparency and non-accountability continues up to the balers. At the baling, sorting of grades is carried out, separating the high and good quality produce from the inferior produce. Depending on the requirements of the exporters, the baler supplies the produce. In a case where a particular exporter slack in quality and standards conformity, baler would take the liberty to overlook the grade and hygienic standards conformity, and sometimes in case of high moisture containing supplies, fumigate beyond the tolerable level (as discussed earlier).

According to Mr PMS Gunasekera, a baler in Induruwa, Kosgoda (6th April 2011), with the increase of cinnamon farm gate price, more and more collectors (dealers) were attracted to the trade, and as a result increased the collector population significantly. But unfortunately, these new comers have little or no respect to standards and quality, unlike the dealers, who have been in the trade for many years. This situation resulted in drop-down of tracerbility, inconsistency in quality parameters (grades), and reduced standards.

In value chain perspective all the above issues would fall into two thematic areas, i.e. (i) production capability and technology; and (ii) governance. The human resource limitation, viz. scarcity of skillful people for cinnamon peeling, lack of industry driven, systematic, and institutionalized training system and infrastructure, low productivity deriving from poorly managed plantations, lack of drive and R&D capacities for value addition are the production and technological capability issues. Non-conformity on quality and standards, breakdown of trust based business transactions in the supply chain, lack of an institutional arrangement to monitor and enforce quality and standards are main governance issues of the value chain. Therefore, a strategy will be sought based on these two thematic areas for breaking the vicious cycle that causing the cinnamon industry value chain to face the situation of losing competitiveness and export market share. This strategy will work on the logical relationships of these complex issues (see Figure 9).

According to the problem tree diagram (Figure 9), the cinnamon export industry value chain is facing three (03) core issues, i.e. (i) scarcity and skills migration of cinnamon peelers; (ii) lack of an institutionalized system to assure market conformity standards; and (iii) weak R&D technology and lack of demand, which act as bottlenecks for industry’s competitiveness and growth. The effects being consequent and branched up to result (i) insufficient volumes reaching the end market; (ii) inability meet up the quality and standards of high-end and European and North American markets; and (iii) under developed and inappropriate technology for product development, packaging, production improvement, etc. which restricts the value chain facing the stiff competition from the cassia exporting countries and losing market share, rapidly, where value added products unable to buffer this market erosion because of its limited product range; and ultimately, causing business and economic loses to the industry and reducing the profit margin.

But all these issues sprouted out from the deficiencies of three elementary factors, viz. social, vocational, and capital. The social stigma caused because of the downward outlook on the peeling profession by the society. Social attitude and acceptance have been harsh and unfair on these workers. Changing the outlook in the cinnamon peeling as a profession thus, is imperative. The absence of an institutionalized, a standardized, and an industry demand driven training delivery mechanism and a system, is restraining the capacity build up of the industry.

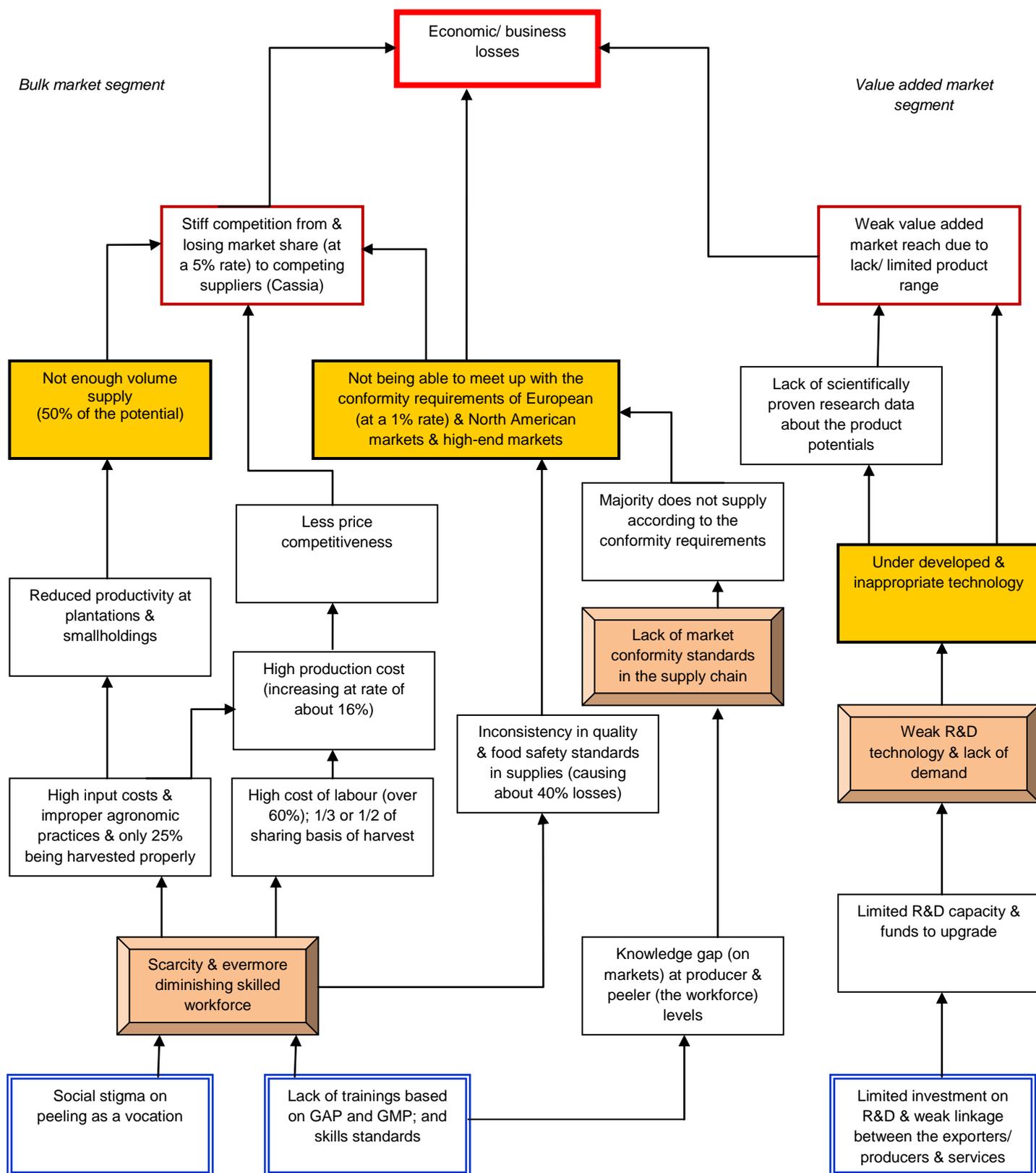


Figure 9: Problem Tree Diagram for Cinnamon Export Value Chain

This vocational deficiency is so serious, it has created a complex of effects branched out to food quality and standards, production scales (and economies), and value governance streams. Thus, this deficiency is greater compare to the other two causes, and will need a higher weighting in the project investment capital. Vocational, institutional, and infrastructure development will need for rectifying the issues caused by it. Although the industry has a very long history and tradition, the capital investment on technology is negligible, compare to the revenue it has been generating for over these years. Apart from individual efforts and spontaneous exercises, there is a very little capital being invested on industry demand driven product and production development. Establishing an investment capital and a system with a dynamic agenda for fulfilling these requirements will be achieved in this concern.

3. Gaps in the existing Institutional Framework

3.1. Thematic Area 1: Production Capacity and Technology

Human resource development. DEA's on-going training scheme (five-day sessions) for cinnamon farmers, farmer groups or Community Based Organizations (CBOs), who are interested in learning recommended hygienic method of cinnamon peeling, was started 10 years ago, trains 1,000 people per year⁶⁶. The training is delivered by experience cinnamon peelers. According to their records, DEA has trained 10,000 people, but only 30% were joined the industry, even though they were given implements free of charge. The reasons for this high fall out are because of (a) social stigma; and (b) the occupation is not attractive for the modern generation⁶⁷. Apart from this, since recently, DEA has launched a project with the support of the Government's treasury, to construct a training center (but without a hostel facility) in their research sub-station at Tihagoda, Matara. The construction works of this training center started and on-going. This training center is designed to train 40 to 45 people on GAP and GMP standards based cinnamon cultivation and primary processing practices.

Giving due recognition and appreciation on these initiatives, but through the fact finding missions, the following prerequisites for an institutionalized and standardized training delivery system, were found not included.

- The training program and the provider are not registered and accredited at TVEC.
- The training content, curricular, and materials are not communicated with the other industry stakeholders.
- The curriculum development methodology is not clearly defined and again, shared with the other industry stakeholders.
- Incorporation of GAP and GMP standards and relevant training manuals are not available and not communicated with the rest of the industry stakeholders.
- Demand analysis on the training provision and tracer-studies are not performed.
- Qualifications and training skills on the trainers are not defined and communicated with the other industry stakeholders.
- The apprentice based training methodology is not adhered and industry training phase is not included.
- A training-of-trainers methodology is missing in bringing up master trainers (peelers) for delivering the training.

⁶⁶ Reference: <http://www.exportagrdept.gov.lk>

⁶⁷ Source: Personal communication with Mr JK Lindara, Assistant Director, Kurunegal (formally, he was attached DEA office in Galle)

Apart from the above institutional gaps, the following capacity gaps were also founded in this existing training delivery system and the mechanism.

Table 7: Cinnamon training demand, outputs and gaps

Criterion	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013	Notes
Total land extent (in ha)	29,415	29,698	29,982	30,265	30,548	1
Land extent at harvesting (in ha)	29,132	29,132	29,415	29,415	29,698	2
Total production volume (in t)	15,000	15,000	15,146	15,146	15,292	
Availability of peelers including the new comers (number of people)	30,000	30,300	30,600	30,900	31,200	3 & 4
Demand for peelers (number of people)	65,852	66,486	67,120	67,754	68,389	5
Labour deficit (number of people)	35,852	36,186	36,520	36,854	37,189	
Output of the training delivery/ on-going & proposed (number of people)	0	500	500	500	500	6
Gap between the demand & delivery output (number of people)	35,852	35,686	36,020	36,354	36,689	
Required training capacity (number of physical units)	359	357	360	364	367	
Cost or loss for the producers due to lack of peelers (in LKR)	45,710,812	46,136,951	46,563,089	46,989,227	47,415,366	7
<i>The above in US\$</i>	<i>408,132</i>	<i>411,937</i>	<i>415,742</i>	<i>419,547</i>	<i>423,351</i>	
Possible contribution from industry, if for 1 training facility (in LKR)	1,828,432	1,845,478	1,862,524	1,879,569	1,896,615	
<i>The above in US\$</i>	<i>16,325</i>	<i>16,477</i>	<i>16,630</i>	<i>16,782</i>	<i>16,934</i>	
Industry contribution share (LKR/ ha)	63	63	63	64	64	
<i>The above in US\$</i>	<i>0.56</i>	<i>0.57</i>	<i>0.57</i>	<i>0.57</i>	<i>0.57</i>	
Possible contribution from industry, if for 2 training facilities (in LKR)	3,656,865	3,690,956	3,725,047	3,759,138	3,793,229	
<i>The above in US\$</i>	<i>32,651</i>	<i>32,955</i>	<i>33,259</i>	<i>33,564</i>	<i>33,868</i>	
Industry contribution share (LKR/ ha)	126	127	127	128	128	
<i>The above in US\$</i>	<i>1.12</i>	<i>1.13</i>	<i>1.13</i>	<i>1.14</i>	<i>1.14</i>	

(Data source: Personal communications with DEA. See footnotes in above sections)

<u>Note 1:</u>	Total land extent is calculated by adding 283.3ha (700acres) per year as new plantation area
<u>Note 2:</u>	First harvest of a newly established stand starts at the end of the second year
<u>Note 3:</u>	The baseline of 2009 is based on: 15,000x1,000kg (total production volume)/ total work days (5[days]x4[weeks]x10[months])x2.5kg per day (peeling rate)
<u>Note 4:</u>	DEA's training with a success rate of only 30%, but the dropout rate from there onwards is assumed zero.
<u>Note 5:</u>	Avg. production volume (t)xproduction from total land extent/ (5[days]x4[weeks]x10[months])x(2.5kg per day [peeling rate]/1000)
<u>Note 6:</u>	Taking into account the proposed training facility of DEA (50 people capacity at one time x 2) & TSC proposed facility at the same capacity + 300 passouts per year from DEA's on-going scheme
<u>Note 7:</u>	The national avg. production is taken as 510kg/ ha

Through the on-going production expansion scheme, DEA pursue an annual target of 700acres new lands to be cultivated with cinnamon⁶⁸ while they are producing 300 new comers with a basic training on cinnamon peeling (refer above statements for this estimate's basis). On these two de-factor inputs (but on certain assumptions), the table given above (Table 7), draws out the relational demands and outputs of the existing training capabilities for the cinnamon, while highlighting the gap and quantifying the inputs to fill it up, for a period covering from 2009 to 2013 (reflecting and projecting).

⁶⁸ Source: Personal communications with Mr NKA Rupasinghe, Deputy Director (Technical), DEA and Mr JK Lindara, Assistant Director (formerly in-charge for Galle District), DEA (11th May 2011)

Per se the data presented in the above table, the industry is facing a significant cumulative deficit (see Figure 10), and if this situation is not arrested, by the time it reached 2013, the deficit will be just over 37,000, which is about 3% increase for a two (02) years period of time.

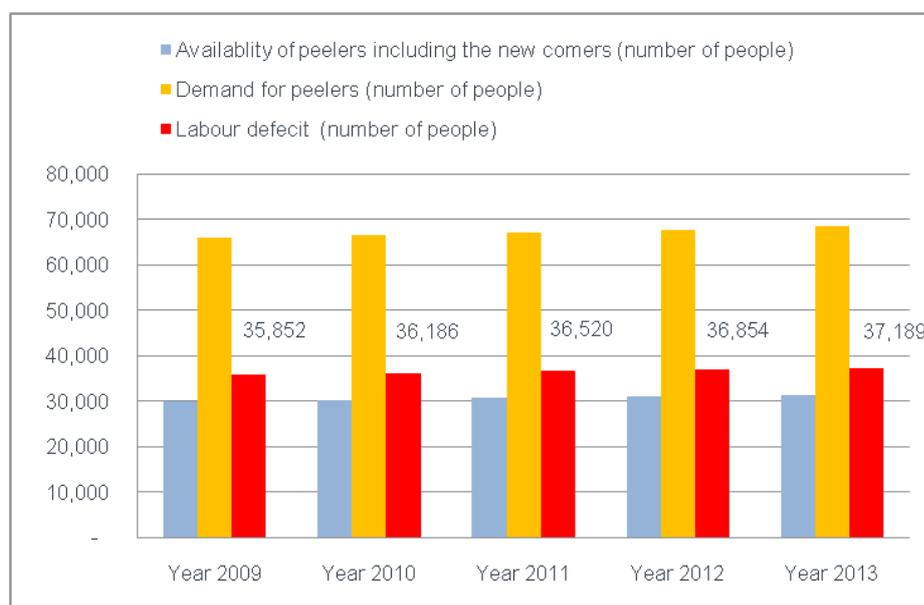


Figure 10: Cumulative estimated workforce deficit reflection and projection

According to the above tabulate estimated data, it is clear that the demand is vast, but the existing capacity is obviously inadequate to fulfill the training demand of the industry. And to make things worse, this is merely rendering the basic skills training, without reckoning the specific and compulsory skills development needs, which are demanded by the food hygiene and safety standards conformity requirements of the trade.

Nevertheless, per se the proposed project feasibility, since there is a significant cost incur due to the inability to duly harvest the plantations, there is a good opportunity for the proposed project proponent to channel funds into this venture by convincing (of course following the principles of Good Governance) the producers to financially contribute, a nominal fee, per extent basis, to partially covering the training cost of the beginners (see Table 7). In fact it will be an investment to prevent and rectify a greater business loss in imminent future.

Having mentioned the above, still the idea of enabling the on the job training (or Enterprise Based Training⁶⁹) at the production units or factories, would be much feasible option, at least amongst some stakeholders. The same idea was pronounced in the project process, from the inception to the completion, of PMSME Project supported U10 project. But the facts revealed, apart from a one factory, i.e. Batuhena Plantation, the other seven (07) of the other factories, which were supported by PMSME, failed in adapting a training agenda into their factory flow operations, and finally had to suffer with a shortage of skilled workforce. The main reason that was found in these cases is the lack of good management and external technical assistance. U10 project selected Batuhena Plantation and provided technical assistance to the plantation manager, Mr Munasinghe to adapt a six-month Enterprise Based Training (EBT) method to train the new factory workers or cinnamon peelers. However, Mr Munasinghe cleared out that if there was no investment capital support (partially) and technical guidance from PMSME Project, it is very hard to implement an EBT scheme; because the production losses could be 30% to 50% for this six-month training period. After having hands-on experience on EBT method, therefore, he firmly believes that institutional training would be more effective and efficient for training cinnamon peelers.

⁶⁹ The copy right of this term shall be with Dr Rohana Kuruppu, Chief Executive Officer of Brandix College of Clothing Technology, 157, Galle Road, Ratmalana South, Sri Lanka, e-mail: rohanak@brandix.com

R&D technology integration: Particularly in agricultural industry based value chains, value addition has become an essential need for enhance or develop competitiveness and sustainability. The reason for needing such a change in a value chain is, according to Andreas Stamm *et al* (2003), “the demand in large markets is becoming more diverse and consumption patterns increasingly globalized. The consumers in these countries are favoring more for ready to eat non-traditional food stuff related popular culinary cultures”. Similar faith is inevitable for the Sri Lanka cinnamon industry value chain. In his budget speech in September 2005, Minister for Finance at that time, emphasized a need of an integrated and dynamic mechanism for developing the value addition segment in the cinnamon industry and to meet this requirement, the importance of a demand responsive R&D services in the country. To initiate things for this value chain segment, the minister proposed to establish a Cinnamon Development Fund through LKR10million (US\$89,290) seed capital.

When it comes to the cinnamon industry, ITI has been the pioneer in providing R&D inputs. As earlier discussed, since 1960s, they were rendering the services, particularly the liking of chemical analysis. But since recently, they are working on medicinal characteristics based product development venture (cross reference to paragraph 1.3). In parallel to this exercise, TSC, in collaboration with the Ministry of Health and University of Peradeniya’s Faculty of Medicine implementing a project to extract anti-diabetic characteristics of cinnamon. However, there is very little or no communication between the endeavors of ITI and Peradeniya University⁷⁰.

In terms of skilled human resource and infrastructure that could be promptly adopted for R&D purposes, are there for the cinnamon industry. But what is mainly, lacking is the proper coordination and dialogue between these think tanks and the industry. Hence, there is a pronounced deficiency in bringing up products that demanded by the industry. Such a market oriented R&D agenda is a missing link between these two stakeholder groups.

But fortunately, ITI has realized this bottleneck and willing to associate with the other industry stakeholders to establish a sound R&D agenda for market oriented product development. In this respect, ITI⁷¹ will share the capabilities in chemical testing (fractionation, isolation, and identification), and furthermore, they will extend the technical capacity by sourcing resources through the collaborating international research institutions. However, ITI realize that finding funds for implementing R&D projects is evermore becoming hard, and it has come up as a major issue.

The same enthusiasm and willingness are with DEA’s R&D responsible divisions. Namely, Dr RS Kularatne, Deputy Director for Research, Dr Padmini de Silva, Head of Research Station, Matale, and Ms Kaushalya Indrasena, Research Officer for Post-harvest Technology, Research Station, Matale have shared their ideas for a better industry demand driven R&D focus. As impediments on advancing on this direction, these personnel highlighted weak link with the private sector companies, shortage of capable staff, and unavailability of advance, but needed technology. Particularly, DEA highlights the need of better coordination between the private sector firms, after the success in developing a carbonated cinnamon drink (with a high quality) and the subsequent stand still, for about four (04) years, of not being able to advance up to introducing it to the markets (cross reference to the paragraph 1.3).

The R&D initiative of the Faculty of Agriculture of Rhuna University gave a good start to the idea of mechanizing the cinnamon primary processing flow. Following this initiative, it was observed that University of Moratuwa, which is one of the pioneer engineering think tanks in the country, also carrying out researches on improving these first generation machines. However, many of the industry stakeholders feel that unless fulfilling agronomic and mechanical criteria that improve the work and time efficiency, any attempt on the mechanization would not be accepted by the industry.

The services renders by the DEA’s Research Station in Tihagoda is quite commendable. Apart from introducing two new varieties of cinnamon (cross reference to paragraph 1.3), this sub-station of DEA has started working on revising the fertilizer application requirements for cinnamon. Having understood their organizational capacity and lapses in small-holder base, where improper fertilizer

⁷⁰ Source: Personnel communication with personnel at ITI (7th April 2011)

⁷¹ Reference: Key person interviews with Dr GAS Premakumara, Head of Division and Mr KR Dayananda, Senior Research Officer of Herbal Technology Division of ITI on 7th April 2011

applications caused high costs, but giving results without due proportion, gives a good idea for rendering a mobile testing service to these needy producers⁷².

3.2. Thematic Area 2: Value Chain Governance

The U10 project of PMSME of GIZ supports the industry stakeholders to learn another very important lesson; which is in a context of a legislative and institutional framework does not operate and is ineffective to assure the trade demanded quality and standards and whole value chain has to rely on ethics and norms of a generation of a people to respect the code of conduct, would not withstand against dynamics of an un-codified trade.

As discussed above (cross reference to paragraph 1.5), the cinnamon industry value chain of Sri Lanka, the local segment governed by businesses built on ethics, norms, family ties and long lasting friendship. In a governance culture as this, in a backdrop of a macro-economy with a scenario of escalating cost of living and cost of production tangled in vicious cycle, small and micro scale enterprises or entrepreneurs, pursue any means for maximizing their profits; sometimes this meant even compromising the trade standards.

In this document, the incidents of quality and standards conformity violations and their consequences were discussed. The coordination of supply chain has shifted over to the collectors (dealers) and producers, building up a power asymmetry. The producers decide the prices and declare the quality and standards of the produce, and collectors coordinate that to the exporters and processors, via the balers. The quality and standard conformity of the trade is at the mercy of the producers and collectors.

A major concern raised by producers and exporters alike, virtually there is no dividend for GMP, HACCP, and ISO certified cinnamon products, as non-certified products, most often are sub-standard, channel through the same supply chain, without any price or credibility difference. Due to these circumstances numerous entrepreneurs expressed their frustration, and sometimes drop their certified protocols and procedures to the non-certified status.

In the cinnamon industry, the existing authorities for implementing standards and enforcing the due legislations to assure the conformity are the Sri Lanka Institute of Standards (SLSI) and the DEA.

The SLSI is the National Standards Body of Sri Lanka, established under the Bureau of Ceylon Standards Act No.38 of 1964. This Act was repealed and replaced by the Sri Lanka Standards Institution Act No. 6 of 1984. The Institution now functions under the Ministry of Science and Technology and is governed by the Minister in terms of the above Act.

Furthermore, the mission statement states that it shall keep up with the existing industrial development and economic growth of the country, and for doing so, it will undertake, promote and facilitate (a) standardization; (b) measurement; and (c) quality assurance and related activities in all sectors of the national economy. In this statement, the following objectives highlighted as the provisions that are specific to trade standards and promotion: (a) increase productivity and maximize the utilization of resources; (b) facilitate internal and external trade; (c) achieve socio-economic development; and (d) enhance international competitiveness of products and services.

SLSI in collaboration with ITI defined and established specifications for grades and other quality parameters, including food hygiene. Sri Lanka Standard 81:2010 UDC664.56 provides (fourth edition) specification for Ceylon Cinnamon, and in section 5, 6, and 7 of this article specify the commercial grades, requirements (quality and hygiene), and packaging in handling cinnamon for export markets. The specifications of Ceylon Cinnamon are in par with ISO specifications (international standards) for cinnamon (article number ISO6539). SLSI also specifies, but in general to all spices and other dried aromatic plants, the code of practices for assuring hygiene (Sri Lanka Standard 1327:2008 UDC 633.83/.82).

⁷² Reference: Key person interview with Dr DN Samaraweera, Research Officer, Soil Fertility Division, Research Sub-station, DEA on 31st March 2011

Promotion of Export Agriculture, Act No. 46 of 1992, paragraph 5, renders powers to DEA for registering cinnamon primary processors (producers), dealers (collectors), buyers (exporters), and processors. This Act also makes provisions for DEA to require maintenance of records and information about the crop at all levels of the supply chain, including cultivation or processing, buying, packaging, and exporting. Furthermore, it renders power to DEA to access and inspect appropriateness on handling of cinnamon through the different stages of the supply chain, i.e. lands, buildings, and transport means for the purpose of processing or storing, and transporting for assessing the suitability.

Despite SLSI (authorized by the Sri Lanka Standards Institution Act of 1984)⁷³ and DEA being adequately given the authority, particularly in combination, to execute powers to establish product quality and standards conformity protocols across the supply chain, but still the industry was unable to receive such a joint service from them. Nevertheless, fortunately, these organizations acknowledge each other's role in the quality and standards conformity of the supply chain, where SLSI, per se the cinnamon industry is concerned, duly recognized as the "competent authority to execute the tasks of enforcement, whilst SLSI would be providing technical inputs on inspections and recommendations supporting to complete the execution of the services"⁷⁴. However, DEA is raising their concern of inadequate staff and logistics to efficiently attending to these enforcement tasks⁷⁵. At a discussion with Mr Janka K Lindara, an Assistant Director of DEA, it was revealed that although DEA has been given the legal provisions for enforcing standards in the industry, but the due regulations for enabling the department to practically act, are yet to be established. This statement indicates that there is a critical gap in harmonizing with the country's legal framework, which concerns the standards conformity issues, focusing the sanitary and phyto-sanitary measures. Namely, the following acts are vital to be harmonized by DEA in their attempt for enacting quality and standards enforcement⁷⁶.

- (a) *The Plant Protection Act of 1999*, which provides the required framework for to prevent the entry of pests that may cause plant health problems through the use of risk analysis, inspection and quarantine procedures. The authorities of enacting the regulations under this act are Seed Certification and Plant Protection Center (SCPPC) and National Quarantine Service (NQS). However, for exports are concerned, it is only SCPPC relevant, in case of administrating the phyto-sanitary certifications on plant materials and germplasm.
- (b) *The Control of Pesticide Act of 1980*, which authorizes the Registrar of Pesticides to approves and registers the pesticide uses.
- (c) *The Seed Act of 2003*, which provides the authority to SCPPC through the National Seed Council (NSC), basically to carry out from establishing guidelines to undertaking certification of seeds use.
- (d) *The Food Act of 1980*, which defines the central authority of the Ministry of Health (MOH) on food safety issues, while empowering specific agencies to carry out export controls.
- (e) *The Consumer Affairs Authority Act of 2003*, which provides powers for enacting a Consumer Affairs Authority (CAA) for ensuring consumer protection, regulations on international trades, and enforcing relevant regulations.
- (a) *The Sri Lanka Accreditation Board for Conformity Assessment Act of 2005*, which provides the necessary legal provisions for enacting a Sri Lanka Accreditation Board (SLAB) that (i) can grant accreditation in accordance with national standards based on the relevant international standards, of laboratories, certification and inspection bodies, training institutions and persons to carry out conformity assessments (ii) ensure competence in internationally accepted accreditation practices and to facilitate international cooperation in accreditation and (iii) to conclude mutual recognition agreements relating to accreditation.

⁷³ This act provides for the establishment of SLSI (Sri Lanka Standards Institute) and the repeal the "Bureau of Ceylon Standards Act" (1964) and makes provision for SLSI to (i) prepare national and international standards (ii) amend or cull existing standards (iii) promote standardization and harmonization, establish laboratories (iv) provides facilities for standards testing (v) undertake research in standards and (vi), operate a certification mark schemes.

⁷⁴ Reference: Key person interview with Mrs R Deepika Munaweera, Senior Deputy Director, SLSI on 27th April 2011

⁷⁵ Reference: Personal communications with DEA personnel on 11th May 2011

⁷⁶ Reference: Sri Lanka Agribusiness Development Project, Technical Assistance Consultant's Report, Project Number: 39381, Asian Development Bank, October 2007, Manila

Preliminary work has been done for launching of the Ceylon Cinnamon brand of quality and excellence. This endeavour is headed by EDB in collaboration with TSC and VEGA of USAID (cross reference to paragraph 1.6). The industry foresees this brand launching would give its value chain a competitive advantage at the export markets over the competitors. At the same time, both the exporters and producers cautioning the authorities for a sound institutional and legislative framework and mechanism is required to effectively implement the Ceylon Cinnamon brand and to not be backfired because of quality and standards conformity issues at the export markets. In this endeavour, the poor coordination between EDB and DEA will be a drawback, particularly in view of the Promotion of Export Agriculture, Act No. 46 of 1992, where unless carefully define the ownership of brand and inspection and enforcement for conformity, this branding strategy might cause a legal complication and a conflict amongst the authorities over the implementation of this scheme.

Therefore, there is a necessity for facilitating building up a coordination mechanism amongst the relevant stakeholders and support them to develop an appropriate institutional and legislative framework for implementing an effective quality and standards conformity scheme for Ceylon Cinnamon brand and codify supply channels.

4. Existing Training Setting and Demand

In the country's technical and vocational education and training, both the private and public sector service providers perform an important part. Department of Technical Education and Training and Vocational Training Authority (VTA) are the leading public sector training providers. But all these institutions do not offer agriculture related training or education.

Meanwhile, the agricultural or agriculture related training is primarily provided by the Agricultural Schools, under the Agriculture Department. Apart from these agricultural schools, Aquinas College of Higher Studies, a non-profit organization, also provides agriculture training. But these institutions target school leavers, usually completing GCE Advanced Level, who would be looking for carrier in agriculture in capacity of managers, supervisors, instructors, and extension workers. The only industry oriented, structured training offered by the National Institute for Plantation Management (NIPM). However, they mooted to serve the needs of the plantation industry crop sectors, viz. tea, coconut, and rubber, and holds seldom or no bearings at the cinnamon industry.

For cinnamon, it is only DEA, which at least in some form of training, being provided. This training function is mainly to attract people to take up the trade. However, the offered service is not sufficiently catering the industry demand because of several structural and functional limitations. Therefore, in reality, there is no proper training institution for cinnamon.

Apparel and textile sector of the country has been a dynamic and lucrative enterprise for couple years. Compare to its agricultural counter parts, this sector is fairly young (started in late 1960s). In the apparel and textile sector, a rare case of fully private sector managed training provision can be found. It is none other than the Brandix College of Clothing Technology; which offers industry and enterprise based trainings, in addition to industry oriented courses.

Sri Lanka has a well defined technical and vocational education framework and services. The country's technical and vocational training regularization and standardization are performed by Tertiary and Vocational Education Commission (TVEC), which is the apex body for certifying and accrediting all training providers in the country.

The demand, per se the cinnamon industry value chain is concerned, was assessed by considering: (a) institutional demand; (b) training delivery demand; and (c) demand for social and industry recognition. In a way, these criteria of demand are the indications for the suitable training delivery mechanism for the industry.

This assessment made it clear that the industry requires a PPP venture for delivering training, which covers all most all aspects of the supply chain. The industry stakeholders, strongly, bear an opinion to firm-up the supply chain's capability for conforming the quality and standards of the Pure Ceylon Cinnamon brand (the mark). Hence, the demanded training shall target personnel attached to the main stream of the vale chain, as well as personnel of its support services. The scope of the training

envisaged to have two (02) levels, viz. certificate and diploma. While these two levels will be focusing specific skills requirements decided on the target trainees, the issue of food safety and hygiene, GAP, and GMP adherence will be cross-cutting.

For making the proposed training function to be recognized socially and industrially, it is demanded to register and accredit the training institution and the courses offered by it.

Results of a rapid information survey, which was carried out in early part of 2011, revealed that 95% (of 18 respondents) learn the trade by informal learning, mainly from their parents. And they have a limited knowledge about GAP; it implies that this traditional way of the knowledge transfer needs upgrading for complying with the contemporary trade demands. But contrast to their limited understanding about GAP, the majority of 56% the respondents demonstrated a good understanding about GMP. However, the fact of 44% the respondents without an adequate knowledge about GMP is still significant; and hence, the situation demands knowledge upgrading.

Lack of proper and sufficient training on cinnamon production and processing was confirmed by the survey findings. Hence, a strong and urgent need of a well defined training delivery mechanism has been reassured. Furthermore, 95% of the survey respondents confirmed that the level of the available training is basic; therefore, a demand for the training delivery mechanism to include advanced level of skills development was implied.

A detailed scheme of these discussed general and specific vocational training issues is articulated in Annex 1.

5. Internal Efficiency of Production and Processing

The findings of a rapid survey that was conducted with a participation of three (03) producers, who represented both the certified (ISO, HACCAP, and GMP) and uncertified categories of operations, to perform a comparative assessment on their productivities, revealed that there is a clear impact of certified and streamlined way of operation on the productivity.

The productivity, per se the study concerned was defined as the ratio between the net profit and total cost (excluding taxes) of operation. Four (04) factors were considered, as criteria of the criteria of assessing the production. These criteria were workforce, system and methods, and technology. In addition to these criteria, the performance of the selected operators was profiled considering the profit and losses.

According to the figure below, the certified estate level operator performs a productivity that at least is doubled the productivity of an uncertified operator.

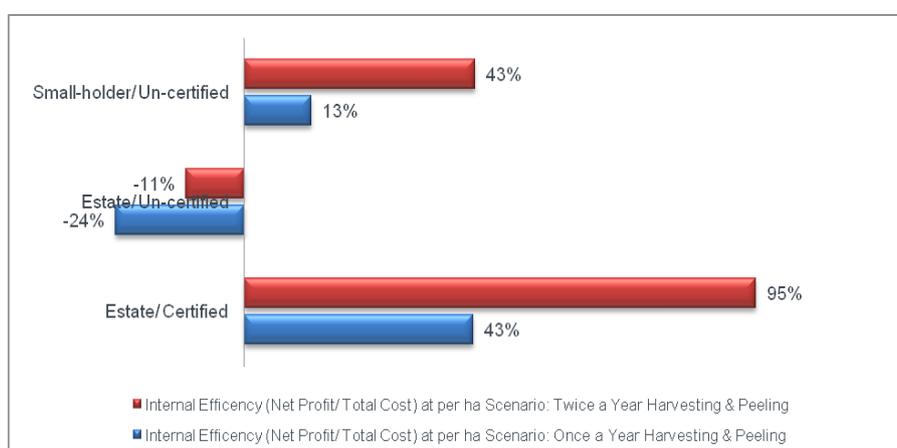


Figure 11: Comparison of the productivity between certified and un-certified operators

Once the reasons for this productivity disparity between these two types of operators were sought, it was clear that certified production system and methods, appropriately coached and trained skilled workforce in an environment with a standard work ambient are having a bearing on the productivity. The appropriate use of the available technology would also be a complimenting factor to this productivity performance (see Annex 2). The contrasting features of the certified, estate operator to the rest of the surveyed operators, are listed below.

Workforce

- Commitment of workers affecting output volume
- Flexible and adaptive to changing output requirement
- A production line with workers bearing needed knowledge reassure quality and standards conformity
- An ability to remunerate workers according to their competencies and outputs build helps to maintain
- Permanent workforce

System and methods

- Systematic technical approach and application of know-how
- compliance to standards
- organized monitoring and control

Infrastructure

- Standard and conducive work environment

Technology

- Appropriate use of existing technology

Of assessing the above list, it is evident that the main contributory factors are related to human resource development and system management. Proper awareness, coaching, and training of workers on production line, have been one of the key aspects to the higher productivity of the certified producer. The other aspect has been the codified and standardized system management and quality control, conforming to the industry and internationally defined parameters.

Hence, for a higher productivity, the industry needs a systematic and integrated approach, combining skills development, upgrading of production infrastructure, and standardizing production and processing.

6. Target Beneficiaries

There are three core issues, which branch out impede the industry's growth. These issues are the immediate effects of the factors causing problems to the competitiveness and sustainability of the industry. Therefore, the proposed action will focus on these core issues as strategic entry points to see immediate results or changes. Hence, in this section, an assessment is made to see who is affected by these issues and what would be change that the proposed action should be focusing to bring out the benefits for these stakeholders. These assessments are made according to the identified core issues.

Core issue 1: Scarcity and evermore diminishing skilled workforce		
Stakeholder	Affect	Change (benefit)
Producers	<ul style="list-style-type: none"> • Only 25% of the lands being harvested twice a year, while 65% and 10% are harvested once a year and not at all in a year, respectively. Hence, 42.5% lose • High labour cost because of 33% to 50% harvest sharing • Irregular harvesting, sometimes up to four (04) years; consequently, some plantations lose entire crop stand 	<ul style="list-style-type: none"> • Harvesting becomes regular and able to harvest twice a year. • Reduced labour cost and improved quality better profit margins • The producers have the ability to do the processing according to the standards.

	<ul style="list-style-type: none"> Sub-standard primary processing leads to another 5% production loss⁷⁷ Although some plantations obtained GMP/ HACCP/ ISO certificates, due to no workers, had to abandon the practice. Hence, 5% production loss and waste of capital investment 	
Peelers	<ul style="list-style-type: none"> Social stigma and consequent social costs Harsh and uncomfortable working environment and conditions Poor knowledge about the trade Livelihood insecurity Less chance for women to join the profession No proper training to new comers Mismanagement of household income Alcoholism 	<ul style="list-style-type: none"> Positively changed social outlook on the peeling as a profession and consequent improvement on the household Worker friendly environment for working (factories instead of "peeling sheds") Standardized and institutionalized training to result National level recognition for the skills (NVQ⁷⁸) Livelihood security through qualified employment Possibility of equal and equitable participation of female
Exporters	<ul style="list-style-type: none"> Reduced profit margins, down to 3% to 5% Annually losing a 5% market share in the world trade due less price competitiveness, especially in USA and European markets Annually loose LKR2.2million (US\$19,643) due to low quality and standards. 	<ul style="list-style-type: none"> Increased profit margins increase the world market share erosion

Core issue 2: Lack of market conformity standards in place on the supply chain

Stakeholder	Affect	Change (benefit)
Exporters	<ul style="list-style-type: none"> 70% - 75% volumes have to be re-processed because of the sub-standard supplies Not being able to supply produce to quality and standards expectations of the export markets and hence, losing the markets (e.g. lost markets in Europe and USA because of this issue) 	<ul style="list-style-type: none"> Codifies supply chain will channel produce that conform to the quality and standards. Hence, mitigating high waste and cost. Build up supply capacity to cater any export markets' requirements (including USA and Europe) in terms of quality and volume.
Balers	<ul style="list-style-type: none"> 40% business lose due to sub-standard produce 	<ul style="list-style-type: none"> Reduce the lose by codified supply chain regulate the grades and hygienic conditions of the supplies
Producers of GMP/ HACCP/ ISO certification	<ul style="list-style-type: none"> Opportunity cost because of there is no price differentiation between the quality and sub-standard produce 	<ul style="list-style-type: none"> Zero the opportunity cost by codifying the supply chain.
Collectors (dealers)	<ul style="list-style-type: none"> Un-codified supplies allow unhealthy competition, build up business mafia, and adulteration of produce to get more money, etc. take place 	<ul style="list-style-type: none"> Bring back the norms and ethics of the trade Decent trade supports sustainable growth of the trade

Core issue 3: Weak R&D technology and lack of demand responsiveness

Stakeholder	Affect	Change (benefit)
Processors/ exporters	<ul style="list-style-type: none"> Losing opportunities to enter into high-end markets and to increase the rate of return Value leaching from the value chain 	<ul style="list-style-type: none"> Capability to access high-end market will be enhanced. Mitigating the value leaching from the industry will enhance the inward investment capacity.
R&D services	<ul style="list-style-type: none"> Low profit margins of the enterprises recede funds channeling into R&D 	<ul style="list-style-type: none"> Increase R&D funding Enhanced innovation

⁷⁷ Reference: Key person interview with Dr IR Ferdinand, a producer in Tihagoda, on 31st March 2011

⁷⁸ National Vocational Qualification

- Less innovation

7. Links with National Development Strategies and Policies (Coherence)

EDB's export strategy for the coming five years (from 2011 to 2015), supports interventions, which promote value addition through technology advancement, workforce development, and production process upgrading. The proposed action's main approach is in par with this policy direction.

Furthermore, EDB's continued effort for upgrading the cinnamon primary processing related infrastructure to GMP level, from the successful completion of the Dassanayake Wallawe GMP factory, another 20 small-holder plantations were selected to provide financial and technical assistance for a similar upgrading. The completion all of these primary processing centers would require a skilled workforce to meet the skills requirements. The training facility that is proposed by this action will train that required workforce for these new factories. Hence, there is a demand and deliver match between these two endeavors. Furthermore, the U10 project supported GMP factories will also be included in channeling the trained personnel for employment.

The on-going project of DEA for constructing a training facility, in Tihagoda, for cinnamon peelers will be complementary with the proposed action; because the demand for skillful people to carry out peeling, according to GMP, is high (as discussed earlier). Hence, a synergy could be foreseen in an event, these two endeavors being successfully completed and in operation. In the mean time at regional policy level, the proposed action will adhere with the Southern Vocational and Technical Training Plan that is implemented by TVEC, Southern Provincial Council, Ruhunu Economic Development Agency (REDA), and the chambers of Matara and Hambantota.

The initiative for codifying supply chain transactions through a brand promotion (Pure Ceylon Cinnamon) would be another complementary and interactive joint venture for the proposed action or vice versa. The brand promotion strategy, jointly designed by TSC, EDB, and USAID, will implement it in coordination and collaboration with the other relevant authorities and service providers like DEA, SLSI, ITI, and private certification and inspection agents. However, to make this strategy effectively operational, a sound coordination mechanism should be facilitated to build up. This will be the niche, which the proposed action fit into this very important national endeavor.

ANNEXES

Annex 1: Existing Training Setting and Demand

This supplementary information provides the background information for assessing the existing training institutions of the country. The selection of several training institutions per se of this overall technical assessment was performed, considering the needs to include training delivery functions on cinnamon industry related skills development, SPS and TBT issues, and a parallel industry value chain with a similar socio-economic background (because of the near past and present dynamics). Furthermore, the national vocational training facility and the training regulatory and accreditation framework are also included in this assessment, in order to complete the picture of the country's existing training environment. Purely private and public sector organizational models as well as hybrid organizational models such as private-public-partnerships and semi-governmental boards, as well as non-governmental (non-profit) entities were reckoned, expecting to have a sectoral perspective in understanding the different options of institutional governance.

After confirming the need for training, a survey was carried out to understand the perspectives of cinnamon growers on training requirements and their opinion about the existing training services. The learning from this survey is also included in this appendix.

The overall summary of the facts and issues in this appendix is presented in the main body text of this report.

i. Profiles of Training Institutions

Department of Export Agriculture⁷⁹
Export agriculture industry, line
department, public sector

Institutional Set-up: Training is a part of the formal functions of the department. A special reference has been given on cinnamon peeler training in the department's mandate for training.

Organizational Structure: The training function takes place under the regular bureaucracy of the department, where the department's Director General is the ultimate decision maker of the internal financial and administrative functions. Under the Director General, the Director Development oversees the training function of the department. However, the operational supervision of the training function is carried out by the Assistant Director Training, who is a subordinate to the Director Development.

Although the Assistant Director Training closely supervises the training function of the department, the authority of this director is limited to the In-service Training Centre at Matale. The trainings, which take place outside this facility, at fields, and the respective Assistant Directors for the districts are responsible in implementing.

Financial and Operational Management: The training function is fully sponsored by the department through the funds received from the state treasury. The operations of the training functions are carried out by the Assistant Directors and their subordinating officers, i.e. Extension Officers. Outreach and training needs assessment are fulfilled by these extension officers. The costs of all trainings are covered by the funds earmarked for the respective Assistant Directors.

Training System and Program: *Target trainees:* All the key stakeholders of the industry value chain are targeted by the delivered training. Namely, these stakeholders include cinnamon growers (small to large scale), growers (farmers) societies or CBOs, who are interested in learning the recommended hygienic method of cinnamon peeling.

⁷⁹ Herein, only the cinnamon peeler training function of the department has been focused.

Training scope⁸⁰: The training offered is a singular module, which covers the foundation knowledge areas of cinnamon crop agronomy, plant pruning, training, and harvesting techniques, product manufacturing (peeling), and quality grading and sorting. In the same module, additionally, the introductory GAP and GMP (emphasising SPS measures) for cinnamon are included. However, per se this training scope is explicit to the Assistant Director's Office of DEA in Galle District. In general, the department's compliance to it would vary district to district, depending on the availability of resources and personnel's commitment.

Training program: In general, the training is delivered on a demand basis. Duration of the training module is five (05) days. The format of the training delivery, primarily, is in the format of field based demonstrations, similar to Farmer Field School (FFS) methodology. But depending on resource availability, class room sessions would be included for holding lectures.

First day of the training includes exposure to a plantation and introduction to cinnamon products and markets. The last day (the 5th day) of this program, practical demonstration and instruction on quality specifications for grades and sorting and grading of products are given. The theoretical parts of the training is conducted by the respective Extension Officers, attached to the Assistant Director's Office, while the experienced cinnamon peelers are sourced for carrying out practical demonstrations on peeling technique.

The training is offered only in Sinhala.

Training Evaluation and Accreditation: Explicit to Galle District's Assistant Director's Office, personal certification scheme is implemented. A certificate awarding ceremony, at the district level, performed for the trainee pass-outs. A special feature of this event is, sometimes, cinnamon small-holders of the area would be invited for facilitating job placement and industry recognition.

Accreditation of the training deliverables is lacking in the system.

Batuhena Estate (Pvt) Ltd
Cinnamon producer, EBT, private sector

Institutional Set-up: The institution is a plantation company, whose main functions are growing and manufacturing cinnamon. It is incorporated as a Private Limited Liability Company under the Registrar of Companies. The training function integrated within the regular functions of the firm.

Organizational Structure: Training function comes directly under the factory manager of this establishment; where this staff acts as the trainer and mentor for training recruit.

Financial and Operational Management: Fund of training operations is covered under the regular recurrent expenditure of the factory. Operational management are of the same as the regular factory operations, but with some exceptions to allow the new recruits to learn and develop skills and practical work adaptations.

Training System and Program: *Target trainees:* Only new recruits are focused in the training.

Training scope: Developing basic skills of workers on peeling according to GMP is the purpose of this training.

Training program: The mode of training is EBT. But continuous training would not take place, since the product specification and requirements would not vary. The training duration is generally six (06) months. The training is divided into (a) entry; (b) work orientation and fundamental practices; (c) assembly line performance; and (d) practice improvement and task specialization. Entry qualification of General Certificate of Education (GCE) of Ordinary Level (O/L) is a prerequisite for the training (as well as for the recruitment).

The medium of training is Sinhala.

⁸⁰ Contents based on the information shared at a discussion with Mr Janaka K Lindara, Assistant Director, DEA on 15th July 2011

Training Evaluation and Accreditation: No specific evaluation or personal certification is performed. The evaluation of competencies is carried out by assessing the efficiency and output in working at the processing flow. Depending on the competencies, tasks specialization in the assembly line will be assigned on a trained worker.

Accreditation of the training deliverables is lacking in the system.

National Institute for Plantation Management
Plantation industry, semi-government

Institutional Set-up: National Institute of Plantation Management (NIPM) was incorporated in 1979 by an Act of Parliament (NIPM Act No. 45 of 1979), which was subsequently amended in 1981 (Act No. 76), 1987 (Act No. 05), and finally in 2003 (Act No. 38). Presently, it functions as a semi-government organization under the purview of Ministry of Plantation Industries.

The mandate of this institute is to develop human resources engaged in the plantation sector of the country, by delivering various academic courses and training programs. Enacting on this mandate, NIPM conduct academic courses, professional and competency development programs; renders research and consultancy services, aptitude assessment on personnel and job placement in public and private sector firms; publications; confers professional fellowship; and outsource facility for training.

However, the institute is in a process of considering the feasibility of restructuring into a private-public-partnership (PPP) venture. The UN's Food Agriculture Organization (FAO) is rendering technical assistance through a three-member expert team to carry out this feasibility assessment. The final recommendations of this technical assistance mission are due⁸¹.

Organizational Structure: The institute is managed by a board of governance, which is appointed by the Minister of Plantation Industries. This governing body is headed by a chairman; while CEO of the board is the director of the institution. Total members of the board are 15, including the chairman and the director. The board members represent the line ministry, the treasury, research institutions of tea, rubber, and coconut plantation crops, associations of smallholders and plantation companies, and trade unions.

Financial and Operational Management: The institute operates primarily on the treasury grant, which is provided, annually, upon a five-year corporate plan; for the past five (05) years, the institute has received little over LKR 66million (US\$590,000) on an average of about LKR 13million (US\$118,000) per annum. The income generated from training, sales of publications, and outsourcing facilities is also utilized for its operations. The institute utilizes the treasury funds on both the recurrent and capital expenses.

The total number of staff in the institute is 28. Out of them 21 personnel (including the chairman and director) are for administrative tasks, while only seven (07) are for carrying out training and training associated tasks.

Training System and Program: *Target trainees:* The institute targets a wider range of trainees, from field or factory level workers including extension and technical officers, supervisors, middle level managers to higher level executives and managers. The training target group also includes smallholders or planners with proprietary interest. The institute focuses on both the private and public sector personnel, engaged in the plantation industries, in delivering the training.

Training scope: The trainings delivered by the institute cover BSc degree, diploma, and certificate levels, covering all aspects of the plantation industry practices, from field development, processing and manufacturing, techniques, and human resources. Furthermore, the institute envisages improving training focus on health, hygiene, and social responsibility standards.

⁸¹ Source: Personal communication with Mr Ranjit Samarasinghe, Chairman, NIPM on 8th July 2011 and Mr Nalin Munasinghe, Program Associate, UN FAO, Sri Lanka on 15th July 2011

Training program: Two categories of trainings delivered by the institution; which are (a) refresher; and (b) in-service. The delivery program comprises (a) academic and professional courses; (b) technical development (on demand); (c) management development; (d) skills development; (e) productivity and quality development; (f) workshop based (on request); and (g) smallholder based courses.

The courses offered by the institute is diverse not only in scope, but duration and cost as well. Some courses are on a day basis, which will last for one to two days at a rate of LKR1,500 (about US\$13) or LKR2,500 (about US\$22), while some for five to seven days at cost of LKR10,000 (about US\$89) or LKR20,000 (about US\$179) per course. The degree and higher national diploma level courses last for 18 to 36 months in duration, and cost approximately LKR80,000 (US\$714) or LKR150,000 (US\$1,340).

The courses are conducted in English, Tamil, and Sinhala.

Training Evaluation and Accreditation: Training evaluation is carried out by written and practical examinations. But the evaluation on short courses and workshop attendance is not performed. The Institute performs the degree level evaluation, based on the criteria of the affiliation with University of Waymaba, Sri Lanka.

Accreditation of the training deliverables is lacking in the system.

**Agriculture Faculty of Aquinas
College of Higher Studies**
Agriculture industry, a training provider, a
non-profit organization, non-governmental
sector

Institutional Set-up: The faculty of agriculture of the Aquinas College was founded in 1966, and was incorporated as a national agricultural training institute in 1981, by the Agriculture Ministry.

Organizational Structure: The faculty is managed by a governing body headed by the Hon. Rector, appointed by the affiliated church.

Financial and Operational Management: The faculty receives funding from Aquinas College's overall budget.

The management of academic activities is carried out by a panel of lecturers, headed by a director (cum lecturer).

Training System and Program: **Target trainees:** The faculty focuses on beginners, who are interested in starting agricultural, or livestock businesses, those who want a career in agricultural and livestock extension, or instruction, and those who seek entry qualifications for agriculture or livestock advanced studies.

Training scope: The institute offers a two-year diploma course.

Training program: The program operates on an annual requirement, based on an academic year calendar. A two-year study course consists of eight hours of daily lectures on weekdays, practical sessions at the field, and study tours. The program follows a trimester format, each lasting 10 weeks.

The study medium is Sinhala, but English is a compulsory subject.

Training Evaluation and Accreditation: At the end of the two-year academic tenure, upon 80% attendance of lectures and practical sessions, the under-graduate students are allowed to face the final exam for qualification. Based on the performance at the exam, the students are awarded with diplomas.

Ministry of Public Administration of Sri Lanka has gazetted the agriculture diploma offered by the faculty to be on par with that awarded by the public agricultural schools. Hence, the faculty graduates

could compete for vacancies in the government service along with the agriculture diploma-holders from the government schools.

Furthermore, Aquinas College was a registered (P01/ 0023) training provider at TVEC, but the accreditation of the course offered to obtain NVQ status, is yet to be accomplished.

IND-EXPO Certification (Pvt) Ltd
Certification body, training provider,
private sector

Institutional Set-up: Ind-expo is incorporated under the Act of Company Registrar as a non-profit entity. At its inception, Ind-expo established partnerships with two (02) frontline business chambers in Sri Lanka, viz. the Ceylon National Chamber of Industries (CNCI) and the National Chamber of Exporters of Sri Lanka (NCE)⁸².

The other partners of this institution, which provide services, are United Registrar Systems (URS) of United Kingdom (UK), Registrar of Standards Holdings Ltd. (ROS), Chartered Institute of Environmental Health (CIEH) of UK, Colombo Municipal Council (CMC), Sri Lanka, and National Cleaner Production Centre, Sri Lanka (NCP CSL).

IND-EXPO intends to restructure their current establishment into a PPP⁸³.

Organizational Structure: The institution is headed by a chairman. A subordinate to the chairman, is a director who manages the whole operation of the organization. Under his supervision, three (03) technical staffs and a secretary function. Apart from these regular staffs, the institute has a pool of experts and resource persons, who on assignment basis render their services.

Financial and Operational Management: A portion of institute's recurrent cost borne by the external funding (UNIDO and the Royal Norwegian assistance). With the income generated by rendering services, the institute is covering the balance portion of the recurrent expenditure. All training programs are fee based.

Management of all operations is carried out by the director of the institute, with the support from the sub-ordinate staffs.

Training System and Program: *Target trainees:* The trainings focus managers (senior and middle level), executives, supervisors and instructors, quality and standards inspectors and auditors, proprietors, and bottom level workers.

Training scope: Developing basic skills of workers on peeling according to GMP is the purpose of this training.

Training program: Food safety, hygiene, and quality assurance, ISO quality and environment management systems, and occupational health and safety are the main training modules offered by the institution. Duration of trainings would not be more than three days, and is delivered upon demand.

The medium of training is English or Sinhala with Tamil translation on demand.

Training Evaluation and Accreditation: No specific evaluation or personal certification is performed. Only certification of attendance is offered to the trainees.

Accreditation of the training deliverables is lacking in the system.

⁸² The inception and continued operations of IND-EXPO have been supported by UNIDO in collaboration with Ministry of Industrial Development of Sri Lanka and the Royal Norwegian Government under a project of strengthening international certification capacity.

⁸³ Source: key person interview with Mr Nimal Perera, Chairman and Mr Shantha Kuruppumullage, Director, IND-EXPO Certification (Pvt) Ltd

Brandix College of Clothing Technology

Apparel industry, training provider, private sector

Institutional Set-up: The institute was established as a private sector venture under the Board of Investment of Sri Lanka, in 1996. It is a subsidiary of Barndix Group of Companies, which is one of the leading textile and apparel manufacturers in Asia.

The institute is affiliated with Royal Melbourne Institute of Technology (RMIT) University of Australia in offering a three-year degree program on textile technology.

Organizational Structure: The institute is headed by a Chief Executive Officer (CEO), who directly reports to a board of management, which comprises all the group companies. Under this CEO, an accountant, an assistant registrar, and an assistant account functions as the institute's administrative staff, while another seven staffs functions as regular trainers. But the majority (75%) of staffs of the institute works on assignment basis, on service contracts. These personnel are externally drawn industry experts or subject matter consultants.

Financial and Operational Management: The institute is fully financed by the group of companies. However, it operates as an independent entity and a service provider, to these financing companies.

Management of all operations is headed by the CEO of the institute, who also acts as a trainer. The other regular staffs support the CEO on the training and administrative functions of the institute.

Training System and Program: *Target trainees:* The institute addresses the training demands of in-house staffs and school leavers, who seek employment in the industry.

Training scope: There are approximately 100 courses of EBT and Industry Based Training (IBT) for in-house staffs for skills upgrading or updating for meeting new technology or manufacturing demands; while two-year diploma course, three-year international degree course, and Industry Orientated Training (IOT) are offered for school leavers, seeking leverage in securing employment in the industry.

Training program: EBT and IBT courses are offered based on training demand analysis, which the institute, annually, performs for the companies. The IOT, diploma, and degree courses are offered according to their respective academic year calendars.

Since EBT and IBT are in-house, the cost of the trainings is borne by the group of companies. The other three external courses are offered on a fee basis. The fee for the diploma course is LKR225,000, excluding taxes, while the fee for the degree course is LKR625,000, excluding taxes.

The medium of training is English.

Training Evaluation and Accreditation: EBT and IBT are evaluated based on the improvement of staff performance and work productivity improvement or successful completion of the manufacturing tasks. Awarding of certificates based on the level of training or academic qualification is carried out on IOT, diploma, and degree courses.

The institute is a registered training provider (P01/ 0062) at TVEC⁸⁴, but however, accreditation of the training deliverables is still lacking in the system.

⁸⁴ It is the state law to register all tertiary and vocational education services and training providers operates in the country at TVEC.

Vocational Training Authority of Sri Lanka

A national training provider, public sector

Institutional Set-up: Vocational Training Authority (VTA) is the national training provider on vocational qualifications. It was established in 1995, under the Vocational Training Authority of Sri Lanka Act, No. 12 of 1995. The mandate of this institution is to provide job oriented training to rural youths.

VTA comes under the purview of the Ministry of Youth Affairs of Sri Lanka.

Organizational Structure: The institution is managed by a board of authority. The chairman is the head of this board. A vice-chairman is appointed to deputize the chairman. Both the chairman and vice-chairman are appointed by the minister of the line ministry. The Director General (DG) and other divisional directors are the other members of the board. DG is the head of the institution.

There are five (05) divisions of VTA. Each of these divisions is headed by a director, who is based in the head office at Colombo. Apart from these directors, there are four (04) internal auditors in VTA's head office. For each district, there is an assistant director, who is based outside the head office, in-charge of the vocational training centres in the district.

Financial and Operational Management: The institute is fully financed by the Government, through the funds allocated to its line ministry.

Overall management of all operations is headed by the DG of the institute, while (work) divisional level and district levels relevant directors and assistant directors are responsible for operational management. VTA has in-house, qualified trainers to conduct trainings.

Training System and Program: Target trainees: The institute focuses, primarily, on school leavers, seeking skilled jobs.

Training scope: The institute offers certificate, diploma, and NVQ level courses.

Training program: Over 50 different training courses are offered by the institute. These training courses are offered according to an annual plan. The following table provides an overview of the courses offered by the institution.

Level & number of courses	Fee	Training duration
Certificate About 20 courses offered	Some are free of charge Min. LKR500, Max. LKR20,000	Min. 3days, Max. 6days
Diploma Only 4 courses offered	Min. LKR10,000, Max. LKR40,000	Min. 6months, Max. 12months
Entrepreneurship Development Program	Information not available	8days
NVQ About 30 courses offered	Some are free of charge Min. LKR500, Max. LKR20,000	Min. 6months, Max. 18months
Special courses Only 2 courses offered, on information technology (IT)	Min. LKR10,000, Max. LKR40,000	Min. 150hrs, Max. 300hrs

VTA provides additional services of career guidance to job seekers, including its training pass-outs. Job placement is also another special service provided by the institution. VTA assists its training pass-outs to find local or foreign employment or self employment. VTA maintains, job seekers and job offers (company) register for facilitating match making. Furthermore, VTA holds job fairs and industrial visits for supporting the trainees to secure jobs.

The medium of training is Sinhala or Tamil.

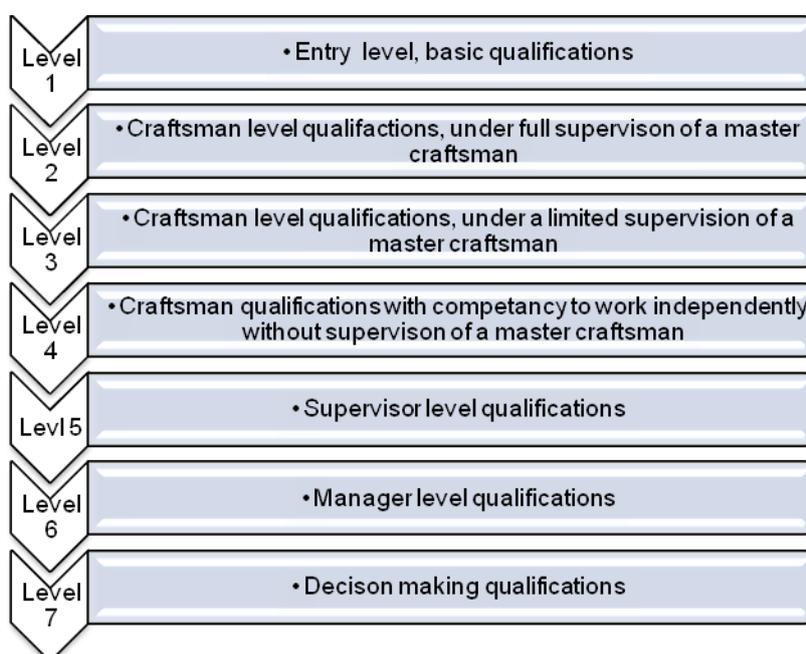
Training Evaluation and Accreditation: The institute has a personal certification scheme for trainees at completion of the courses. Some of the courses comprise an end of course test to award certificates. Periodically, VTA conducts tracer studies to assess the training effectiveness and efficiency. The institute is a registered training provider at TVEC, as well as accredited for about 30 training courses to obtain NVQ status.

ii. **National Framework for Vocational Training Regulation and Accreditation**⁸⁵

The authority of standardizing and regularizing vocational and tertiary training and educational services is vested with TVEC. This commission was established under the provisions of the Tertiary and Vocational Education Parliamentary Act No 20 of 1990 as the apex body in the Technical and Vocational Education and Training (TVET) sector. Its primary responsibility is policy formulation, planning, quality assurance, coordination and development of tertiary and vocational education in the country.

As the apex body of TVET sector, TVEC has the authority to register all training and educational service providers in this sector. In fact, the TVET Act mandates all TVET service providers to be registered at TVEC. The commission is also authorized to define, institutionalize, award, and regularize National Vocational Qualifications (NVQ) on defined occupational competency standards. This standardizing or accreditation process prerequisites the establishment of national occupational competency standards. These competency standards define national benchmark for any vocational skills requirement to be accomplished⁸⁶.

NVQ framework defines seven (07) levels of competencies, which are as follows:



The framework directs two ways of attaining NVQ. These two ways are (a) Competency Based Training (CBT); and (b) Recognition of Prior Learning (RPL).

⁸⁵ All the details provided and issues discussed, herein, are the contents of the KPIs with Dr TA Piyasiri, DG, Mr BHS Suraweera, Deputy DG, and Mr SUK Rubasinghe, Deputy Director (Standards and Accreditation) on 27th April 2011; and referring to the information materials provided by TVEC at this meeting.

⁸⁶ According to Mr BHS Suraweera, Deputy DG, TVEC, training intends to enhance human resource competency to carry out work tasks. Training is then a delivery mechanism for attaining this objective.

CBT is a conventional way of training that runs through a continuous assessment of competencies, and ends at a final assessment of competencies. These competencies are developed through formal learning and structured institutional setting.

RPL builds up through an informal way or any other way of learning, and the assessment takes place in a work place setting. In the RPL assessment, only the competencies are reckoned, but leave out the method and process of learning and skills development.

Registering training providers and vocational education institutes is a legal requirement under the TVET Act of 1990, No. 20, and the clause 14th and 15th; and according to the development plan that was notified by the Government gazette notification of No. 887/ 8. The purpose of registering these service providers is: (a) to certify the quality of vocational training providers; (b) to make aware the public about vocational training providers, which offers quality courses; and (c) to establish a system of training course accreditation and managing standards.

The benefits, which the training providers would receive by registering at TVEC are: (a) legal protection on operating training institute; (b) recognition and public awareness about offering of quality courses by the institute; (c) publicity reached by publicizing on the Government gazette, the internet, and news papers; (d) capacity to award nationally accepted personal certificates to trainees; and (e) make eligible institute to apply for accrediting training courses.

In registering training institute at TVEC, the following criteria are considered.

- Availability of qualified academic or training staff at institute
- Quality and adequacy of training content of the courses offered
- Proper availability of training equipment, tools, and facilities
- Suitability of training techniques and materials
- Standard and accepted evaluation techniques
- Personal certification with vocational qualification emphasis
- Availability of training infrastructure suiting to trainee population and training courses
- Availability of basic amenities like drinking water, light, first aid, and sanitary facilities
- Proper institutional management including record keeping and availability of student welfare and accommodation

TVEC has four categories of registering training providers. These categories are as follows:

Category	Validity period	Condition to be fulfilled
A+	5years	At least 50% of the courses offered are accredited and quality assurance system is in place.
A	3years	At least 50% of the courses offered are accredited
B	3years	Courses offered are up to the expected quality and adequate in number
C	2yeras	Minimum conformity to the registration criteria

iii. Training Demand

The demand, per se the cinnamon industry value chain is concerned, is assessed by considering: (a) institutional demand; (b) training delivery demand; and (c) demand for social and industry recognition. In a way, these criteria of demand are the indications for the suitable training delivery mechanism for the industry.

In this demand assessment, reference has given to (a) a rapid survey on training demand assessment amongst the growers; and (b) outcomes of the working group sessions at the validation workshop that was held on 7th July 2011, Colombo.

A rapid survey was conducted during May and June 2011. Despite it was planned to include 30 respondents, the survey sample had to limit to 18 because of the prevailed practical situation and available resources. All respondents of this sample were males, while a half of these respondents were between 31 and 40 years of age (22%) and 51 and 60 years of age (28%). Land extent of the majority (39%) of the respondents was between 10ha to 30ha, while 33% of them were having lands with extents between 1ha to 5ha.

The result of over 60% of the respondents were having experience over 20 years on cinnamon growing implies a sample with an extensive background on the industry. Resulting over 70% of the respondents with a sound knowledge on all key aspects of the cinnamon growing could be contributed because of this background. And 95% of them learning the trade by informal learning, mainly from their parents, would be complimenting this extensive engagement and commitment.

The fact that almost 95% of the respondents were not bearing an accurate knowledge about GAP implies that this traditional way of the knowledge transfer needs upgrading for complying with the contemporary trade demands. But contrast to their limited understanding about GAP, the majority of 56% the respondents demonstrated a good understanding about GMP. However, the fact of 44% the respondents without an adequate knowledge about GMP is still significant; and hence, the situation demands knowledge upgrading.

The survey results firmly assure the labour demand for cinnamon peeling and associated plantation maintenance work tasks. The opinion of 70% of the respondents about the scope of the cinnamon peeling to be inclusive all work tasks from pruning to peeling off bark, unambiguously defines the parameters for the cinnamon peeling vocation. However, the majority's opinion as it is a tedious job, which to be performed in a not so conducive work environment, strongly urges radical changes to the outlook and work surrounding.

The lack of proper and sufficient training on cinnamon production and processing was confirmed by the majority's responses. Hence, a strong and urgent need of a well defined training delivery mechanism has been reassured. Furthermore, 95% of these responses were that the level of the available training is basic; therefore, a demand for the training delivery mechanism to include advanced level of skills development was implied.

The duration of the existing trainings (one to two days) was confirmed to be not enough for a substantial skill development. Hence, the demand for a lengthier training scheme is implied. The fact of there is no any other training provider other than the public sector institutions, in the present context, urges an involvement of the private sector in the training delivery.

The majority of the respondents were not paying for the training and bears a very little or no knowledge about how the industry accepts the trained personnel, demonstrate the prematurity of the industry in terms of training. However, since the majority of these respondents find the training to be effective and useful gives a positive prospect. Nevertheless, a high percentage of ignorance on NVQ framework demands an awareness raising campaign amongst the industry stakeholders in couple with any possible training intervention.

Learning from the outcomes of the validation workshop is summarized below.

Institutional Demand: The stakeholders, across the value chain, unanimously favoured the proposition of establishing a PPP venture for delivering the anticipated training for the cinnamon industry value chain.

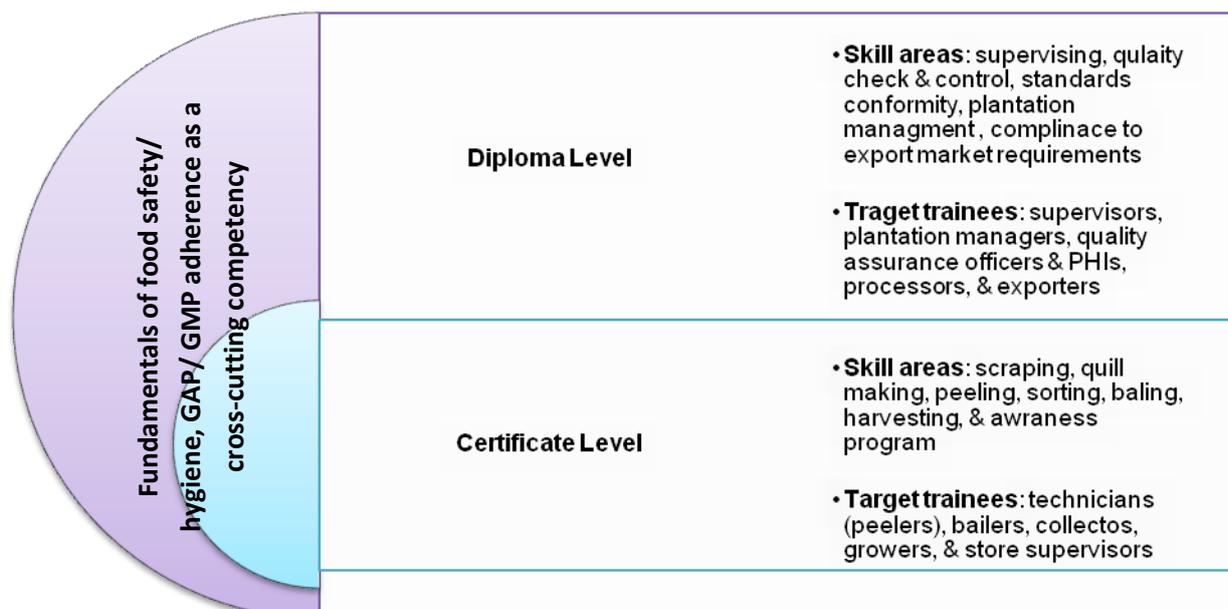
Delivery Mechanism: *Training target group:* The value chain stakeholders expect a training, which covers almost all aspects of the supply chain. Their rationale for this requirement is to firm-up the supply chain's capability for conforming the quality and standards of the Pure Ceylon Cinnamon brand (the mark). Therefore, the following value chain actors have been identified by them as the training target group: (a) cinnamon processors/ technicians⁸⁷ (peelers); (b) balers; (c) collectors; (d) supervisors; (e) growers including smallholders; (f) quality assurance officers and Public Health

⁸⁷ During the validation workshop, the stakeholders thought of changing the title of the cinnamon peeler as processor or technician.

Inspectors (PHIs); (g) store supervisors; and (h) processors and exporters. The skills areas, which are to be developed through this training, per each targeted trainee group are list below:

Trainee target	Skills area
Technician/ processor (peeler)	Scraping, quill making (joining), peeling (inner bark) sorting, bailing, grading, and harvesting <i>Based on the requirements of trade crafts and GAP/ GMP adherence</i>
Baler and collector	Sorting, bailing, and grading <i>Based on the requirements of trade crafts and GAP/ GMP adherence</i>
Supervisor and manager	Overall managerial skills and technical knowledge <i>Based on knowledge requirements for international food and hygiene standard conformity and quality requirements</i>
Grower	Technical and market knowledge and plantation management including general knowledge on “peeling” <i>Based on knowledge requirements for international food and hygiene standard conformity and quality requirements</i>
Quality assurance officer and PHI	Technical knowledge on product quality <i>Based on knowledge requirements for international food and hygiene standard conformity and quality requirements</i>
Store supervisor	Technical knowledge on product quality <i>Based on knowledge requirements for international food and hygiene standard conformity and quality requirements</i>
Processor and exporter	Technical and market knowledge <i>Based on knowledge requirements for international food and hygiene standard conformity and quality requirements</i>

Scope of training: The stakeholders indentified two (02) levels of training, viz. certificate and diploma levels. The diagrammatic illustration of this training scope is given below:



Mode of training: The demand for in-house training or IBT and in-service training or IOT was expressed during the stakeholder consultations.

Recognition and Acceptance: To rectify the social and industrial outlook on the vocations in the cinnamon industry, particularly on the cinnamon technicians (peelers), it is imperative and demanded to register and accredit the training institution and the courses offered by the prospective training function.

However, in this whole process of registration (attaining recognition) and accreditation, the following considerations have been highlighted by the stakeholders.

- Registering the prospective training institute at TVEC.
- Accreditation of courses offered by this training institute (national accreditation) at TVEC and obtaining NVQ standard.
- Obtaining certification of internationally accepted ISO 9000 Quality Management System for the prospective training institution and training management.
- Training of competency assessors and registering them at TVEC for assuring credibility.
- Formulation of training curricular and competency assessment materials.
- Contrary to the industry's existing workforce and the demand for labour, it is imperative to have RPL assessment for allowing the experience and skilled cinnamon technicians and personnel to obtain NVQ level personal certification. CBT assessment would be required for the beginners, newly entering into the industry for attaining NVQ level certification.
- Introducing and institutionalizing an attractive training stipend for the trainees to encourage enrolment.
- Creating a labour market demand for trained cinnamon peelers through public awareness campaign, holding job fairs, and mass media publicity.

With the recent event of launching of the Pure Ceylon Cinnamon (PCC) brand logo by the President of Sri Lanka, the cinnamon industry has begun a new chapter.

On one side, the stakeholders are feeling excited about the prospectors of successes at the export market front, but on the other side they are worried about the vulnerability of the supply chain in food safety standards conformity. They strongly believe that while strengthening in cards, upgrading the skills competencies of the workforce to meet the demands of SPS standards requirements, is a critical demand to capitalize this marketing opportunity. In this perspective, the stakeholders unanimously opted for the idea of the prospective training function to be in par with this brand logo (PCC). On the other hand, they see the PCC mark as an opportunity for the prospective training establishment with a clear strategic advantage. To capitalize on this opportunity, the necessity of making mandatory the training of cinnamon technicians for obtaining the PCC logo has been seen as a critical policy advocacy, by the stakeholders.

Annex 2: Internal Efficiency of Production and Processing

Productivity Criteria	Category of Producer		
	Estate/ Certified Producton	Estate/ Un- certified Producton	Small-holder/ Un- certified
A. Workforce			
Number of workers	32	25	19
Task distribution			
<i>Managerial/ executive</i>	1	0	0
<i>Adminstrative</i>	4	0	0
<i>Supervisory</i>	1	1	0
<i>Technical</i>	0	0	0
<i>Production line - skilled work</i>	26	24	18
<i>Scraping</i>	10		7
<i>Peeling</i>	6		8
<i>Quill making</i>	10		3
<i>Production line - unskilled work</i>	0	0	0
<i>Production line - maintainance</i>	2	0	0
<i>Plantation - crop cultivation & maintainance</i>	48	24	11
<i>Plantation - harvesting</i>	26	24	9
Gender composiiton			
<i>Female (management & production staff only)</i>	16	12	not available
<i>Male (management & production staff only)</i>	16	13	not available
Personnel engagement			
<i>Full-time</i>	54	25	19
<i>Part-time</i>	2	0	0
<i>Permenant</i>	28	0	0
<i>Temporary</i>	26	25	18
Qualifications			
<i>University degree/ higher national diploma/ diploma</i>	2	0	0
<i>O/L or A/L (Secondary)</i>	4	1	0
<i>Below O/L & lesser</i>	48	24	19
Experience of producion line workers			
<i>More than 20 years</i>	0	5	9
<i>Between 20 years & 10 years</i>	9	18	4
<i>Between 9 years and 5 years</i>	10	0	0
<i>Less than 5 years</i>	7	2	8
Worker understanding about the trade (produciton line workers only)			
<i>Satisfactory (Yes = 1; No = 0)</i>	1	0	0
<i>Basic (Yes = 1; No = 0)</i>	0	1	0
<i>Not sure or inconsistent (Yes = 1; No = 0)</i>	0	0	1
Worker attributes for quality & standards assuurance			
<i>Personal hygiene at work</i>			
<i>Satisfactory (Yes = 1; No = 0)</i>	1	0	0
<i>Basic (Yes = 1; No = 0)</i>	0	0	1
<i>Not sure or inconsistent (Yes = 1; No = 0)</i>	0	1	0
<i>Hyigene & cleanliness of produce</i>			
<i>Satisfactory (Yes = 1; No = 0)</i>	1	0	0
<i>Basic (Yes = 1; No = 0)</i>	0	0	0
<i>Not sure or inconsistent (Yes = 1; No = 0)</i>	0	1	1
<i>Quality assuurance</i>			
<i>Satisfactory (Yes = 1; No = 0)</i>	1	0	0
<i>Basic (Yes = 1; No = 0)</i>	0	0	1
<i>Not sure or inconsistent (Yes = 1; No = 0)</i>	0	1	0
<i>Overall care & compliance for quality & standards</i>			
<i>Satisfactory (Yes = 1; No = 0)</i>	1	0	0
<i>Basic (Yes = 1; No = 0)</i>	0	0	1
<i>Not sure or inconsistent (Yes = 1; No = 0)</i>	0	1	0
Wages & allowances received			
<i>Scraping</i>			
<i>Work hours (per day)</i>	8		
<i>Remuneration (per month, in LKR)</i>	10,800		
<i>Peeling</i>		8	8
<i>Work hours (per day)</i>	8		
<i>Remuneration (per month, in LKR)</i>			
<i>Quill making</i>		39,000	33,600
<i>Work hours (per day)</i>	39,756		
<i>Remuneration (per month, in LKR)</i>			
<i>Cultivation & crop management</i>			
<i>Work hours (per day)</i>	8	8	8
<i>Remuneration (per month, in LKR)</i>	14,400	5,833	16,800

Productivity Criteria	Category of Producer		
	Estate/ Certified Production	Estate/ Un-certified Production	Small-holder/ Un-certified
B. Systems and methods			
Cultivation and crop management			
<i>Comprehansive (Yes = 1; No = 0)</i>	1	0	0
<i>Basic (Yes = 1; No = 0)</i>	0	1	1
<i>Not clear (Yes = 1; No = 0)</i>	0	0	0
Harvesting			
<i>Use standard method (Yes = 1; No = 0)</i>	1	1	1
<i>Use method is not up to the standarad (Yes = 1; No = 0)</i>	0	0	0
<i>Not clear (Yes = 1; No = 0)</i>	0	0	0
Processing			
<i>Apply traditional, standard techniques (Yes= 1; No = 0)</i>	1	1	1
<i>At all steps take off-ground (Yes= 1; No = 0)</i>	1	0	0
<i>All steps take on-ground (Yes= 1; No = 0)</i>	0	1	1
<i>Store off-ground (Yes= 1; No = 0)</i>	1	0	0
<i>Store laying on-ground (Yes= 1; No = 0)</i>	0	1	1
Product quality assuerance			
<i>By use of visual inspections (Yes = 1; No = 0)</i>	1	1	1
<i>Refer standards set by SLSI & ISO</i>	1	0	0
<i>By use of lab testing (Yes = 1; No = 0)</i>	1	0	0
<i>Not clear (Yes = 1; No = 0)</i>	0	0	0
Product hygiene and safety; & worker hygiene assuerance			
<i>Codifeid & compliance; no probability of incositantcies (Yes = 1; No = 0)</i>	1	0	0
<i>Not codifeid, but practices are checked & incositantcies are probable (Yes = 1; No = 0)</i>	0	0	1
<i>Not codifeid, practices are not checked & high probability of incositantcies (Yes = 1; No = 0)</i>	0	1	0
Worker efficiency assuerance			
<i>By supervisor (Yes = 1; No = 0)</i>	1	0	0
<i>By output based remuneration (Yes = 1; No = 0)</i>	0	1	1
<i>By quality & output based remuneration (Yes = 1; No = 0)</i>	1	0	0
Communication & welfare of workers			
<i>Structured, formal, & organized (Yes = 1; No = 0)</i>	1	0	0
<i>Not structured, informal/at personal basis, but organized (Yes = 1; No = 0)</i>	0	1	0
<i>Not structured, informal/ on personal basis, & not organized (Yes = 1; No = 0)</i>	0	0	1

Productivity Criteria	Category of Producer		
	Estate/ Certified Production	Estate/ Un-certified Production	Small-holder/ Un-certified
C. Infrastructure			
Facilities for cultivation			
<i>Standard (Yes = 1; No = 0)</i>	1	0	0
<i>Basic (Yes = 1; No = 0)</i>	0	1	1
<i>Not clear (Yes = 1; No = 0)</i>	0	0	0
Faculties for processing			
<i>Codified & compliance, factory construct (Yes = 1; No = 0)</i>	1	0	0
<i>Not codified, basic production construct (Yes = 1; No = 0)</i>	0	1	1
<i>Not codified, unsuitable production construct (Yes = 1; No = 0)</i>	0	0	0
Worker friendliness			
<i>Satisfactory (Yes= 1; No = 0)</i>	1	0	0
<i>Basic (Yes= 1; No = 0)</i>	0	1	0
<i>Unfriendly (Yes= 1; No = 0)</i>	0	0	1

Productivity Criteria	Category of Producer		
	Estate/ Certified Production	Estate/ Un-certified Production	Small-holder/ Un-certified
D. Technology			
Equipment & tools used for cultivation & crop management			
<i>Apply machinery (Yes = 1; No = 0)</i>	1	0	0
<i>Modernized equipment & upgraded tools (Yes = 1;No = 0)</i>	1	0	0
<i>Modernized equipment & traditional tools (Yes = 1;No = 0)</i>	0	0	0
<i>Traditional equipment & tools</i>	0	1	1
Equipment & tools used for processing			
<i>Apply machinery (Yes = 1; No = 0)</i>	0	0	0
<i>Modernized equipment & upgraded tools (Yes = 1;No = 0)</i>	0	0	0
<i>Modernized equipment & traditional tools (Yes = 1;No = 0)</i>	1	0	0
<i>Traditional equipment & tools</i>	0	1	1
Equipment & tools used for quality assurance			
<i>Use analytical appliances</i>	1	0	0
<i>Use lab testing</i>	1	0	0
<i>Only based on visual observations</i>	0	1	1

Productivity Criteria	Category of Producer		
	Estate/ Certified Production	Estate/ Un-certified Production	Small-holder/ Un-certified
E. Performance			
Average production volume at entry for processing (in kg per day per ha)	69	9	58
Average production volume at end of processing (in kg per day per ha)*	3.0	0.4	2.50
Average volume of desired quality (grades)			
<i>Alba (in kg pe day per ha)</i>	0.24	-	-
<i>C5 special (in kg per day per ha)</i>	2.72	0.39	2.45
<i>C4</i>	-		
Average volume of off-quality/ off-grades (in kg per day per ha)	0.06	0.01	0.05
Average volume of desired moisture/ cleanliness/ etc. (baler or exporter buy without bargaining) (in kg per day per ha)	100%	100%	100%
Average volume of rejections due to moisture/ cleanliness (baler or exporter buy after bargaining)	0%	0%	0%
Time takes to harvest 1ha of land (in months)	0.25	0.39	0.57
Time takes to peel (process) harvest from 1ha of land (in months)	0.25	1.05	0.57
Income of harvesting 1ha land (per month)			
<i>Once a year (in LKR)</i>	86,957	5,388	15,750
<i>Twice a year (in LKR)</i>	195,652	11,450	33,469
Total cost of processing, when 1ha land harvested			
<i>Once a year (in LKR)</i>	60,971	7,092	14,000
<i>Twice a year at exclusion of regular maintenance cost (in LKR)</i>	100,203	12,837	23,406
Net profit (before deducting for taxes)			
<i>Once a year (in LKR)</i>	25,986	(1,704)	1,750
<i>Twice a year (in LKR)</i>	95,449	(1,387)	10,063
Cultivate total land extent (in ha)	21.6	7.6	3.2
* The ratio between yield (bark) and wet weight is taken as 1:23			

Annex 6: Letter from the Applicant to UNIDO



The Spice Council

Spices, Flavours, Fragrance & Beyond

1, 1/1, Anderson Road,
Colombo 5.
Tel: 011 – 7635025, E-mail: spicecouncil@dialognet.lk, info@srilankanspices.com

OUR REF: 44/2011

26th July 2011

Ms. Kenza Le Mentec

Economic Affairs Officer
Standard and Trade Development Facility (STDF)
Agriculture and Commodities Division
World Trade Organization
Rue de Lausanne, 154
CH 1211 Geneva 21
Switzerland.

Dear Madam,

PROJECT ON “FOOD SAFETY & QUALITY AND RELATED INSTITUTIONAL CAPACITY BUILDING FOR THE CINNAMON SECTOR IN SRI LANKA”

We appreciate the assistance and guidance given by WTO/STDF to have a successful project designed on “Food Safety & Quality and related institutional capacity building for the cinnamon sector in Sri Lanka”. It is an utmost important to address the issues of quality, productivity and the sanitary standards of cinnamon as it is highly important in the International Spices Trade.

We are pleased to notice that the project preparatory phase is successfully progressing and would like propose to WTO/STDF to have United Nations Industrial Development Organization (UNIDO) as the executing partner of this project during the implementation phase in order to have a successful project implemented addressing a national interest of Sri Lanka.

Thank you

Yours Faithfully

D. A. PERERA
CHAIRMAN
THE SPICE COUNCIL

Cc. Dr. Lalith Gunathilake
Director
Trade Capacity Building Branch
United Nations Industrial Development Organization
Room D – 13 – 51
P. O. Box 300
A – 1400, Vienna, Austria.

Annex 7: Endorsement Letters from the Ministries

අමාත්‍යාංශය அமைச்சு Ministry	2435248		ප්‍රධාන කාර්යාලය பிரதான அலுவலகம் General Office	2327554 2392149 2392150
ෆැක්ස් தொலைநகல் Fax	2390885		ෆැක්ස් தொலைநகல் Fax	2390941
ලේකම් செயலாளர் Secretary	2436123 2436124	කර්මාන්ත හා වාණිජ කටයුතු අමාත්‍යාංශය கைத்தொழில் மற்றும் வணிக அமைச்சு MINISTRY OF INDUSTRY AND COMMERCE	විද්‍යුත් තැපෑල மின்னஞ்சல் e - mail	Secretarymid @gmail.com
ක. ම. 570, 73/1, ගාලු පාර, කොළඹ 03, ශ්‍රී ලංකාව த.பெ. இல. 570, 73/1, காலி வீதி, கொழும்பு 03, இலங்கை P. O. Box 570, 73/1, Galle Road, Colombo 03, Sri Lanka				
මගේ අංකය எனது இல.	113/Sec 1/5/1	ඔබේ අංකය உமது இல.	දිනය திகதி	10 th Aug. 2011

Mr. D.A. Perera
 Chairman
 The Spice Council
 1, 1/1, Anderson Road
 Colombo 05.

Dear Sir,

Project to Establish a “National Cinnamon Training Academy”

Reference to your letter dated 29th July 2011 on the above subject.

We are aware that the Spice Council of Sri Lanka in collaboration with the Standard and Trade Development Facility (STDF) of World Trade Organization (WTO) and United Nations Industrial Development Organization (UNIDO) has initiated ‘a project to establish a National Cinnamon Training Academy in Sri Lanka. It is a long felt need in the sector and would address the issues of quality, productivity and the health & safety standards of the cinnamon products and workers as it is highly important in the international spices trade.

This ministry was involved in this project from its inception and would like to place on record the extension of its support and cooperation for the implementation of same.

Yours faithfully,


 Tilak Collure
 Secretary

අමතසංයම/அமைச்சு / Ministry

80/5 මෝවිජන මන්දිරය
රජමල්වත්ත මාවත
බත්තරමුල්ල
இல. 80/5 கோவிஜனமந்திரய
ரஜமல்வத்த.

No.80/5, "Govijana Mandiraya"
Rajamalwatta Mawatha,
Battaramulla.

නිවස /வதிவிடம்/Residence

"ගුරු ගෙදර" කපුහෙන මාව,
උස්මල්වත්ත, බත්තර, ශ්‍රී ලංකාව.
"குருகெதர" கப்புஹென வீதி,
உக்கல்தொட, கபுஹென வீதி, இலங்கை.
"Guru Gedara", Kapuhena Road,
Uggalboda, Kalutara North, Sri Lanka



රේජිනෝල්ඩ් කූරේ (ස.ම.)

ரெஜினோல்ட் குரே

REGINALD COORAY (M.P.)

සුළු අපනයන හේතුව ප්‍රවර්ධන අමාත්‍ය
சிறு ஏற்றுமதிப் பயிர் ஊக்குவிப்பு அமைச்சர்
MINISTER OF MINOR EXPORT CROPS PROMOTION

දුරකථන/ தொலைபேசி /Telephone

තරු අමාත්‍යාංශය } +94 112887403

கௌரவ அமைச்சர் } +94 112888921

Hon. Minister

Fax : +94 112885387

ලේකම්

செயலாளர் } 071-8993042

Secretary } 0112887898

නිවස

வதிவிடம் } +94 34 2222812

Residence

මගේ අංකය
எனது இல. }
My No

ඔබේ අංකය
உமது இல. }
Your No

දිනය
திகதி } 22nd August 2011
Date

Ms. Kenza Le Mentec
Economic Affairs Officer
Standard and Trade Development Facility (STDF) <
Agriculture and Commodities Division
World Trade Organization
Rue de Lausanne, 154
Ch 1211 Geneva 21,
Switzerland.

Dear Ms Kenza Le Mentec

Establishment of the Cinnamon Training Academy

We are happy to note that Spice Council of Sri Lanka in collaboration with Standard and Trade Development facility (STDF) of World Trade Organization (WTO) and United Nations Industrial Development Organization (UNIDO) has initiated a project to establish a "Cinnamon Training Academy" in Sri Lanka to address the issues of quality, productivity and the sanitary standards of cinnamon as if highly important in the International Spices Trade.

This is to inform you that as the Minister of Minor Export Crop Promotion and my Ministry will extend our fullest cooperation and assistant to this project as it will provide immense support to the Cinnamon sector development.

Thanking you

Yours Sincerely,


Reginald Cooray

Minister of Minor Export Crop Promotion

Reginald Cooray
Minister of Minor Export Crops Promotion
No. 80/85, a, Govijana Mandiraya
Rajamalwatta Avenue
Battaramulla.

Cc: Dr. Lalith Gunathilake,
Director, Trade Capacity building branch
United Nations Industrial Development Organization
Room D – 13 – 51, P.O. Box 300
A – 1400, Vienna, Austria.

Mr. D. A. Perera
Chairman
THE SPICE COUNCIL

මහින්ද යාපා අබේවර්ධන
 மஹிந்த யாப்பா அபேவர்தன
 Mahinda Yapa Abeywardena

කෘෂිකර්ම අමාත්‍ය
 கமத்தொழில் அமைச்சர்
 Minister of Agriculture



“අපි වවමු රට නගමු”
 “நாம் பயிரிடுவோம் நாட்டைக்
 கட்டியெழுப்புவோம்”
 “Let us Cultivate and
 uplift the Nation”

මගේ අංකය
 எனது இல. } Ad:Sec (AD) Development
 My No. }

ඔබේ අංකය
 உமது இல. }
 Your No. }

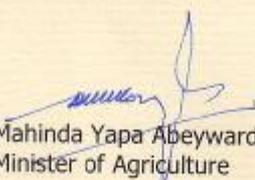
දිනය
 திகதி }
 Date } 22.07.2011

United Nations Industrial Development Organization
 Standard and Trade Development Facility (STDF) of WTO

Establishment of National Cinnamon Training Academy

I am happy to note that the Spice Council of Sri Lanka in collaboration with United Nations Industrial Development Organization and Standard and Trade Development facility of WTO, has initiated a project to establish National Cinnamon Training Academy in Sri Lanka.

This is to inform you that as the Minister of Agriculture, I will extend my fullest support to the project, as it will provide immense support to the sector development.


 Mahinda Yapa Abeywardena
 Minister of Agriculture

වාර්තා: 011-2887412
 කෘෂිකර්ම අමාත්‍යාංශය,
 “ගෝජන මන්දිරය”, 80/5, රාජමාවුර පාර, බත්තරමුල්ල.
 தொழில் அமைச்சு,
 “கோவீண மன்றம்”, 80/5, ராஜமவுர் பாதை, பத்தரமுல்லை.
 மொழி / மொழி / Fax
 011-2887412

අමාත්‍යාංශය:
 கமத்தொழில் அமைச்சு,
 “கோவீண மன்றம்”, 80/5, ராஜமவுர் பாதை, பத்தரமுல்லை.
 மொழி / மொழி / Fax
 011-2887412

Office:
 Ministry of Agriculture,
 “Govjane Mandiraya”, 80/5, Rajamawur Avenue, Battaramulla.
 மொழி / மொழி / E-Mail
 mahindayapeabeywardena@gmail.com

Annex 8: Purchase of land and possible financial contributions for construction

22/12 2011 16:32 FAX 94 11 2512788

INTERCOM LTD

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The Spice Council

Spices, Flavours, Fragrance & Beyond

1, 1/1, Off Dikmans Road,
Colombo 05

Tel/Fax: 011-7635025 E-mail: spicecouncil@dialognet.lk, tsc@dialognet.lk

December 22, 2011

Our ref: TSC/233/2011

Mrs Roshini Gunaratne
National Project Co-ordinator
UNIDO, Indexpo Certification (Pvt) Ltd
Apt. 20, 1st Floor,
Galle Face Court 2,
Colombo 3.

Dear Ms. Roshini,

Purchase land for establishment of Cinnamon Training Academy

As you aware, we have purchased a land of 1 acre 3 roods 20 perches totaling 300 perches. This land was virtually gifted to the Cinnamon Training Academy (Pvt) Ltd by a cinnamon estate owner. We paid him a token Rs 1,125,000.00 at the time of writing the purchase deed. This land is adjoining the model as a GMP, HACCP model cinnamon factory.

This land is situated in Kosgoda, the main cinnamon producing district of Galle. There is easy access to this land from the Colombo – Galle road and very close to the Kosgoda Railway Station. The current valuation is estimated at over Rs. 12 million and number of cinnamon growers and exporters have invested in the Cinnamon Training Academy (Pvt) Ltd and it has Rs 3 million in available for this project.

Thank you
Yours Faithfully

The Spice Council
Sarada De Silva
Chairman



ශ්‍රේණි කටයුතු හා නිපුණතා සංවර්ධන අමාත්‍යාංශය
இளைஞர் அலுவல்கள் மற்றும் திறன்கள் அபிவிருத்தி அமைச்சு
MINISTRY OF YOUTH AFFAIRS & SKILLS DEVELOPMENT



My No: 4-1/2/3/2 (d)

11.11.2011

Director General
Department of National Planning

Establishment of a Cinnamon Training Academy

As per the directions of Hon.Dullas Alahapperuma, Minister of Youth Affairs and Skills Development, a special meeting was held on 09.11.2011 with the participation of Ministry officials, Director General, Tertiary and Vocational Education Commission, Chairman and officials of the Spice Council.

At this meeting following matters have been discussed:

1. Present situation and prevailing issues of the Industry
2. Development of NVQ standards and curricula for the spice trade. eg: cinnamon peelers, cinnamon technicians etc
3. Possible involvement of establishing a Cinnamon Training Academy

It is observed that cinnamon is one of the major exports for earning the foreign exchange to this country. Hence, It is necessary to increase the value addition of the final export items relating to the cinnamon products. In this context, skilled manpower is a critical factor to increase the value addition, reduce the cost of production, and to enhance the efficiency of the industry of the cinnamon items.

According to the mandate given by this Ministry, NVQ standard and curriculum development relating to the cinnamon peelers, cinnamon technicians and other relevant trades could be done by this Ministry with due assistance of the industry.

In the above discussion, the officials of Spice Council requested to establish a Cinnamon Training Academy in Southern province by investing Rs.25 million from the Government of Sri Lanka. Considering the importance of establishing the training academy, there is a possibility of initiating Public-private partnership(PPP) method for this purpose. At present Export Cess tax by the Government on cinnamon items is Rs.3/= per kg. Therefore, this cess income could be utilised to develop the cinnamon industry and improve the value addition of the export related cinnamon products.

අමාත්‍යාංශයේ 304/2, පාර්ලිමේන්තු මහල, කොළඹ 05. 'திறன்கள் அமைச்சு' 304/2, நாடாளுமன்ற மாளிகை, கொழும்பு 05, 'Youth Affairs' 304/2, Parliament House, Colombo 05.
எனது இணையத்தளம் / Web Site : <http://www.youthskillsmin.gov.lk> | இணைப்பு / இணைப்புகள் / e-mail : info@youthskillsmin.gov.lk

අමාත්‍ය
அமைச்சர்
Minister } 011 - 2596772

අමාත්‍ය
அமைச்சர்
Secretary } 011 - 2597501

සමස්ත
දුරකථන
Fax } 011 - 2597804

සමස්ත
அமைச்சர்
Office } 011 - 2597877

Considering the above facts, Public-Private Partnership method could be initiated for this purpose by promoting company to hold the majority of shares for the Government side and management of the institution could be handed over to the private share holders. According to the information provided by the Spice Council they have already purchased a land for this purpose. Therefore, Government could contribute by investing Rs.25 million to construct the buildings as the Government portion for the public-private partnership.

As such, you are kindly requested to discuss this proposal with the Director General of Public Enterprise and the officials of the Spice Council to seek the possibility of establishing Cinnamon Training Academy through the public and private partnership mode as this venture will significantly improve the industry position thereby contribute for the national economy.

S.S.Hewapathirana
Secretary
Ministry of Youth Affairs and Skills Development

Cc: (i) Director General, Department of Public Enterprise -for kind information & necessary action pl.

20/12
[Signature]
(ii) Chairman, the Spice Council

