Potentials and opportunities for the Dutch horticultural sector in Sri Lanka

A comprehensive sector study on the current state of the

Floriculture and Fruit & Vegetables industry in Sri Lanka

with emphasis on

Potentials and opportunities for the Dutch horticultural sector

September 2016

Authorised by:
The Netherlands Enterprise Agency | RVO.nl &
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Foreword from the ambassador

During the past decade, the Sri Lankan economy has tripled and with an economic growth of 5.4% in 2015, Sri Lanka is well on its way to become a higher middle income country. The Gross Domestic Product is rising and the poverty ratio of Sri Lanka is decreasing. All of this contributes to the establishment of an increased quality of life and an improved business climate.

The agricultural sector of Sri Lanka plays a key role in the country's economic development and its new role has been redefined in the light of the development goals of the nation. Sri Lanka can cultivate vegetables, flowers and fruit all year round. Using techniques and practices of an efficient and sustainable production are paramount.

The Netherlands is the world`s leading supplier of flowers, plants and trees. The Dutch horticultural sector is a global trendsetter, supplying markets all over the world, as well as being a leading innovator in greenhouse technology. It forms the heart of an international network for floriculture, bulbs, fruit and vegetables. The developments of high-quality production methods have enabled the Dutch horticulture cluster to become this strong. The Dutch have created efficient supply chains that are able to deliver flowers in New York that have been cut the very same day in the Netherlands.

The Dutch horticultural sector is supplying markets all over the world, as well as a leading innovator in greenhouse technology. The Netherlands is the largest exporter of onions and seed potatoes and one of the largest producers of tomatoes in the world. Therefore, the Netherlands has the knowledge, technology and capacities to support Sri Lanka with establishing an efficient and professional horticultural industry.

Over the years agriculture has become a priority for the Dutch Embassy in Colombo. An agricultural department has been established and many activities have been organised to strengthen the agricultural cooperation between the two countries. Our team in Colombo is willing to assist when you require more information about specific sectors or doing business in Sri Lanka.

Because of the improved business climate and the promising perspectives of the agricultural sector in Sri Lanka, the Netherlands Embassy in Colombo felt the need to commission a Business Opportunity Report, to provide further insight into the opportunities in the horticultural sector and specific information for companies that are interested in business opportunities in this sector in Sri Lanka. Also the launch of the new direct KLM route between Amsterdam and Colombo will make it easier to transport horticultural products to both countries.

I hope that this report on potentials and opportunities for the Dutch horticultural industry in Sri Lanka will prove to be instrumental and will provide the industry with useful and realistic information. The horticultural missions in both, the Netherlands and in Sri Lanka will offer an interesting podium for both Sri Lankan and Dutch organisations, to present themselves. It will certainly be yet another step in the further strengthening and broadening of the partnership between the Netherlands and Sri Lanka.

Joanne Doornewaard
Ambassador of the Kingdom of The Netherlands in **Sri Lanka & Maldives**
September, 2016

Foreword from the authors

Strengthening the ties and enhancing bilateral trade between the horticultural sectors in Sri Lanka and the Netherlands are the ultimate goals of this study. In anticipation of two scheduled trade missions for the horticulture sector - one in September 2016 with Sri Lankan entrepreneurs to the Netherlands and the other in November 2016 with Dutch entrepreneurs to Sri Lanka - the Embassy in Colombo and RVO in The Hague commissioned this survey in order to give the Dutch horticultural cluster insights in the business potential in Sri Lanka.

Project team

The survey was carried out by a core team of 2 Sri Lankan and 1 Dutch expert:

- Dr. Chalinda Beneragama | University of Peradeniya www.pdn.ac.lk
- Prof. Buddhi Marambe | University of Peradeniya www.pdn.ac.lk
- Jos Leeters MSc | Bureau Leeters www.bureauleeters.nl

During the final phase valuable support was provided by:

- Milco Rikken | ProVerde | www.proverde.nl
- Jeroen Gelderblom | JConnectA | www.jconnecta.com

Throughout the survey, the contact person at RVO was Mrs. Annette Weijman. From the side of the Dutch Embassy in Colombo Mr. Nishan Dissanayake and Mr. Wouter Verhey (agricultural counsellor India & Sri Lanka at the Embassy of The Netherlands in New Delhi) were involved. This team gave indispensable support and steering.

The study was conducted through a combination of desk research and field research in Sri Lanka. The staff of the University of Peradeniya made the foundation for this report by gathering facts, figures and opinions in Sri Lanka and examining the involvement of the public and private organizations. Jos Leeters joined in several company visits, attended a stakeholders meeting in Colombo and interviewed company owners and managers to find out what's on their agenda. Finally he integrated all results and opinions in this report.

About NEA

The Netherlands Enterprise Agency (NEA) or Rijksdienst voor Ondernemend Nederland (RVO) encourages entrepreneurs in sustainable, agrarian, innovative and international business and it contributes to sustainable economic development through private sector development by offering different instruments and intervention types targeting SMEs from developing countries and emerging markets. ⓘ www.rvo.nl

On behalf of the survey team I wish that this report will benefit and support both the Dutch and Sri Lankan horticultural industries towards more bilateral relationships and trade.

Jos Leeters
September, 2016

Management summary

Agriculture has been a major pillar in the society and economy of Sri Lanka for a long time. Due to the country's geographical position in the tropics with good temperature and light regimes and various climate zones, the conditions are favourable for 365 days / year crop cultivation. However, the development of an export oriented horticultural industry only started in the 70's of the last century. In the 90's substantial volumes of ornamental products were being traded between Sri Lanka and the Netherlands, focusing on the foliage and cuttings segment. The business went down in the first decade of this century, partly because of political and economic unrest during the civil war, but also because of international competition from other continents. Nowadays, doing business in horticulture has become more serious, especially since the end of the civil war in 2009 and the recent revival of the economy. Whereas only few Sri Lankan companies dominated the business in the 80's and 90's, recently new entrants came into the picture. The government of Sri Lanka plays an active role in helping the industry forward.

Economy
The economy of Sri Lanka shows positive figures. It has a lower middle income economy, but it's on the way to become a higher middle income country. Its GDP grew by 7% in 2013, 7% in 2014 and 5% in 2015 to US$ 3,600 per capita in 2015. Inflation remains in the single digit levels, currently around 4%. Agriculture and food processing, tourism, textile / garments and commercial services (banking, logistics, telecom) are the core sectors in the Sri Lankan economy.

Floriculture
Sri Lanka exported floricultural products for a value of US$ 14 million in 2015, whereas it imported for a value of US$ 1 million, the majority of exports being foliage and cuttings. The Netherlands and Japan are the leading destinations. Export of cut flowers is rather small but trade towards the regional markets and the Middle East shows an increase. Within the group of importing countries of floricultural products from Sri Lanka, Saudi Arabia, UAE, Qatar and Kuwait grew to a market share of almost 25%.

Trade statistics indicate that there's a potential for more trade of floricultural products between Sri Lanka and the Netherlands. The import from Sri Lanka was less than 1% of the total imports in the Netherlands in 2015, which implies there's potential for growth. And the export from the Netherlands to Sri Lanka (either direct or through distributors or partners of Dutch suppliers in other countries) has much more potential as well.

Fruit and vegetables
Sri Lanka exported fresh and processed fruits for a value of US$ 212 million in 2015, whereas it imported for a value of US$ 68 million. Sri Lanka is a net importer of vegetables: its exports of fresh and processed vegetables in 2015 valued US$ 37 million and its imports US$ 392 million. Volumes and values of fruit and vegetables trade by far exceed the floricultural trade figures. The major buyers of Sri Lankan fruit and vegetables are regional markets: India, Maldives, Middle East countries and Malaysia. But also the USA, UK and other European countries are trade partners. Exports to the Netherlands is relatively small: US$ 2.5 million value of fruits in 2015, which is less than 0.5% of the total imports in the Netherlands.

Sector strengths and weaknesses
There's an optimistic atmosphere in the horticultural industry. On the one side stakeholders are aware that Sri Lanka -although it has been exporting for decades - is still at an infant stage as an export country compared to global players and compared with some other countries in the region. There're serious constraints. On the other side there's eagerness to overcome these obstacles and to work shoulder to shoulder with the government and move further towards growth. The following characteristics of the sector are most relevant:

- The Sri Lankan government plays a pro-active role, highly appreciated by the private sector. There's room for improvement in infrastructural projects (especially airport facilities), applied R&D, promotion of advanced technology and streamlining of procedures (bureaucracy);

- Availability of advanced technology in cultivation and postharvest, as well as knowledge and awareness with respect to the use of advanced technology, are at low levels;
- There's not a full coverage of all necessary supplies for advanced production and postharvest practices; room for improvement is mainly seen in modern varieties -especially in cut flowers and vegetables- and mid- and high technology for the cultivation phase -including greenhouse systems- and postharvest phase;
- Over the whole horticultural industry the scale of production is rather small and cost prices are relatively high;
- International connectivity by air and sea are good. The logistical infrastructure within the country is satisfactory; the main issue in the horticultural industry is the immature cold-chain all over the country: lack of refrigerated transport, storage and handling facilities;
- Availability, quality and costs of labour at management level and work-floor level are satisfactory. At least they're not seen as a limiting factor in the sector development. The education sector works hard on improvements in university and school curricula. However, in the eyes of entrepreneurs, graduates miss enough practical skills. That same counts for public extension services: manpower is well available but knowledge transfer capacity in advanced technologies is hardly there;
- Sri Lanka is a Xylella free country, which gives comparative advantages as a supplier of ornamental products;
- The marketing capacity of Sri Lankan entrepreneurs isn't strong; it's difficult to catch up with the latest trends, developments and market access requirements in high-end (export) markets and there's no strong international exposure of Sri Lanka as a country with a horticultural profile.

Drivers for change in the horticultural sector

Government policies on the one side and private sector initiatives on the other side, cause the following trends in the Sri Lankan horticultural sector:

- A shift towards an export oriented agribusiness
- A transition from paddy (rice) cultivation towards cash crops
- Introduction of more advanced technologies in production of crops and postharvest, thereby aiming for higher productivity and volumes, more consistent quality and reduction of the cost price
- Less and smarter use of non-organic fertilizers and agro-chemicals in crop cultivation
- Increasing supply to domestic high end markets, especially in the tourism sector

Opportunities

The horticultural sector development in Sri Lanka requires steps into three directions: 1st introduction and use of advanced technologies, 2nd investments in marketing and 3rd development of human resources, in other words training and education of people. These foreseen steps provide ample business opportunities for the Dutch horticultural industry. Dutch companies have the technology, the trade networks and the knowledge to support Sri Lanka and to benefit business-wise. Potential for mutual business is there in 5 specific fields:

1. Seeds, propagation materials and technical supplies for the Sri Lankan production sector
    - Modern variety seeds and/or young plants for cut flowers and vegetables
    - Fertilizers, agro-chemicals and biological pest control solutions
    - Equipment for land-preparation, planting and potting, fertigation, spraying, crop maintenance (pruning / trimming), internal logistics and harvesting
    - Mid-tech greenhouse solutions, including plastic coverage, ventilation, screening, irrigation, fertigation, hydroponic systems and other climate control (even heating) methods
    - Labour management systems
2. Technology for the Sri Lankan postharvest segment
    - Sorting, grading, packaging, handling
    - Storage / transport
    - Flower care
    - Delay fruit ripening
3. Capacity building, training and business consultancy all over the supply chain
4. Trade partnerships in seed production, propagation and (semi-finished) ornamental plants
5. Trade partnerships in the fruit and vegetables sector

1 Sri Lanka at a glance

Sri Lanka is an island in the Indian Ocean located at the tip of the Indian subcontinent with an equatorial (tropical) monsoonal climate. The history between Sri Lanka and The Netherlands goes back to the 17th century: from 1640 to 1796 Sri Lanka was a governorate of The Netherlands, established by the Dutch East India Company.

Facts and figures

Official name	Democratic Socialist Republic of Sri Lanka
Administrative Capital	Sri Jayewardenepura
Commercial Capital	Colombo
Time (zone)	UTC+5.5 (3.5 hours ahead of the Netherlands)
Location	Latitude 5° 55. to 9° 50. north Longitude 79° 42. to 81° 52., 650 km north of the equator
Area	65,610 km^2 including 2,905 km^2 inland water bodies
Population	22,053,488 (July 2015 est.)
Population growth	1.3 %
Population density	336 persons / km^2
Literacy rate	92.6 %; male: 93.6 %; female: 91.7 % (2015 est.)
Religions	Buddhist (official) 70.2%, Hindu 12.6%, Muslim 9.7%, Roman Catholic 6.1%, other Christians 1.3%, other 0.05 % (2012 est.)
Language	Sinhala (official and national language) 74%; Tamil (national language) 18% and other 8%; English is the business language
Economy	(lower) middle-income economy
GDP per capita	US$ 3,600

Figure 1.1: Geographical location of Sri Lanka

Sri Lanka is located as a geographical hub between the main global economies and markets. Nowadays it's one of the few countries in South Asia with a high human development index (HDI; 0.757 in 2014; rank 73 out of 188 countries and territories). Its politics are stable and its economy is strongly developing since the civil war came to an end in 2009. Tourism in particular is growing exponentially.

The official name is Democratic Socialist Republic of Sri Lanka. It's executive power is in the hands of HE the **President**, Mr. Maithripala Sirisena (since 9th January 2015) who also holds the position **Chief of State** and **Head of government**. The **Prime Minister** (deputy to the president) is Mr. Ranil Wickremasinghe (since 9th January 2015).

Agriculture always played an important role in the Sri Lankan society and economy, which is mainly caused by a favourable climate. Nowadays the character of the agricultural sector shows a transition from small scale production for local markets towards an export-based agribusiness and from paddy fields to cash crops.

Figure 1.2: Map of Sri Lanka

Extensive faulting and erosion over time have produced a wide range of topographic features with 3 elevation zones: the Central Highlands, the plains, and the coastal belt. In the south-central part of Sri Lanka, the Central Highlands span around 65 km in the north-south direction with Pidurutalagala as the peak elevation at 2,524 m. The Highlands are the hydrologic heart of the country as all the major perennial rivers originate here, spreading from the highlands to the coast. Most of the island's surface consists of plains between 30 and 200 meters above sea level.

The mean annual temperature varies from 27℃ in the coastal lowlands to 16℃ in the central highlands, while the annual rainfall varies from under 900 mm in the south-east and north-west to over 5,500 mm in the western slopes of the Central Highlands. Being a tropical country, Sri Lanka receives about 1,200 W/m^2 sunlight throughout the year.

Water sources for agriculture are from seasonal rains and from the inland rivers and water-storing reservoirs. Water in Sri Lanka is considered as ‘good quality’, year round available and having a neutral to slightly acidic pH level (around 6.8) with a low level of dissolved mineral contents (EC ~0).

Despite its relatively small size, the Sri Lankan landmass shows a variety of climates. There’re four geographical and topographical features which influence the climate, in particular the rainfall regime:
1. the fact that Sri Lanka is a small island situated in the tropical Indian Ocean with warm, humid air;
2. its proximity to the equator which results in solar radiation rarely being a limitation to crop growth;
3. the existence of large mass of hills at the centre of the island which is perpendicular to two approaching moisture laden monsoon wind streams (the south-west monsoon in the middle of the calendar year and the north-east monsoon towards the end of the year);
4. the presence of the vast land mass of the Indian sub-continent to the immediate north and northwest of Sri Lanka, which has a large effect in driving the monsoon.

In Annex I more background is given of the climate, history, economy and infrastructure of Sri Lanka.

2 Horticultural production and trade

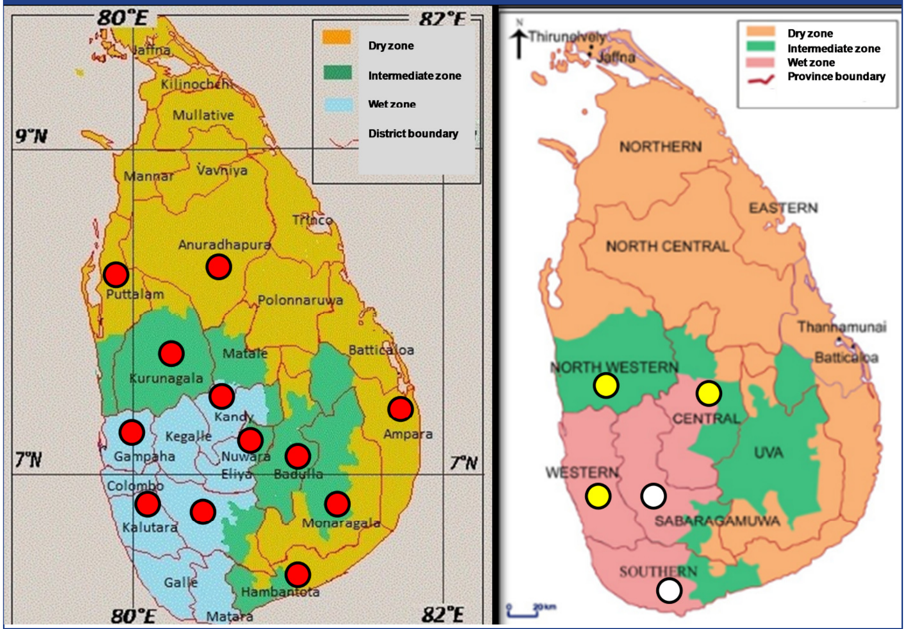
Of the total land in Sri Lanka, 43.5% is used for agriculture, of which 21% for arable lands, 16% for permanent crops and 7% for permanent pasture. Agriculture contributed 7.9% to the country's GDP in 2015. The value addition to the sector increased by 5.5% in 2015, mainly due to the growth in rice (23%), fruit (16.5%) and vegetables crops (25%). In spite of the low share of the agriculture sector in GDP, it still remains the primary employer, accounting for a share in employment of about 28%.

Sri Lanka belongs to one of the global biodiversity hotspots and is recognized as the country with the highest biodiversity per unit area in the Asian regions. About 75% of the plants in the country (6,800 species) are native. Being a tropical country, endowed with a variety of climates, it has developed production and built up positions of supplier in various international value chains in floricultural and fruit & vegetables. This chapter highlights the facts and figures related to production and international trade in these value chains.

2.1 Production

The production areas for horticultural products are spread over the country. Figure 2.1 shows the major regions for fruit and vegetables, for floricultural products as well as potential areas for the expansion of floricultural produce.

Figure 2.1: Regions with horticultural importance



- Red circles: major growing regions of fruit and vegetables
- Yellow circles: major growing regions of floricultural plants
- White circles: potential regions for floriculture expansion

Floriculture

Commercial ornamental plants are grown in the Western Province (Gampaha, Kaluthara and Colombo Districts), North Western Province (Kurunegala and Puttalam Districts) and Central Province (Kandy, Kegalle, Matale, Nuwara Eliya and Bandarawela Districts). Apart from these provinces, the Export Development Board of Sri Lanka has identified the Southern Province and the Sabaragamuwa Province as potential areas for the expansion of floricultural businesses.

Overall exact production figures aren't available. The total of export-oriented production in 2015 was 4,458 MT, out of which the cut foliage segment was dominant (2,455 MT), followed by live plants, including cuttings (1,860 MT) and cut flowers (143 MT). Although the production data targeting the domestic consumption are not available, a significant quantity is produced and consumed locally.

Table 2.1: Floriculture products exported from Sri Lanka	
Key Products	**Varieties**
Decorative foliage	*Draceana sanderiana, Draceana maasageana, Cordyline, Agalonema, Adiantum, Calathea, Maranta, Codiaeum, Monstera, Pothos, Pandanus, Thaloide, , Philodendron, Miscanthus, Anthuriums, Dieffenbachia, Scindapsus, Caryota urens, Chrysalidocarpus, Aspidistra*
Rooted and unrooted young plants & indoor pot plants	*Draceana sanderina, Draceana maasageana, Codiaeum, Agloanema, Scindapsus, Draceana marginata, Cordyline, Pleomele reflexa, Polyscias, Livistonia, Syngonium, Calathea, Schefflera, Raphis, Chlorophytum*
Cut flowers	*Roses , Carnations , Gerbera, Chrysanthemum, Lilies, Gypsophila, Limonium, Anthurium*
Landscaping plants	*Plumeria, Gardenia, Codiaeum, Ixora, Hibiscus, Cassia, Bouhinia, Bougainvella, Allamanda, Jasmine, Acalypha, Neem*
Tissue cultured plants	*Ananas, Musa sp, Cordyline, Dracaena, Syngonium, Philodendron, Ficus*

Source: Export Development Board

Fruit and vegetables

Fruit and vegetables are grown in most regions of the country, except for the northern and eastern parts (Figure 2.1). Table 2.2 shows the main crops per District and Table 2.3 shows that production of fruit and vegetables was rather stable since 2000, but is substantially increasing since 2010.

Table 2.2: Major growing Districts of fruit and vegetables	
District	**Crop**
Kurunegala	Cucumber (10%), Orange (11%), lime (12%), Mangoes (19%), Banana (19%), Pineapple (40%)
Monaragala	Brinjals (10%), Cucumber (10%), Ash Pumpkin (29%), Red Pumpkin (15%), Ash Plantain (20%), Oranges (13%), Limes (37%), Plantain (13%), Papaw (10%)
Anuradhapura	Luffa(10%), Okra (12%), Brinjals (15%), Ash Pumpkin (29%), Red Pumpkin (27%)
Badulla	Tomato (24%), Cabbage (33%), Carrot (32%), Knolkhol (33%), Beetroot (11%), Raddish (16%), Beans (46%), Leeks (10%), Capsicum (18%), Brinjals (10%), Oranges (20%)
Rathnapura	Beans (10&), Banana (16%), Passion Fruit (23%)
Kandy	Tomato (14%), Cabbage (10%), Beans (13%)
Nuwara Eliya	Tomato (17%), Cabbage (38%), Carrot (60%), Knolkhol (51%), Beetroot (50%), Raddish (30%), Beans (14%), Leeks (86%), Capsicum (18%)
Gampaha	Pineapples (35%)
Hambantota	Luffa (19%), Bitter Guard (16%), Snake Gourd (15%), Cucumber (11%), Ash Plantian (10%), Papaw (12%)
Puttalam	Beetroot (19%), Capsicum (15%)
Ampara	Cucumber (17%), Red Pumpkin (10%)
Kaluthara	Passion Fruit (34%)

Source: Export Development Board (% = share of the total national production within each District)

Table 2.3: Fruit and vegetables production and area harvested in Sri Lanka (period 2004-2013)

Year	Fruits		Vegetables	
	Production (Tons)	Area Harvested (Ha)	Production (Tons)	Area Harvested (Ha)
2013	913,100	125,735	975,065	85,705
2012	904,919	126,460	884,340	88,250
2011	888,190	127,202	821,690	84,400
2010	847,256	122,130	795,600	82,068
2009	765,714	113,950	795,240	83,220
2008	785,702	112,564	785,310	84,520
2007	781,726	112,480	782,580	84,890
2006	769,598	111,312	734,170	87,120
2005	827,690	117,720	700,550	86,578
2004	813,900	114,120	617,718	75,423

Source: FAOSTAT

Fruit
The Central Bank of Sri Lanka Central mentioned in its 2015 annual report a substantial increase of fruit production with 15.6% towards 1,203,224 MT, especially in avocado, melon, guava, rambutan and pineapple[1].

Vegetables
According to the Central Bank's annual report[1] vegetable production increased to 1,875,508 MT in 2015 (2.2% growth compared to 2014). This increase was the result of a 2.4% increase in the 2014/15 *Maha*[2] season and a 1.8% growth during the 2015 *Yala*[2] season.

Production for the domestic market versus exports
Only a small share of the total production is being exported: in 2015 33 million kg of fruits (Rs. 5,173 million), while 45 million kg of fruits (Rs. 5,637 million) were imported: mainly apples, mandarins, oranges and grapes. In 2015 26 million kg of vegetables (Rs. 4,142 million) were exported (Table 2.4).

Table 2.4: Comparison of production and export volumes of selected commodities (2013)

Crop	Domestic production in MT	Exports in MT	Exports as % of production
Banana	383,784	2,649	0.7%
Pineapple	51,611	1,254	2.4%
Mango	67,941	47	0.1%
Papaya	24,258	454	1.9%
Tomato	73,917	10.2	0.0%
Leeks	26,793	4.6	0.0%
Cucumber	31,061	6.7	0.0%
Carrot	35,830	0.02	0.0%
Beans	40,513	0.8	0.0%

Producers and exporters
In the early years of the development of the export-oriented horticultural industry in Sri Lanka (70's), only a handful of companies dominated the business. However, as doing business in horticulture has become more serious, many companies have come into the picture in the recent past. In 2016, the Lanka Fruit & Vegetable Producers, Processors & Exporters Association, seated in the Ceylon Chamber of Commerce, registered 34 producers of fruit and vegetables for the export market (all registered under the Export Development Board of Sri Lanka). Floricultural items are produced and supplied by 45 companies registered under the Export Development Board of Sri Lanka in 2015. See Annex II for the list of suppliers of fruit and vegetables and a list of suppliers of floricultural items.

To strengthen the exports and the exporters, some of the producers got together and have established export associations; the 'Floriculture Produce Exporters Association' and the 'Lanka Fruit & Vegetable Producers, Processors & Exporters Association' are the two major associations of the producers.

2.2 Trade

2.2.1 Floriculture

International market developments
Globalization and consolidation trends in the worldwide floriculture in the last decades have created an enormous pressure on countries like Sri Lanka. Emerging production industries in East Africa, Latin America and other Asian countries became major competitors for Sri Lankan floriculture produce in the world trade. Table 2.5 shows how a number of countries with lower positions than Sri Lanka in 2003, developed their position in the world floriculture business into 2013.

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[1] Statistics of FAOSTAT (Table 2.3) and the Central Bank's annual report 2015 aren't consistent.
[2] There are two cultivation seasons namely; *Maha* and *Yala* which fall parallel with two monsoons. The *Maha* Season falls during the north-east monsoon from September to March. The *Yala* season is effective during the period from May to September which falls during the south-west monsoon.

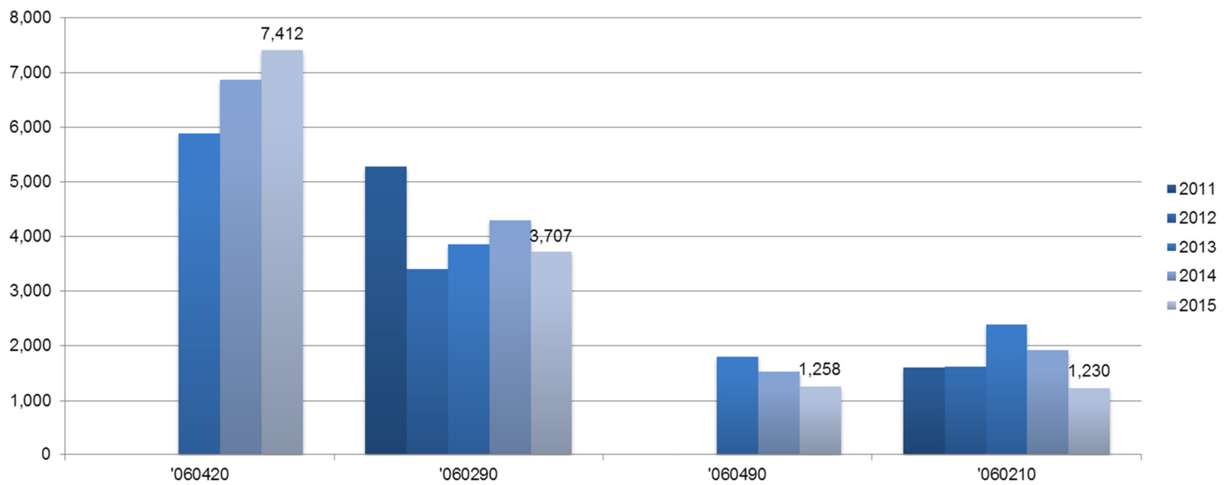
Table 2.5: Ten-year growth in floriculture exports by selected countries (2004- 2013), in US$ million			
	2004	**2013**	**growth**
Sri Lanka	9.0	14.1	57%
Czech Republic	9.0	51.1	468%
Peru	7.4	14.9	103%
Slovakia	7.1	17.2	142%
Ireland	6.2	18.3	197%
Vietnam	5.3	37.3	608%
Egypt	5.1	65.3	1,182%
El Salvador	4.4	21.7	393%
Greece	4.3	14.9	247%
Ethiopia	2.7	187.6	6,733%
Lithuania	2.4	96.0	3,915%
Latvia	0.9	34.9	3,866%
Kazakhstan	0.1	27.6	41,722%

Source: Floriculture Statistics, International Trade Center

Export

Among the major items that Sri Lanka produces for the export market, **foliage and branches** (HS 0604) and **rooted and unrooted cuttings** (HS 0602) are noteworthy (63% and 36% resp. of total exports). See Table 2.6. In the early 1990s, the floriculture industry was heavily relying on **cut flowers** (HS 0603), however at present the export oriented cut flower production has come down to only 1%. The majority of all foliage and cuttings , being exported to the Netherlands, goes by air. Only a single party exports pot plants by sea freight.

Table 2.6: Floricultural items* exported by Sri Lanka (2011-2015), in US$ thousand



Code	Product label	2011	2012	2013	2014	2015
'060420	Foliage, branches and other parts of plants, without flowers or buds *(=fresh)*	-	-	5,875	6,872	7,412
'060290	Live plants, incl. their roots, and mushroom spawn (excluding bulbs, tubers, tuberous roots, . . . *(= mainly rooted cuttings)*	5,268	3,394	3,863	4,300	3,707
'060490	Foliage, branches and other parts of plants, without flowers or flower buds, and grasses, mosses . . . *(= non-fresh)*	-	-	1,786	1,518	1,258
'060210	Unrooted cuttings and slips	1,599	1,617	2,384	1,916	1,230
'060390	Dried, dyed, bleached, impregnated or otherwise prepared cut flowers and buds, of a kind suitable . . .	269	125	76	110	88
'060319	Fresh cut flowers and buds, of a kind suitable for bouquets or for ornamental purposes (excluding . . .	56	43	104	81	61
'060220	Edible fruit or nut trees, shrubs and bushes	31	42	26	30	58
'060314	Fresh cut chrysanthemums and buds, of a kind suitable for bouquets or for ornamental purpose . . .	262	34	20	26	1

**Product category: 06 Live trees, plants, bulbs, roots, cut flowers etc.*
Source: Trade Map, International Trade Center

Since decades, the Netherlands has been in the forefront in the exports of floricultural items from Sri Lanka (Table 2.7), while Japan is the second largest buyer. These 2 countries alone shared half of the total exports of Sri Lanka in 2015 (Table 2.8). During the last few years however, the Dutch market lost share, whereas Middle East countries show a gradual increase in the market share. Within the top-10 importing countries, Saudi Arabia, UAE, Qatar and Kuwait play a growing role which accounts for about 23% of the total exports nowadays. Germany and the USA show a drop since 2006.

Table 2.7: Top-10 importing countries for floricultural items* exported by Sri Lanka (2006-2015), in US$ thousand

	2006	2009	2012	2015	average annual change
Total	**11,267**	**11,461**	**10,428**	**13,817**	**2.5%**
1. Netherlands	3,805	4,155	3,654	3,935	0.4%
2. Japan	1,994	1,972	2,061	3,189	6.7%
3. Saudi Arabia	367	405	556	1,398	31.2%
4. United Kingdom	930	687	941	973	0.5%
5. UAE	352	486	374	823	14.9%
6. Germany	830	1,047	613	582	-3.3%
7. Qatar	170	256	268	519	22.8%
8. Kuwait	218	187	237	415	10.0%
9. Australia	138	105	160	357	17.6%
10. USA	241	207	187	212	-1.3%

**Product category: 06 Live trees, plants, bulbs, roots, cut flowers etc*
Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table 2.8: Market share (%) of the top-10 floricultural items* importing countries from Sri Lanka (2006-2015)

	2006	2009	2012	2015	change
Netherlands	34%	36%	35%	28%	-6%
Japan	18%	17%	20%	23%	5%
Saudi Arabia	3%	4%	5%	10%	7%
United Kingdom	8%	6%	9%	7%	-1%
UAE	3%	4%	4%	6%	3%
Germany	7%	9%	6%	4%	-3%
Qatar	2%	2%	3%	4%	2%
Kuwait	2%	2%	2%	3%	1%
Australia	1%	1%	2%	3%	2%
USA	2%	2%	2%	2%	0%

**Product category: 06 Live trees, plants, bulbs, roots, cut flowers etc*
Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table 2.9: European markets for floricultural items* exported by Sri Lanka (2006-2015), in US$ thousand

	2006	2009	2012	2015	average annual change
Netherlands	3,805	4,155	3,654	3,935	0.4%
United Kingdom	930	687	941	973	0.5%
Germany	830	1,047	613	582	-3.3%
Denmark	324	459	146	117	-7.1%
Czech Republic	12	-	11	75	58.3%
Poland	154	349	60	73	-5.8%
Italy	330	179	92	65	-8.9%
Sweden	14	7	21	59	35.7%
Switzerland	117	94	93	50	-6.4%
Ireland	21	-	-	48	14.3%
France	141	198	104	32	-8.6%

**Product category: 06 Live trees, plants, bulbs, roots, cut flowers etc*
Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

When European markets alone are considered, only the Netherlands, UK and Germany are within the top-ten importing countries. Other European importers from Sri Lanka are Czech Republic, Sweden and Ireland (Table 2.9).

More detailed statistics of exports of floricultural products (HS 6-digits) from Sri Lanka are in Annex III.

Import
Sri Lanka imports mainly starting materials for cut flower and ornamental plants production. That product segment shows a substantial growth in recent years (HS 0602). Figures of the last 3 years are shown in Table 2.10 and the corresponding countries of origin in Table 2.11.

Table 2.10: Floricultural items* imported in Sri Lanka (2013-2015) in US$ thousand

Code	Product label	2013	2014	2015
'0604	Foliage, branches etc.	35	306	117
'0603	Cut flowers and flower buds for bouquets, fresh or dried	61	65	48
'0602	Plants, live, nes (incl their roots), cuttings & slips; mushroom spawn	354	473	633
'0601	Bulbs, tubers, corms, etc.	177	107	49

**Product category: 06 Live trees, plants, bulbs, roots, cut flowers etc*
Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table 2.11: Top-10 exporting countries for floricultural items* imported by Sri Lanka (2006-2015), in US$ thousand

	2006	2009	2012	2015	average annual change
Total	**432**	**382**	**554**	**846**	**10.6%**
Thailand	7	5	99	408	636.5%
India	41	57	109	265	60.7%
Netherlands	227	210	207	56	-8.4%
China	0	4	1	34	-
New Zealand	0	0	0	20	-
Belgium	0	0	6	12	-
Turkey	0	0	3	12	-
Germany	14	7	8	6	-6.3%
Kenya	0	2	3	6	-
Taipei, Chinese	7	0	5	6	-1.6%

**Product category: 06 Live trees, plants, bulbs, roots, cut flowers etc*
Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Thailand and India are the leading countries from where Sri Lanka imports floricultural products. Thailand shares about 50% of the imports in 2015 with a rapid growth rate. The Netherlands is ranked 3rd. However, imports from Thailand and India partly include products that origin from the Netherlands through branch offices and/or distributors of Dutch breeders and propagators in these countries.

Some new countries such as Belgium, Turkey and Kenya also came in to the import trade in the recent past, which is an indication of expansion of Sri Lankan floriculture industry.

Bilateral trade (potential) between Sri Lanka and the Netherlands
Trade statistics over recent years indicate that there's a potential for more trade of floricultural products between Sri Lanka and the Netherlands. For instance:
- Sri Lanka exported for US$ 3.395 thousand to the Netherland in 2015 and for another US$ 9.882 thousand to other countries. The import from Sri Lanka was less than 1% of the total imports in the Netherlands. There's a potential to export more to the Netherlands.
- Sri Lanka imported for US$ 56 thousand from the Netherlands in 2015 and for US$ 791 thousand from other countries. Here again the Netherlands has more potential to be a trade partner and supplier for Sri Lanka.

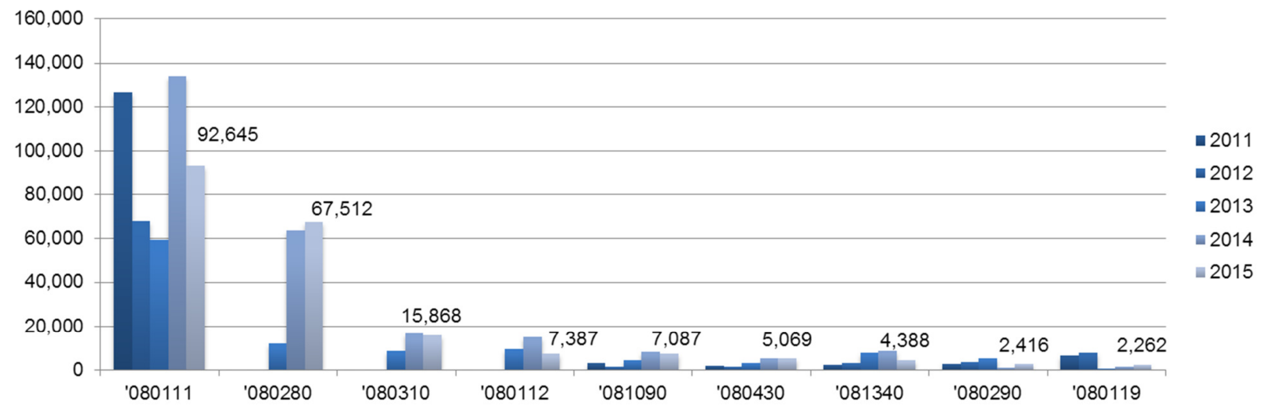
In Annex IV detailed trade statistics are shown with potential trade volumes between the 2 countries.

2.2.2 Fresh and processed fruit

Export

Sri Lanka has been in the international trade of fruit for more than 3 decades. Among the fresh fruit items, plantains and bananas (HS 0803), pineapples, mangoes, avocadoes, guavas (HS 0804) are the major categories. See Table 2.12 for statistics at a HS 6-digits level (2011-2015) and see Table 2.13 for statistics at a HS 4-digits level (2006-2015).

Table 2.12: Fruits* exported from Sri Lanka (2011-2015), in US$ thousand, HS 6-digits



Code	Product label	2011	2012	2013	2014	2015
'080111	Desiccated coconuts	126,318	67,634	59,293	133,936	92,645
'080280	Fresh or dried areca nuts	-	-	11,758	63,650	67,512
'080310	Fresh or dried plantains	-	-	8,480	16,498	15,868
'080112	Fresh coconuts in the inner shell "endocarp"	-	-	9,536	14,936	7,387
'081090	Fresh tamarinds, cashew apples, jackfruit, lychees, sapodillo plums, passion fruit, …	2,829	1,395	4,104	8,218	7,087
'080430	Fresh or dried pineapples	1,795	1,513	2,959	4,916	5,069
'081340	Dried peaches, pears, papaws "papayas", tamarinds and other edible fruits…	2,183	3,121	7,547	8,621	4,388
'080290	Nuts, fresh or dried … (excl. coconuts, Brazil nuts, cashew…	2,479	3,313	4,989	1,042	2,416
'080119	Fresh coconuts (excl. in the inner shell "endocarp"…	6,393	7,838	400	1,212	2,262
'080720	Fresh pawpaws "papayas"	725	775	1,164	1,844	1,908
'080590	Fresh or dried citrus fruit (excluding oranges, lemons "Citrus limon, Citrus limonum",…	3,185	3,123	2,680	1,508	1,705
'080132	Fresh or dried cashew nuts, shelled	2,604	1,334	595	1,365	1,279
'080550	Fresh or dried lemons "Citrus limon, Citrus limonum" and limes "Citrus aurantifolia,…	971	347	358	643	742
'080390	Fresh or dried bananas (excluding plantains)	-	-	229	500	680
'080450	Fresh or dried guavas, mangoes and mangosteens	303	316	258	515	413
'080131	Fresh or dried cashew nuts, in shell	3	1	3	92	113

** Product category: 08 Edible fruit, nuts, peel of citrus fruit, melons*
Sources: Trade Map, International Trade Center

Though with fluctuations, the export-oriented fruit industry has shown more than a three-fold growth in the last decade (Table 2.14). Among the major buyers of Sri Lankan fruits are India, USA, Iran, UAE and Saudi Arabia. Most of these countries show a steady growth in buying over the years. Having been a supplier to a market such as USA for more than a decade, Sri Lanka has proven that the far distance does not hinder the exports if a quality product is supplied for reasonable prices.

India shows the strongest increase over the last decade and holds a market share of 35% in 2015 (Table 2.15).

Table 2.13: Fruit exported from Sri Lanka (2006-2015), in US$ thousand, HS 4-digits						
Code	**Product label**	**2006**	**2009**	**2012**	**2015**	**average annual change**
'0801	Brazil nuts, cashew nuts & coconuts	52,865	67,424	76,813	103,694	10.7%
'0802	Nuts nes	1,989	1,504	3,350	69,931	379.5%
'0803	Bananas and plantains, fresh or dried	108	1,108	6,391	16,548	1691.4%
'0810	Fruits nes, fresh	1,164	1,394	1,677	7,182	57.4%
'0804	Dates, figs, pineapples, mangoes, avocadoes, guavas	3,560	2,533	2,323	5,518	6.1%
'0813	Dried fruit	2,175	1,559	3,128	4,459	11.7%
'0805	Citrus fruit, fresh or dried	2,248	4,906	3,721	2,449	1.0%
'0807	Melons (including watermelons) & papayas, fresh	236	467	810	1,949	80.6%
'0811	Frozen fruits & nuts	16	69	36	26	6.9%
'0814	Citrus fruit and melon peel	0	8	18	14	-
'0809	Apricots, cherries, peaches, nectarines, plums & sloes, fresh	2	0	1	3	5.6%
'0812	Provisionally preserved fruits & nuts (unfit for immediate consumption	22	103	35	0	-11.1%
'0808	Apples, pears and quinces, fresh	9	0	0	0	-11.1%
'0806	Grapes, fresh or dried	2	0	0	0	-11.1%

Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table 2.14: Top-8 importing countries for fruit* exported by Sri Lanka (2006-2015), in US$ thousand					
	2006	**2009**	**2012**	**2015**	**average annual change**
Total	**64,398**	**81,074**	**99,705**	**211,773**	**25.4%**
India	3,030	2,643	6,144	73,876	259.8%
USA	1,629	2,034	7,231	18,406	114.4%
Iran	2,893	5,262	3,324	15,753	49.4%
UAE	12,355	17,004	10,265	14,091	1.6%
Saudi Arabia	3,844	5,875	10,027	10,848	20.2%
Pakistan	5,579	9,199	10,456	9,049	6.9%
Germany	3,792	3,697	4,917	8,644	14.2%
Egypt	5,529	5,647	7,669	7,947	4.9%

** Product category: 08 Edible fruit, nuts, peel of citrus fruit, melons*
Sources: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table 2.15: Market share (%) of the top-10 fruit* importing countries from Sri Lanka (2006-2015)					
	2006	**2009**	**2012**	**2015**	**average annual change**
India	5	3	6	35	66.7%
USA	3	3	7	9	22.2%
Iran	4	6	3	7	8.3%
UAE	19	21	10	7	-7.0%
Saudi Arabia	6	7	10	5	-1.9%
Pakistan	9	11	10	4	-6.2%
Germany	6	5	5	4	-3.7%
Egypt	9	7	8	4	-6.2%
Qatar	1	1	2	2	11.1%

** Product category: 08 Edible fruit, nuts, peel of citrus fruit, melons*
Sources: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Among the European countries, only Germany is in the top-ten importing countries of Sri Lankan fruit. However, various other European countries are demanding Sri Lankan fruit and show constant growth figures in imports from Sri Lanka (Table 2.16).

More detailed statistics of exports of selected fruit products (HS 6-digits) from Sri Lanka are shown in Annex III.

Table 2.16: European markets for fruits* exported by Sri Lanka (2006-2015), in US$ thousand, ranked on 2015 market performance					
	2006	2009	2012	2015	average annual change
Germany	3,792	3,697	4,917	8,644	14.2%
France	2,413	3,954	3,626	4,276	8.6%
Spain	1,943	2,409	3,077	3,202	7.2%
United Kingdom	2,406	1,900	3,255	2,354	-0.2%
Netherlands	1,872	2,288	1,874	2,353	2.9%
Belgium	134	399	839	2,198	171.1%
Portugal	1,441	1,780	1,489	2,037	4.6%
Italy	727	961	1,270	1,431	10.8%
Greece	807	595	792	941	1.8%
Austria	96	100	86	620	60.6%
Switzerland	405	314	338	521	3.2%

** Product category: 08 Edible fruit, nuts, peel of citrus fruit, melons*
Sources: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Import
Compared to all the other perishables, fruit is the major commodity that has a huge import potential to Sri Lanka. The total fruit imports have steadily been increasing over the past decade. Apples, pears and quinces (HS 0808), grapes (HS 0806) are among the major product segments (Table 2.17). China and Indonesia are the leading suppliers. In 2015 these two counted for 40% of the total imports (Table 3.18). The Netherlands plays a minor role with US$ 31 thousand import value in 2015, mainly processed fruits.

Table 2.17: Fruit items* imported in Sri Lanka (2013-2015) in US$ thousand				
Code	**Product label**	**2013**	**2014**	**2015**
'0811	Frozen fruits & nuts	173	132	175
'0810	Fruits nes, fresh	590	688	1,123
'0813	Dried fruit	321	165	653
'0814	Citrus fruit and melon peel	39	37	22
'0805	Citrus fruit, fresh or dried	7,988	6,708	7,798
'0809	Apricots, cherries, peaches, nectarines, plums & sloes, fresh	43	23	37
'0804	Dates, figs, pineapples, mangoes, avocadoes, guavas	2,458	3,112	3,882
'0812	Provisionally preserved fruits & nuts (unfit for immediate consumption	1	1	3
'0808	Apples, pears and quinces, fresh	19,871	17,309	19,725
'0803	Bananas and plantains, fresh or dried	0	0	0
'0802	Nuts nes	1,257	40,271	13,411
'0807	Melons (including watermelons) & papayas, fresh	0	0	9
'0801	Brazil nuts, cashew nuts & coconuts	758	2,140	6,349
'0806	Grapes, fresh or dried	11,206	10,390	14,316

** Product category: 08 Edible fruit, nuts, peel of citrus fruit, melons*
Sources: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table 2.18: Top-10 exporting countries for fruit* imported by Sri Lanka (2006-2015), in US$ thousand					
	2006	2009	2012	2015	average annual change
Total	**14,451**	**20,789**	**39,201**	**67,504**	**40.8%**
China	4,273	7,948	12,340	13,820	24.8%
Indonesia	0	0	0	12,636	-
USA	1,585	2,280	6,128	5,997	30.9%
India	1,165	1,709	3,899	4,756	34.2%
South Africa	710	756	3,037	4,164	54.1%
Australia	2,323	2,181	2,118	3,575	6.0%
New Zealand	13	66	1,502	3,566	3036.8%
Italy	418	255	831	2,837	64.3%
UAE	1,625	1,523	2,132	2,580	6.5%
Tanzania	24	71	274	2,051	938.4%
Vietnam	193	977	199	2,050	106.9%

** Product category: 08 Edible fruit, nuts, peel of citrus fruit, melons*
Sources: Export Development Board, Sri Lanka and Trade Map, International Trade Center

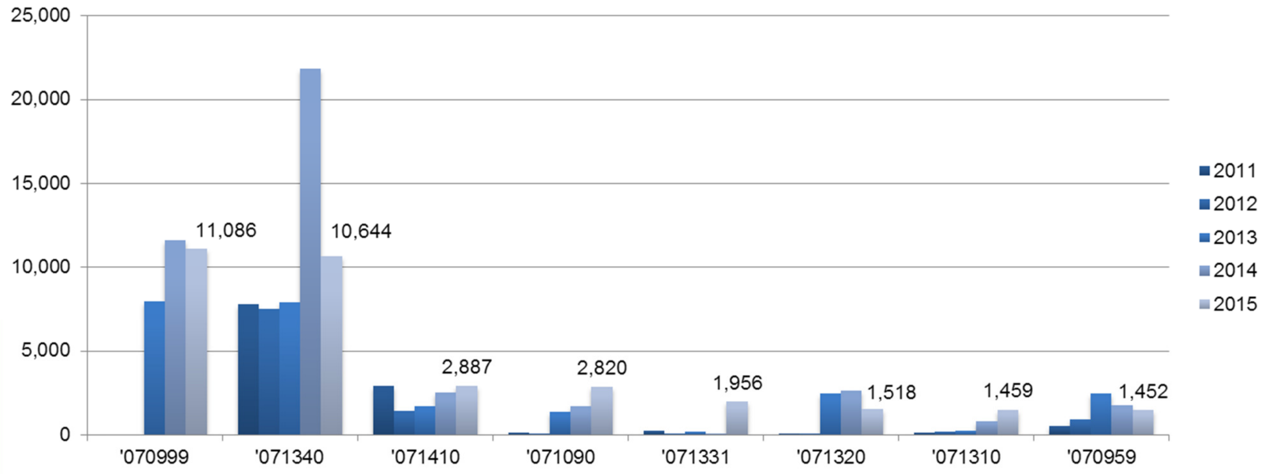
Bilateral trade potential between Sri Lanka and the Netherlands
Trade statistics over recent years indicate that there's a potential for more trade of fruit between Sri Lanka and the Netherlands. For instance:

- Sri Lanka exported for US$ 2.354 thousand to the Netherland in 2015 and for another US$ 209,419 thousand to other countries. The import from Sri Lanka was less than 0.5% of the total imports in the Netherlands. There's a potential to export more to the Netherlands.
- Sri Lanka imported for US$ 31 thousand from the Netherlands in 2015 and for US$ 67,504 thousand from other countries. Here again the Netherlands has more potential to be a trade partner and supplier for Sri Lanka.

In Annex IV detailed trade statistics are shown with potential trade volumes between the 2 countries.

2.2.3 Fresh and processed vegetables

Table 2.19: Vegetables* exported from Sri Lanka (2011-2015), in US$ thousand, HS 6-digits



Code	Product label	2011	2012	2013	2014	2015
'070999	Fresh or chilled vegetables n.e.s.	-	-	7,932	11,593	11,086
'071340	Dried, shelled lentils	7,757	7,495	7,878	21,840	10,644
'071410	Fresh, chilled, frozen or dried roots and tubers of manioc "cassava"	2,894	1,383	1,664	2,490	2,887
'071090	Mixtures of vegetables, uncooked or cooked by steaming or by boiling in water, frozen	83	12	1,326	1,670	2,820
'071331	Dried, shelled beans of species "Vigna mungo [L.] Hepper or Vigna radiata [L.] Wilczek", . . .	243	33	171	66	1,956
'071320	Dried, shelled chickpeas "garbanzos",	10	6	2,432	2,609	1,518
'071310	Dried, shelled peas "Pisum sativum"	102	162	219	791	1,459
'070959	Fresh or chilled edible mushrooms and truffles (excluding mushrooms of the genus "Aga . . .	473	899	2,462	1,710	1,452
'071360	Dried, shelled pigeon peas "Cajanus cajan"	-	-	2,131	1,269	981
'071140	Cucumbers and gherkins provisionally preserved, e.g. by sulphur dioxide…	460	500	899	1,363	921
'071490	Arrowroot, salep, Jerusalem artichokes and similar roots & tubers with high starch or inulin.	512	432	366	436	358
'071190	Vegetables and mixtures of vegetables provisionally preserved, …	273	284	270	343	312
'071290	Dried vegetables & mixtures of vegetables, whole, cut, sliced, broken, in powder, but not…	117	61	105	126	262
'070993	Fresh or chilled pumpkins, squash and gourds "Cucurbita spp."	-	-	6	7	190
'071080	Vegetables, uncooked or cooked by steaming or by boiling in water, frozen (excl. potatoes, . . .	63	229	25	156	120

** Product category: 07 Edible vegetables and certain roots and tubers*
Sources: Trade Map, International Trade Center

Export

Sri Lanka is a net vegetables importer. Exports in 2015 reached a value of US$ 37.2 million, which was nearly 4-fold compared to 2006. See Table 2.19 for statistics at a HS 6-digits level (2011-2015) and see Table 2.20 for statistics at a HS 4-digits level (2006-2015).

Table 2.20: Vegetables exported from Sri Lanka (2006-2015), in US$ thousand, HS 4-digits

Code	Product label	2006	2009	2012	2015	average annual change
'0713	Dried vegetables, shelled	169	20,039	8,510	16,614	1081.2%
'0709	Vegetables nes, fresh or chilled	6,825	6,697	8,328	12,757	9.7%
'0714	Manioc, arrowroot salep (yams) etc	1,360	2,577	1,829	3,258	15.5%
'0710	Frozen vegetables	194	16	323	2,943	157.4%
'0711	Vegetables, provisionally preserved (unfit for immediate consumption)	1,019	785	790	1,235	2.4%
'0712	Dried vegetables	191	69	90	289	5.7%
'0708	Leguminous vegetables, shelled or unshelled, fresh or chilled	9	469	807	56	58.0%
'0703	Onions, garlic and leeks, fresh or chilled	37	40	63	48	3.3%
'0707	Cucumbers and gherkins, fresh or chilled	3	0	31	8	18.5%
'0706	Carrots, turnips and salad beetroot, fresh or chilled	4	0	4	2	-5.6%
'0701	Potatoes	11	11	4	1	-10.1%
'0702	Tomatoes	2	11	102	1	-5.6%

Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Regional destinations are dominant in the Sri Lankan vegetables export. All countries that import vegetables from Sri Lanka show a considerable growth in trade during the last decade. Maldives, UAE, India, UK, Malaysia and the USA count for 66% of the total vegetables imports. During the last decade, India, Malaysia and Pakistan show most growth (Table 2.21).

Table 2.21: Top-10 importing countries for vegetables* exported by Sri Lanka (2006-2015), in US$ thousand

	2006	2009	2012	2015	average annual change
Total	**9,830**	**30,721**	**21,418**	**37,213**	**31.0%**
Maldives	2,699	2,429	3,833	5,946	13.4%
UAE	1,291	11,219	2,804	5,603	37.1%
India	35	1,950	1,662	4,340	1,366.7%
United Kingdom	412	1,395	755	3,182	74.7%
Malaysia	25	275	260	2,582	1,136.4%
USA	141	58	61	2,489	185.0%
Switzerland	710	802	708	1,575	13.5%
Kenya	0	0	0	1,070	-
Pakistan	8	1,087	848	1,053	1,451.4%
Japan	319	366	513	1,026	24.6%

** Product category: 07 Edible vegetables and certain roots and tubers*
Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table 2.22: Market share (%) of the top-10 vegetables* importing countries from Sri Lanka (2006-2015)

	2006	2009	2012	2015	average annual change
Maldives	27	8	18	16	-4.5%
UAE	13	37	13	15	1.7%
India	0	6	8	12	-
United Kingdom	4	5	4	9	13.9%
Malaysia	0	1	1	7	-
USA	1	0	0	7	66.7%
Switzerland	7	3	3	4	-4.8%
Kenya	0	0	0	3	-
Pakistan	0	4	4	3	-
Japan	3	1	2	3	0.0%

** Product category: 07 Edible vegetables and certain roots and tubers*
Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Tables 2.22 and Table 2.23 give an overview of the market shares of the main export destinations of vegetables. In Europe the UK and Switzerland are the main importers. More detailed statistics of exports of selected vegetables (HS 6-digits) from Sri Lanka are shown in Annex III.

Table 2.23: European markets for Sri Lankan vegetables* (2006-2015), in US$ thousand

	2006	2009	2012	2015	average annual change
United Kingdom	412	1,395	755	3,182	74.7%
Switzerland	710	802	708	1,575	13.5%
France	603	541	405	811	3.8%
Turkey	0	0	1,038	344	-
Germany	218	260	200	241	1.2%
Norway	177	161	170	157	-1.3%
Italy	113	71	248	135	2.2%
Greece	1	39	4	87	955.6%
Netherlands	18	7	2	40	13.6%
Denmark	1	9	3	8	77.8%

** Product category: 07 Edible vegetables and certain roots and tubers*
Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Import
Volumes and values of vegetables imports by far exceed the vegetables export figures. Onions, garlics and leeks (HS 0703) and potatoes (HS 0701) are the main fresh segments whereas dried vegetables (HS 0709) also take a substantial share (Table 2.24). India is responsible for about 32% of the total imports to Sri Lanka in 2015, showing a rapid increase in share of their export market over the years, followed by Australia and Canada (Table 2.25).

Table 2.24: Vegetables items* imported in Sri Lanka (2013-2015), in US$ thousand

Code	Product label	2013	2014	2015
'0701	Potatoes	29,952	37,496	37,618
'0711	Vegetables, provisionally preserved (unfit for immediate consumption)	198	151	300
'0704	Cabbages and cauliflowers, fresh or chilled	33	9	27
'0710	Frozen vegetables	171	258	361
'0708	Leguminous vegetables, shelled or unshelled, fresh or chilled	15	10	4
'0714	Manioc, arrowroot salep (yams) etc	4	0	0
'0703	Onions, garlic and leeks, fresh or chilled	99,704	65,261	122,078
'0702	Tomatoes	0	0	5
'0706	Carrots, turnips and salad beetroot, fresh or chilled	7	0	2
'0705	Lettuce and chicory, fresh or chilled	17	0	4
'0707	Cucumbers and gherkins, fresh or chilled	1	0	1
'0712	Dried vegetables	608	604	652
'0713	Dried vegetables, shelled	155,599	176,886	231,036
'0709	Vegetables nes, fresh or chilled	25	11	17

** Product category: 07 Edible vegetables and certain roots and tubers*
Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table 2.25: Vegetables exporting countries to Sri Lanka (2006-2015), in US$ thousand

	2006	2009	2012	2015	average annual change
Total	**97,824**	**242,609**	**204,086**	**392,104**	**33.4%**
India	42,374	64,774	56,560	127,679	22.4%
Australia	14,488	41,147	78,983	96,578	63.0%
Canada	1,702	46,859	11,644	72,687	463.4%
China	5,887	15,821	22,951	33,396	51.9%
Pakistan	5,074	19,043	14,537	23,885	41.2%
Myanmar	683	1,430	3,326	14,704	228.1%
USA	117	3,051	3,133	5,022	465.8%
UAE	10,968	23,952	724	3,775	-7.3%
Turkey	10,862	7,088	2,103	2,553	-8.5%
Netherlands	1,396	752	1,812	2,073	5.4%

** Product category: 07 Edible vegetables and certain roots and tubers*
Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Bilateral trade potential between Sri Lanka and the Netherlands

Trade statistics over recent years indicate that there's a potential for trade of vegetables between Sri Lanka and the Netherlands. For instance:

- Sri Lanka exported for US$ 40 thousand to the Netherland in 2015 (mainly processed) and for another US$ 37.173 thousand to other countries, so there's a potential to export more to the Netherlands. However, due to global competition, pressure on prices, high market access requirements and the current scale of vegetables production in Sri Lanka, this is a rather theoretical assumption.
- Sri Lanka imported for US$ 2.073 thousand from the Netherlands in 2015 (mainly potatoes) and for US$ 390,031 thousand from other countries. Here again the Netherlands has more potential to be a trade partner and supplier for Sri Lanka.

In Annex IV detailed trade statistics are shown with potential trade volumes between the 2 countries.

3 Enabling environment for horticulture

3.1 National policy on agriculture

Sri Lanka does not have a separate horticulture policy but has embedded the policy statement into the National Agriculture Policy. The last one was published in September 2007 under the then Minister of Agriculture, who is currently HE the President. A new National Agriculture Policy is under making by the Ministry of Agriculture. It can be said that the government envisages a move from subsistence agriculture into an agribusiness based economy with access to export markets. For horticulture the government has the ambition to build a sector with viable commercial horticulture enterprises with solid export markets, while having impact to the lives of farmers by providing them better inputs and training, buying produce and indirectly by improving the supply chains that reach their villages.

The National Agricultural Policy of 2007 consists of policy statements for the Food, Floriculture and Export Agricultural Crop Sectors. The objectives are:

- Increase domestic agricultural production to ensure food and nutrition security of the nation
- Enhance agricultural productivity and ensure sustainable growth
- Maximize benefits and minimize adverse effects of globalization on agriculture
- Adopt productive farming systems and improved agro technologies
- Adopt technology in farming that is environmentally friendly and harmless to health
- Promote agro-based industries and increase employment opportunities
- Enhance the income and the living standard of farming communities.

The major policy statements of the National Agriculture Policy in relation to the horticulture sector, among the 22 identified sections, are given in Annex V.

Current specific measures, priorities and programs (partly in the National Budget 2016) are:

- Reduction of the dependency on chemical fertilizers and agro-chemicals (including a ban on glyphosate) and withdrawal of fertilizer subsidies
- Shift towards less and smarter use of non-organic fertilizers and agro-chemicals
- Transition from paddy cultivation towards cash crops
- Shift towards an export oriented agribusiness
- Ambition to set up cold rooms for vegetables and fruit
- Removal of import duties pertaining to agriculture machinery and equipment
- Proposal to establish 23 Agricultural Development Mega Zones in order to make Sri Lanka's agricultural products globally competitive.

Among the national policies and priorities in relation to agriculture, the following aspects are important to ensure the export oriented growth in the horticulture sector.

Land Availability

Sri Lanka has some underutilized lands available with potential for expansion of horticultural crops. Moreover, at least half of the cultivated coconut lands (394,836 ha) can be used by implementing sustainable inter-cropping systems. Sri Lanka has experience in having large scale cultivations; for instance in 1993 Sri Lanka had the world's largest single floriculture plantation with *Dracaena fragrans* 'massangiana' in an area of 125 ha. However, nowadays the availability of land in large enough parcels is one of the crucial issues for horticultural sector development. Current policies and practices restrict land availability, especially in large parcels issued to private firms, especially firms not owned and controlled by Sri Lankans. Land is scarce and is enmeshed with historical, cultural, and political issues that can easily complicate transactions. The Sri Lankan government owns and commands a considerable inventory of "crown" lands, some of which are not contributing what they could to national development goals. The government has models and experience with lease agreements. Discussions with potential investors indicate that experienced commercial firms would seek parcels in the 500 to 1,500 ha range for initial horticulture development aimed at the EU and Gulf markets.

Public-Private Partnerships

There are numerous examples of successful cooperation between government and private sector firms in agriculture, including cultivation and distribution of high quality seeds and other input supplies.

The government is looking for more opportunities to enlist the resources and interest of the private sector in horticulture development.

More cold storage at Bandaranaike International Airport (BIA)
Sri Lankan exporters of fruit and vegetables have joined with exporters of other high value perishables (among others fish and flowers) to open up a dialogue with the government for larger and better cold storage facilities at BIA.

Import Substitution
Much of Sri Lanka's policies with respect to tariffs and agriculture are all aimed at import substitution. The potential of Sri Lanka for producing and exporting early season fruits and vegetables has been given priority attention by the government.

3.2 Public and private sector organizations

The **Ministry of Agriculture (MOA)** is the dedicated government authority for agriculture. Within the MOA the **Department of Agriculture (DOA http://www.doa.gov.lk/)** is one of the largest government departments with a high profile community of agricultural scientists and a network of institutions covering different agro ecological regions island wide. The objectives of the DOA are focused on maintaining and increasing productivity and production of the food crop sector. The major functions of the DOA include research, extension, production of seeds and planting materials, regulatory services related to plant quarantine, seed production and imports, soil conservation and pesticides. The management structure of DOA consists of **three research institutes**:

- Rice Research and Development Institute
- Field Crops Research and Development Institute
- Horticultural Crops Research and Development Institute

and **six technical service centers**:

- Seed Certification and Plant Protection Centre
- Seed and Planting Material Development Centre
- Extension and Training Centre
- Socio Economics and Planning Centre
- Natural Resource Management Centre
- Progress Monitoring and Evaluation Unit

The **Hector Kobbekaduwa Agrarian Research and Training Institute (HARTI)** is the premier national Institute in the field of socio-economic research and has also developed skills and infrastructure for providing relevant training to farmers, field workers and managers in both state and non-state sectors. HARTI functions with the objectives of 1st timely dissemination of market information to policy makers, farmers and traders; 2nd identification of agrarian policy perspectives; 3rd research planning-priority setting and 4th building relationships with public/private sector organizations, universities and regional & international research institutes/agencies.

The **Sri Lanka Council for Agricultural Research Policy (SLCARP)** was established in 1987 under the ministry of agricultural development and research. Providing advice to the government of all matters regarding the organization, coordination, planning and execution of agricultural research and such other related matters, formulation of national agricultural research policy and priorities are two of the main functions of the SLCARP.

The **Institute of Post Harvest Technology (IPHT)** is the main Institution in Sri Lanka engaged in improving the Post Harvest Technology of rice/other grains, field crops, fruits/ vegetables and spices through research, training, extension, consultancy/advisory and other development activities. Technology dissemination is one of the major activities of the institute which is carried out through the Training and Extension division. In addition, IPHT provides laboratory- and fumigation services.

The **Board of Investment of Sri Lanka (BOI)** functions as a central facilitation point for investors. BOI is committed towards continuously improving the country's investment climate. The Board of Directors represents the private and public sector. BOI companies today employ over 470,000 workers. They account for nearly 65% of Sri Lankan exports and 86% of the country's industrial exports. The BOI is therefore a significant agent of social change and its existence of over 38 years has radically transformed Sri Lanka both economically and socially. Significantly, when an investor signs an agreement with the BOI, the provisions embodied in the agreement remain valid for the life of the enterprise. Successive governments cannot change these provisions, ensuring a degree of stability that few other countries can offer or match. Though the BOI is not directly related to horticulture, several horticulture related companies run with the assistance of the BOI.

The **Sri Lanka Export Development Board (EDB)** was established in 1979 and is Sri Lanka's effort to develop and promote exports. The EDB is the executive arm of the Export Development Council of Ministers, which is the policy-making body of the EDB. It is headed by HE the President of Sri Lanka.

The major functions of EDB include;

- Assisting in the improvement of the macro and micro economic environment viz-a-viz the development of exports.
- Formulating and implementing the National Export Development Plan and sectoral development plans, in association with the relevant state and private sector agencies.
- Providing exporters with a viable overseas market-environment by active participation in trade negotiations and relevant follow-up activities.
- Conducting market research/surveys and identifying market opportunities for Sri Lankan products and services.
- Implementation of supply development programmes including technical, quality and packaging development, in order to assist exporters/potential exporters to improve/increase the competitiveness of exports.
- Formulating and implementing integrated product- and market development programmes, in order to expand existing markets and support exporters/potential exporters' entry into new markets.
- Implementing export development programmes for SMEs in order to increase the awareness of the export potential of the SME sector and to encourage and assist SMEs to export.
- Supporting exporters and potential exporters and the whole sector to achieve trade efficiency.
- Assisting in improvement of export support services in co-ordination with other service-providers.
- Working with international trade promotion organizations as well as other local trade support organizations; EDB is information partner of the Dutch CBI www.cbi.eu.
- Implementing human resource development training/awareness programmes for exporters, potential exporters and related personnel, with the objective of helping them to acquire/enhance their skills in technology, productivity, financial/general management, export marketing, etc..

A tangible and recommended service of the EDB is its information products on markets, products, tariffs, regulations, international commodity prices and national/international trade statistics. Through its website international data bases and in-house trade publications are easily accessible.

Box 1: Online access to the EDB	
Website	http://www.srilankabusiness.com/
Exporters directory	http://www.srilankabusiness.com/exporters-directory

The **Department of Export Agriculture (DEA)** functions under the Ministry of Primary Industries and is responsible for the Research and Development of a group of perennial, Export Agricultural crops (EAC) namely Cinnamon, Pepper, Cardamom, Clove, Nutmeg, Coffee, Cocoa, Vanilla, Betel, Citronella, Lemon grass, Arecanut and some traditionally grown crops in Sri Lanka, aiming at improving productivity, production and quality of the produce.

The **Ceylon Fertilizer Company Ltd.** and the **Colombo Commercial Company Ltd.** are fully government owned, ISO 9001:2008 certified companies. Both companies are engaged in imports of chemical fertilizers, producing quality fertilizer mixtures and marketing, distributing through island wide network of warehouses and thereby catering to the fertilizer needs of Sri Lankan farmers.

Apart from the public organizations with direct or indirect involvement in the horticulture sector, there’s a number of private organizations. Most of these are member of the National Agribusiness Council.

The **National Agribusiness Council (NAC)**, established in June 2000, is focused on the objectives of its founder sponsor – the USAID funded Agro Enterprises Project (AgEnt), driving the development of the national agribusiness sector. NAC's objectives encompass a wide range of services designed to make Sri Lanka's agribusiness sector competitive in the globalizing market place. The council offers leadership to stronger and globally competitive private sector driven agribusiness development. The NAC is a powerful voice in the agribusiness related policy analysis, fighting political and bureaucracy machineries for policies and regulations assisting the growth and sustainability of the industry. Some of the marked achievements are the creation of the "green channel for perishable product" at the airport, Tax removal of importing fruit seeds and lands made available for establishing model farms.
The NAC consists of 17 associations and 15 cooperate members (all leading agriculture/horticulture related companies in Sri Lanka). Among the 17 associations, the following (10) are directly involved in the horticulture industry:

- Sri Lanka Food Processors' Association (SLFPA)
- Ceylon Coir Fiber Exporters' Association (CCFEA)
- Crop Life Sri Lanka (CLSL)
- Floriculture Produce Exporters' Association (FPEA)
- Protected Agricultural Entrepreneur's Association (PAEA)
- Seed Producers' Association of Sri Lanka (SPASL)
- Seedmen's Association of Sri Lanka (SASL)
- Sri Lanka Coir & Allied Products Manufacturers' Association
- Sri Lanka Fruits & Vegetable Producers, Processors' & Exporters' Association
- The Coir Council International

3.3 Plant quarantine

British scientists of the Department of Agriculture at Peradeniya commenced plant quarantine activities in the 1880s, when Sri Lanka became a centre for scientific study and identification of pests in the region. After the establishment of the Central Agricultural Research Institute (CARI), all the plant quarantine activities were carried out jointly in the Divisions of Entomology and Plant Pathology of that institute. In the early 1980s, with the help of Australia, a separate unit for plant quarantine activities was established in Gannoruwa within the premises of CARI. A Chief Plant Quarantine Officer was appointed then. The present National Plant Quarantine Service (NPQS) complex was established in 1994 at Katunayake (Bandaranike International Airport), financially supported by Japan.

Plant protection laws in Sri Lanka
1901 - Insect Pest and Quarantine Ordinance
1907 - Plant Pest Ordinance
1909 - Water Hyacinth Ordinance No 4
1924 - Plant Protection Ordinance No 10
1999 - Plant Protection Act No 35 (since 1999 no new regulations have been enacted)

The National Plant Quarantine Service functions with the following objectives:

- Prevention of introduction, establishment and spread of dangerous alien pests within the country.
- Involvement in domestic pest control programmes.
- Development of treatment technologies to eradicate pests of quarantine importance.
- Promotion of export of healthy plants and plant products.

The Plant Protection Act No. 35 of 1999 considers a Quarantine pest as 'a pest of potential economic or environmental importance to any area within Sri Lanka and not yet present there, or present but not widely distributed and being officially controlled'. The Asia and Pacific Plant Protection Commission (APPPC) has made two lists (A1 and A2) of dangerous pests to help the member countries in deciding on quarantine pests. These 2 lists can be obtained from the NPQS.

- the A1 list contains dangerous pests that are not yet recorded in the Asia and Pacific region.
- the A2 list contains dangerous pests present but of limited distribution in some countries within the Asia and Pacific region.

There are some pests present in Sri Lanka that may cause serious outbreaks and hence continuous control programs must be carried out. Apart from the quarantine pests, these 'Regulated Pests' are under serious observation by the NPQS.

Box 2: Issuing procedure of phytosanitary certificates on agricultural commodities at the Katunayaka International Airport by the national Plant Quarantine Service
http://www.doa.gov.lk/index.php/en/services/895

Eligibility	Any person
Procedure of applying	Application can be obtained from the Plant Quarantine Station at the airport and submit to the station. The items should be free from any pest and diseases
Time of submission the applications	Any time (24 hours)
Fees for application	Free of charge
Fees for obtaining the service	Rs 162 per certificate
Time taken to provide the service	30 minutes maximum
Documents needed	Export/ Import permit and fulfil the conditions requested
Place of service given	Plant Quarantine Station-Airport, Bandarnayake
Fax /Tel.	011-2252575, 011-226395
Cargo Inspection room:	011-2263955
Passenger Terminal:	011-2264568
E-mail:	pqsbia@sltnet.lk
Staff officer in charge of the service:	Assistant Director of Agriculture

Sri Lanka is Xylella free
A scientific opinion was published on 6th January 2015 by the European Food Safety Authority on the risk to plant health posed by Xylella fastidiosa in the EU. Thus, all imports to the Netherlands (all EU countries) must comply with the conditions stated in the 2015/789 article 16. The list of plant species that have been identified as susceptible to the European and non-European isolates of Xylella in that document, does not carry the species that Sri Lanka sends to the export markets. Furthermore, the Netherlands Food and Consumer Product Safety Authority (NVWA) on 20th January 2016, has included Sri Lanka to the EU list of declared countries registered, being **free from Xylella fastidiosa**.

3.4 Breeders rights

Plant variety protection (plant breeder's rights) is a rather new concept to Sri Lanka. As a member of the WTO and as a signatory of the TRIPS Agreement, Sri Lanka is obliged to implement effective protection on plant varieties. However, at present, there is still no system of protection in place. In order to fulfil its article 27.3 (b) TRIPS obligations, the National Intellectual Property Office (NIPO) in Sri Lanka introduced the Protection of Plant Varieties Bill 2001 (the Draft), based on the UPOV 1991 Convention. Yet Sri Lanka debates how to meet those requirements. The National Intellectual Property Office together with the Ministry of Agriculture have identified the need of a proper mechanism, however the national legislation has still failed to promote the working document as a law.

Despite being non-compliant with TRIPS, Sri Lanka holds a strong position in terms of trustworthiness and confidentiality with respect to plant variety protection, except for very few occasions where non-entrepreneurial farmers have violated such agreements and were left out of the horticulture industry. The strong associations Sri Lankan entrepreneurs have with foreign partners, commonly secure the varieties provided by the foreign partners. Nevertheless, this way of protecting breeder's rights in Sri Lanka isn't sustainable and doesn't fully ensure protection. Few excerpts of the discussions in this regard with Sri Lankan entrepreneurs in the floricultural production and trade are given in quotes below.

"We are doing a good business with Australia. We produce planting materials to Australia in which the mother plants are obtained from them. They are depending on us and relying on us because we were able to keep the trust for their patented varieties for over 10 years."

"We get all our mother plants from Japan. We grow and export all our products mainly to Japan. Over the last 15 years, we have never had a single complaint about the breeders' rights. We work with the mother company in Japan with a great understanding."

3.5 Supplies

Although the supply of inputs to horticulture crop production is not organized as a sub-sector, there are prominent enterprises supplying fertilizers, agro-chemicals and (hybrid) seeds and a handful of suppliers of other inputs, such as greenhouse construction materials, shade nets, UV treated polythene, pots, mulching materials and drip irrigation. See these local suppliers in Table 3.1.

Table 3.1: Main agricultural input suppliers

Unipower (Pvt) Ltd, 756-B, Parliament Road, Pelawatta, Battaramulla.
Phone - 0115732110/111 - Web: www.unipowersl.com - Email - unipower@unipowersl.com

Hayleys Agri Business, 25, Froster Lane, Colombo 10
Phone - 011 2688960 - Web: www.hayleysagriculture.com - Email: info@agro.hayleys.com

CIC Agri Business, Kew Road, Colombo 02
Phone - 011 2328421 - Web : www.cicagri.com - Email: sunith@cicagri.com

Agstar Fertilizers (Pvt) Ltd, Bava Place, Colombo 08
Phone – 0114812424 - Web: www.agstarspices.com - Email: info@agstarexports.com

Opex Holdings (Pvt) Ltd, W.A.D Ramanayake Mawatha, Colombo 02
Phone – 0112421356 - Web: http://www.opexholdings.com/ - Email: opexholdings@sltnet.lk

Sri Lanka is heavily dependent on import for many of these supplies; the Netherlands, Israel, India, Thailand and Pakistan are the major exporters.

All coir-based products (as potting mixtures or planting media), organic fertilizers such as compost, plastic pots and seed & planting materials are domestically produced and even exported.

Fertilizers

Sri Lanka is heavily dependent upon fertilizers which are imported from elsewhere (Table 3.2). China counts for about 66% of the share (Tables 3.3 and 3.4).

Table 3.2: List of fertilizer products imported by Sri Lanka (2006-2015), in tonnes

Code	Product label	2006	2009	2012	2015	average annual change
'3102	Mineral or chemical fertilizers, nitrogenous	397,410	352,775	396,666	537,578	3.9%
'3104	Mineral or chemical fertilizers, potassic	156,060	59,696	124,756	218,503	4.4%
'3103	Mineral or chemical fertilizers, phosphatic	71,274	41,530	109,130	102,458	4.9%
'3105	Mixtures of N, P and/or K fertilizers	6,307	7,916	9,169	14,280	14.0%
'3101	Animal or vegetable fertilizers in packages weighing more than 10 kg	660	58	55	32	-10.6%

Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table 3.3: Top-12 Fertilizer exporters (Product category 31), imported by Sri Lanka (2006-2015), in US$ thousand

	2006	2009	2012	2015	change
Total imports	**163,359**	**181,491**	**312,350**	**290,783**	**8.7%**
China	15,475	18,421	103,000	192,694	127.2%
Uzbekistan	0	148	7,161	20,836	-
Belarus	4,202	0	9,324	18,223	37.1%
UAE	30,274	18,417	72,692	14,387	-5.8%
Lithuania	0	0	14,642	13,286	-
Russian Federation	4,338	177	25,321	12,125	19.9%
India	3,058	2,391	1,195	8,761	20.7%
Vietnam	0	521	909	2,609	-
Norway	286	0	1,627	1,907	63.0%
Germany	1,829	7,382	5,394	1,197	-3.8%
Thailand	312	177	505	956	22.9%
Netherlands	103	294	489	736	68.3%

Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table 3.4: Top-12 Fertilizer exporters (Product category 31), imported by Sri Lanka (2011-2015)

	Imported value 2015 (US$ 1,000)	Share in Sri Lanka's imports (%)	Imported growth in value between 2011-2015 (%, p.a.)	Imported growth in value between 2014-2015 (%, p.a.)	Ranking of partner countries in world exports	Share of partner countries in world exports
World	290,783	100%	-8%	7%		100%
China	192,694	66%	15%	36%	1	17.7%
Uzbekistan	20,836	7%	37%	1,688%	58	0.2%
Belarus	18,223	6%	22%	13%	5	5.2%
UA Emirates	14,387	5%	-32%	-80%	18	1.1%
Lithuania	13,286	5%	-11%	426%	12	1.7%
Russia	12,125	4%	-17%	-49%	2	14%
India	8,761	3%	3%	110%	57	0.2%
Vietnam	2,609	1%	-58%	12,945%	56	0.2%
Norway	1,907	1%	0%	4%	79	0%
Germany	1,197	0%	-43%	248%	13	1.6%
Thailand	956	0%	25%	34%	46	0.2%
Netherlands	736	0%	15%	31%	6	4.1%

Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table 3.5: Existing trade of and between Sri Lanka and the Netherlands for fertilizers (Product Category 31) in tonnes (2013-2015)

Code	Product label	Sri Lanka's imports from Netherlands			Netherlands's exports to world			Sri Lanka's imports from world		
		2013	2014	2015	2013	2014	2015	2013	2014	2015
'3105	Mixtures of nitrogen, phosphorous or potassium fertilizers	479	695	1,151	1,159,975	1,206,523	1,086,161	10,552	8,293	14,280
'3102	Mineral or chemical fertilizers, nitrogenous	4	0	0	5,918,723	6,263,737	5,916,276		535,914	537,578
'3103	Mineral or chemical fertilizers, phosphatic	0	0	0	297,436	341,147	277,716	53,184	94,813	102,458
'3104	Mineral or chemical fertilizers, potassic	0	0	0	291,227	508,758	660,601	120,040	125,475	218,503
'3101	Animal or vegetable fertilizers in packages weighing more than 10 kg	0	0	0	792,298	779,580	816,968		98	32

Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table 3.6: Existing trade of and between Sri Lanka and the Netherlands for the items HS 3105 Mixtures of nitrogen, phosphorous or potassium fertilizers in tonnes (2013-2015)

Code	Product label	Sri Lanka's imports from Netherlands			Netherlands's exports to world			Sri Lanka's imports from world		
		2013	2014	2015	2013	2014	2015	2013	2014	2015
'310520	Fertilizers containing nitrogen, phosphorus & potassium in packs weighing <=10kg	458	695	1,151	676,957	715,637	494,371	4,777	4,877	5,826
'310530	Diammonium phosphate, in packages weighing more than 10 kg				86,754	81,980	134,384	3,247	2,127	5,564
'310540	Monoammonium phosphate & mix thereof with diamonium phosphate, in pack<=10kg				24,635	36,914	37,641	1,640		831
'310551	Fertilizers containing nitrates & phosphates, in pack weighing<=10kg				38,656	27,738	87,339			
'310559	Fertilizers containing nitrogen & phosphorus, in pack weighing<=10kg				6,821	11,397	14,029		11	
'310560	Fertilizers containing phosphorus & potassium, in packages weighing<=10 kg				290,380	302,370	285,067	14	26	
'310590	Fertilizers, in packages not exceeding 10 kg	20			18,368	16,396	17,460	795	759	1,156
'310510	Fertilizers in tablets of similar forms or in packages not exceeding 10 kg				16,707	14,091	15,871	81	493	903

Sources: Export Development Board, Sri Lanka and Trade Map, International Trade Center

The Netherlands exports substantial volumes of fertilizers to worldwide destinations. Sri Lanka hardly imports fertilizers from the Netherlands. Tables 4.5 and 4.6 indicate the potential trade, based on the current export-import figures between the 2 countries.

Agro-chemicals

Suppliers of pesticides have a strong market position in Sri Lanka. One can buy a wide range of chemicals for interventions in case of pests and diseases. The common attitude for long has been: “the more chemicals, the better”. Driven by consumer demands and high-end market needs (MRL-limits and CSR requirements) and also forced by the government that wishes to reduce the dependency on chemicals, now we see a tendency that the industry moves to integrated pest management (IPM) and natural pest control methods. Practical knowledge and expertise in this field stays behind and the supplying industry isn’t offering the latest products and services yet.

Seeds and planting materials

Over the past five years, Sri Lanka has imported for US$ 7 million vegetable seeds (Table 3.7 and 3.8). Thailand, India, USA and Japan are the major countries from where Sri Lanka has been importing. Direct figures of imports from the Netherlands show only a 0.2% market share in the year 2014-2015. However, it must be noted that part of the imports through the aforementioned countries (f.i. India and Thailand) are related to Dutch seed companies with branches and/or distributors in those countries. See also Table 3.10 with existing and potential trade between the 2 countries

Table 3.7: Vegetable seeds imported by Sri Lanka (2006-2015)

Code	Product label	2006	2009	2012	2015	average annual change
120991	Seeds, vegetable, for sowing (Quantity – Tonnes)	382	257	390	226	-4.5%
120991	Seeds, vegetable, for sowing (Value – US$ thousands)	2,818	4,371	6,547	7,074	16.8%

Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table 3.8: Top-12 exporting countries for vegetable seeds* imported by Sri Lanka (2006-2015), in US$ thousand

	2006	2009	2012	2015	average annual change
Total	**2,818**	**4,371**	**6,547**	**7,074**	**16.8%**
Thailand	515	1,817	2,600	3,147	56.8%
India	281	461	1,344	1,192	36.0%
Japan	479	645	794	775	6.9%
United States of America	623	463	433	370	-4.5%
Italy	16	61	61	331	218.8%
South Africa	15	34	115	301	211.9%
France	340	393	291	238	-3.3%
Vietnam	4	85	470	221	602.8%
China	67	107	84	195	21.2%
Indonesia	0	0	0	166	
Korea, Republic of	114	105	82	63	-5.0%
New Zealand	0	59	113	37	

**Product category: 1209 Vegetable Seeds for sowing*
Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Export figures of seeds show a substantial growth in flower seeds over the recent year (Table 3.9)

Table 3.9: Seeds exported from Sri Lanka (2006-2015), in US$ thousand

Code	Product label	2006	2009	2012	2015	average annual change
'120999	Seeds, fruit and spores for sowing	1	0	245	1052	11677.8%
'120930	Seeds, flower, for sowing	392	64	450	602	6.0%
'120991	Seeds, vegetable, for sowing	1	1	133	23	244.4%

Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table 3.10: Existing trade of and between Sri Lanka and the Netherlands for seeds, in US$ thousand (2013-2015)										
Code	**Product label**	**Sri Lanka's imports from Netherlands**			**Netherlands's exports to world**			**Sri Lanka's imports from world**		
		2013	**2014**	**2015**	**2013**	**2014**	**2015**	**2013**	**2014**	**2015**
'120999	Seeds, fruit and spores for sowing	1	18	37	45,829	55,246	43,551	672	682	995
'120991	Seeds, vegetable, for sowing	34	6	13	1,306,668	1,345,586	1,181,176	6,732	6,433	7,074

Sources: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Coco-peat

Sri Lanka is placed in the 7th position in the global exports of coco-peat (coir) over the last 3 years, generating an income of US$ 124 million in 2014. Coconut is cultivated in Sri Lanka on an area of 394,836 ha with an annual production amounting 2,870 million nuts. As the coir production is directly proportional to the production of nuts, Sri Lanka can produce more than what is produced at present, thus expansion in this industry is a mere possibility. As a consequence, all coir-based products (as potting mixtures or planting media) are produced and distributed domestically and exported.

Advanced technology for production and postharvest

Production in advanced greenhouses with mid- or high-tech production systems (such as hydroponics) and automated control and steering systems, is hardly seen in Sri Lanka. Most of the protected cultivation is done under basic wood, bamboo or metal constructions with shade nets or polythene screening or cladding. Equipment and supplies for irrigation and fertigation are on the market, but integrated concepts cannot be found

The same counts for the postharvest stage. Advanced systems and machinery for packing, grading, sorting and other handling of horticulture produce after harvesting (flowers, fruit and vegetables) are hardly seen and thus the supply industry doesn't offer these products for competitive prices.

Certifications

Sri Lanka is adjusting well to the ISO 22000 series and to the health & safety regulations stipulated by the EU. Farmers are educated to practice Good Agricultural Practices (GAP) at the nurseries but only very few farms are certified under the GlobalGAP certification scheme or any equivalent, which is required by more and more retailers worldwide.

The processing / manufacturing facilities owned by the export companies comply with local standards (SLSI) and also with International quality standards such as ISO and HACCP. Here again, only very few have successfully implemented traceability and management systems such as IFS and BRC.

Control Union and SGS have offices in Sri Lanka..

3.6 Availability and quality of labour

The majority of the people who run horticultural businesses is well-educated. Most of them are with at least a Higher National Diploma or Bachelor or even higher degree. For the level of entrepreneurs and higher management positions there's enough potential if we look at the numbers of youngsters and graduates. However, there's an issue with the reputation of the agribusiness. Many graduates prefer government jobs and/or other industries, especially the financial and commercial service sectors. Though it's not considered to be a main obstacle, it's not easy for the industry to attract young talents. Furthermore, enterprises in the industry usually miss the practical skills and the right entrepreneurial attitude when working with the new generation. This issue is high on the agenda of the educational sector.

With respect to the (unskilled) workforce, the sector is satisfied. Labour is available, the literacy rate is high (93.3% in 2014) so communication is easy. People are known as skillful, easily trainable and quick-learners. About 8.8 million persons were employed in Sri Lanka in 2014 (5.7 million = 65.9% males and 3.0 million = 34.1% females). Of all, the estimated share of the agriculture sector is 28.5%.

Sri Lanka has a high computer literacy rate: in 2014 one out of every five households owns either a desktop or a laptop computer. In the floriculture business, some growers are using software like OneDrive® (previously SkyDrive®) in their business planning and in sharing information on-line with the buyers.

The costs for labour are competitive for the region: depending on various factors between US$ 7 and 10 per day, which is higher than Bangladesh, but lower than China and Thailand. For the horticulture sector there're no difficulties or obstacles with labour unions, whereas unions in the tea, rubber and coconut sectors sometimes cause negative impact on productivity and continuity.

3.7 Distribution and marketing

Supply chains for perishables in Sri Lanka aren't organised well. It's estimated that the over-all post-harvest losses of fruit and vegetables are 30 - 40 %, due to not having enough refrigerated trucks and a lack of (cold) storage and handling facilities, both in the regions as at the airport. Only a limited (six) horticulture companies have their own refrigerated trucks. The service can be obtained from various service providers, though the overall capacity is insufficient. Thus, measures are necessary to look after the cold-chain management all over the sector in order to increase the efficiency and reduce (financial) losses in the sector.

The common opinion in the sector is that the facilities at the Sri Lankan airports to retain perishables, are not satisfactory. The Food Research Unit of the Department of Agriculture (DOA) apparently has initiated plans to establish a cold room facility at or near Bandaranaike International Airport with the capacity of 1,000 tonnes. However, no business plan and no financial commitment have been organized yet to establish and run this business.

3.8 Research, education and extension

Research
Sri Lanka's National Agricultural Research System (NARS) is dispersed under several ministries: Ministry of Agriculture, Ministry of Plantation Industries, Ministry of Lands, Ministry of Fisheries and Aquatic Resources, Ministry of Environment and Natural Resources, and Ministry of Higher Education. The Sri Lanka Council for Agricultural Research Policy (SLCARP) has the responsibility of aiding, promoting and coordinating agricultural research. The Council also conducts some limited research, often at the request of the Ministries or the stakeholders, but its main role is to coordinate the research activities of various ministries and higher education institutes. The dispersed nature of the national agricultural research system makes this coordination extremely difficult; most often ineffective as ministries themselves have more authority over their research priorities and development of research programmes.

There are three main commodity research institutes, of which the Horticulture Crop Research and Development Institute (HORDI) is most relevant for fruit, vegetables and floriculture. HORDI is by far the largest agricultural research agency in Sri Lanka with two regional centers, located in Bandarawela and Makandura, a fruit crop research center in Horana, a virus indexing center at Homagama, a potato research station in Sita-Eliya, a food research unit in Gannoruwa and a natural resources management center in Peradeniya. HORDI employs 223 full time equivalent researchers.

The Institute of Postharvest Technology (IPHT) is a relatively newly established research centre in Anuradhapura in 2002.

Education and Training

Every year about 900 students graduate from one of the 8 Faculties of Agriculture in Sri Lanka. All the Faculties have developed their curricula to meet the demand of the society, both locally and internationally. The Faculties offer 4-year degree programs in Agriculture. The Agriculture Education Unit (AEU), the extension arm of the Faculty of Agriculture of University of Peradeniya, is geared to offer tailor-made programmes to educate people in Sri Lanka and foreign students. The AEU is the only unit of this kind established in a university in Sri Lanka.

There're four Schools of Agriculture (under the DOA) offering two-year diploma course, delivering a middle-grade technical workforce of about 250 per year.

The private educational institution, Aquinas University College in Sri Lanka, also offers two-year Diplomas in agriculture, being approved and recognized by the Ministry of Agriculture since 1981.

Extension

Agriculture extension activities are handled by many line ministries and public departments, semi-autonomous bodies, research institutes, as well as private and civil society extension service providers. These service providers engage farmers independently to deliver their extension advice on various technical subjects. Sri Lanka has established ICT initiatives for agriculture extension since 2003.

The Department of Agriculture (DOA) is responsible for extension activities in selected irrigation schemes called Inter-Provincial Irrigation Areas. For the largest irrigation scheme in the country, Mahaweli Development Scheme, an autonomous organization called Mahaweli Development Authority of Sri Lanka provides the required extension services. The Extension and Training Centre of the Department of Agriculture is responsible for the agriculture extension activities in the inter-provincial areas, while the Provincial Departments of Agriculture is responsible for the agriculture extension within their administrative boundaries, excluding those of inter-provincial areas. The Farm Women Agriculture Extension (FWAE) wing was established in the department in 1970 to provide extension services solely for the women in the food crops sector.

All public extension officers are holders of University degrees or Diplomas, so they're qualified to do the job. However, many of them lack 'on-the-job' training (continuing professional development) and are not well-equipped with the latest technological advancements.

There are several semi-autonomous, semi-government agencies which have their own extension staff to provide extension advice to the farmers. A few examples of such bodies are:

- Department of Export Agriculture
- Coconut Cultivation Board
- Tea Small Holdings Development Authority
- Rubber Development Department

The private sector is also involved in extension work. Few enterprises such as CIC Agri Businesses, Hayley's Agriculture Holdings, A. Baur and Co., etc. provide services to farmers on a regular basis, being an additional (commercial) service, related to delivery of seeds, other agricultural inputs, machinery and equipment. These advisory services are normally not fee-based but rather a tool to promote the companies' products or to ensure the quality of raw produce that relevant companies buy from its producers. Generally speaking the performance of these private services is better compared to the government sector.

4 Horticulture sector analysis

4.1 Major trends and drivers for change

Government policies on the one side and industry efforts for creating and catching more market opportunities on the other side, cause the following trends in the Sri Lankan horticultural sector:

- A shift towards an export oriented agribusiness
- A transition from paddy (rice) cultivation towards cash crops
- Introduction of more advanced technologies in production of crops and postharvest, thereby aiming for higher productivity and volumes, more consistent quality and reduction of the cost price
- Less and smarter use of non-organic fertilizers and agro-chemicals in crop cultivation
- Increasing supply to domestic high end markets, especially in the tourism sector

4.2 Opinions and views from the private sector

Opinions in Sri Lanka

Generally speaking there's a positive atmosphere in the private sector. One realizes that Sri Lanka, although it has been exporting for decades, is still at an infant stage as an export country compared to global players and compared with some other countries in the region. There's an awareness that the horticultural industry faces serious constraints and at the same there's eagerness to overcome these obstacles and to work shoulder to shoulder with the government and move further towards a growth phase of the sector.

In Annex VI the results are shown of various meetings with Sri Lankan private sector stakeholders. The most relevant outcomes of these consultations are:

- The private sector in Sri Lanka is satisfied with the supportive role of the government; nevertheless entrepreneurs see room for improvement in infrastructural projects (especially airport facilities), applied R&D, promotion of advanced technology and streamlining of procedures (especially for export permits).
- The private sector is optimistic with respect to the improvements that have been recently made in education curricula; still the main concern is that graduates miss practical skills and the right attitude for the horticultural sector.
- That same counts for public extension services: manpower is well available but knowledge transfer capacity in advanced technologies is hardly there. The industry has to look for (more costly) alternatives to stay up to date.
- There's not a full coverage of all necessary supplies for advanced production and postharvest practices at competitive price levels; room for improvement is mainly seen in modern varieties (especially in cut flowers and vegetables), mid- and high technology and some specific agro-chemicals.
- The sector is rather satisfied about the logistical infrastructure in the country; the main issues that worries almost all actors is the immature cold-chain all over the country (lack of refrigerated transport, storage and handling facilities).
- Availability, quality and costs of labour (both for the management level as for the 'dirty hands workforce') are satisfactory. At least they're not seen as a limiting factor in the sector development.
- The general opinion is that Sri Lankan exporters lack the capacity to catch up with the latest trends, developments and market access requirements in high end (export) markets. There's a need for awareness and capacity building. In addition, several stakeholders mention that Sri Lanka should pay more attention to country branding.
- Commercial banks play a role in providing loans, so the private sector is able to find financial support while investing. But the system isn't satisfactory, due to inadequate regulations on collateral and security.
- Asking the private sector which issues cause the biggest obstacles in their company development, the most given answers are:
    - lack of marketing capacity
    - not enough access to advanced technology
    - not enough capable management
    - not enough volumes and too much inconsistencies in supply

- Asking the private sector for the main opportunities that will benefit their companies, the most given answers are:
    - capacity building at management level
    - new varieties and new technology
    - Sri Lanka branding
    - year round supply, more volumes and more diversity in supply
- Asking the private sector what are the priority items to further develop the whole horticulture sector in Sri Lanka, the answers are:
    1. technology
    2. marketing
    3. people

Opinions in The Netherlands

Due to the fact that Sri Lankan and Dutch businesses have trade relations for decades in the floriculture industry, it's relevant to know the viewpoints from the Dutch side. Some reflections:

- Sri Lankan exporters in floriculture are able to maintain long-term relationships. Although their cost-price may be higher than in other continents, the quality and reliability keep them in trade. It's also seen that they invest in the market and visit fairs in Europe. But it's considered as an 'old-school' approach. Market visits are not enough target-oriented; finding new market channels and extra, sustainable outlets seems to be difficult. In the current dynamic market with upcoming new entrants, there's a need to behave more pro-actively and effectively.
- There's not enough innovative power in existing relationships in the floricultural business. It's a global trend in the ornamental plants trade that value chains become shorter and that producers realize more involvement in the retail and even consumer phase. Building such new value chains requires entrepreneurial eagerness. For example: sea-freight for transporting ornamental plants. It becomes more and more common in distribution from the Americas and Asia towards Europe, but it's hardly done yet in Sri Lanka.
- Market exposure and market visits to Europe (or even training visits) are beneficial for both sides. It would be worthwhile to not only include owners / directors but also middle management.
- The Dutch business culture is very direct and can be black-or-white. It's easy to come to business with Dutch businessmen. It may conflict with the Sri Lankan culture, for instance when it comes to plant breeders' rights: Dutch breeders have very strict protocols and expect full commitment to the internationally accepted rules. If Sri Lankan partners hesitate or leave question marks in the relationship on that field, it may easily lead to a no-go.
- When it comes to travel time and time zone difference, Dutch businessmen prefer Sri Lanka over destinations in the Americas and the Far East. The new direct KLM connection adds to that proposition. Moreover, the easiness of (English) communication with Sri Lankans and the overall feeling of safety while being in the country, are highly appreciated and give additional advantages over some other place on earth.

4.3 SWOT analysis

The information and analyses in all previous paragraphs leads to the following summarising SWOT-overview of the Sri Lankan horticultural sector.

Strengths	Weaknesses
+ Geographical hub location between the main global markets + Strong international air and see connectivity and adequate national road network + Government support and favourable legislation for horticultural development + Well-documented, user-friendly (export) procedures and strict phytosanitary regulations + Easiness of doing business and eagerness and enthusiasm to establish partnerships + Reputation and trustworthiness of companies and people + Availability of skilled and easily trainable workforce + Free trade agreements with EU (duty-free and quota-free) and many other markets + Favourable climate for tropical, temperate and Mediterranean crops + Good water quality and availability + Rich biodiversity + Potential to increase productivity and yields + Availability of coco-peat / coir products *Floriculture* + Strong actor in the global cuttings and foliage market; in the business for years; well established business relations with the Netherlands + Xylella free	- Lack of technology in cultivation (f.i. irrigation and/or mid tech and high tech greenhouse technology) - Lack of varieties in planting materials and seeds of cut flowers, ornamental plants and vegetables - Relatively high production costs (no economy of scale) - Insufficient experience and knowledge regarding IPM practices - No formal system for variety protection (UPOV) - Weak extension and technical services (not aligned with the latest technological developments) - Lack of technology in postharvest practices (collection, transportation, storage); weak postharvest infrastructure (cold chains); high postharvest losses - Inadequate technologies for processing and value adding - Difficult to meet high-end market access requirements; certifications (such as GlobalGAP) not widely implemented - Poor marketing systems - Weak branding and promotion at national level - No structural, practical linkages between value chain actors and knowledge institutions - Lack of streamlining in government procedures (bureaucracy) *Floriculture* - No full consistency in product delivery (cuttings, foliage - Not close enough to the market - Too much old-school: lack of market-awareness and acquisition capacity to establish new business partnerships *Fruits* - Limited availability of orchards with a large (commercial) scale = insufficient supply

Opportunities	Threats
+ Growth in domestic demand for floricultural products and fruits & vegetables (incl. tourism sector) + Arab (Gulf) markets + Branding the land of origin (Ceylon branding) *Floriculture* + Large and still moderately growing global market for ornamental products + Innovations in assortment / varieties, especially for sea freight *Fruits* + Growing consumption of off-season fruits in Europe and other high end markets (Gulf, Russia, North-America, Far East) *Vegetables* + Regional markets	- Increasing market access requirements in high-end markets, incl. CSR - Consolidation in the market due to the growing share of large supermarket chains > less bargaining power for producers and exporters *Floriculture* - In foliage and cuttings segment strong competition from Latin America (historically), Africa (new) and other Asian countries (new) *Fruits* - Worldwide competition *Vegetables* - Competition from nearby countries (India, Thailand, Myanmar, Vietnam)

5 Potentials and opportunities for the Dutch horticultural industry

The positive developments in the Sri Lankan economy in general and the demand for technical and market-related improvements in its horticultural sector, provide ample business opportunities for the Dutch horticultural industry. Dutch companies have the technology and the knowledge to support Sri Lanka and to benefit business-wise. Based on the sector analysis of the Sri Lankan horticulture, the potentials and opportunities are clustered in 5 themes:

1. Seeds, propagation materials and technical supplies for the Sri Lankan production sector
2. Technology for the Sri Lankan postharvest segment
3. Capacity building, training and business consultancy all over the supply chain
4. Trade partnerships in seed production, propagation and (semi-finished) ornamental plants
5. Trade partnerships in the fruit and vegetables sector

Ad 1. Seeds, propagation materials and technical supplies for the Sri Lankan production sector

Sri Lanka is heavily dependent on imported inputs for the various stages of the production chain. The country is making a next step in its sector development, which means it's ready and open for more advanced technology and higher quality inputs then currently available. Local distributors (even with nurseries) are available to have a role in the actual delivery of products and (after sales) services.

Specific demand is there for:
- Modern variety seeds and/or young plants for cut flowers and vegetables
- Fertilizers, in particular organic ones
- Agro-chemicals, in particular with short pre-harvest intervals
- Biological pest control solutions
- Equipment for land-preparation, planting and potting, fertigation, spraying, crop maintenance (pruning / trimming), internal logistics and harvesting
- Mid-tech greenhouse solutions, including plastic coverage, ventilation, screening, irrigation, fertigation, hydroponic systems and other climate control (even heating) methods
- Labour management systems

A consideration towards the Dutch industry is to join forces and jointly develop the Sri Lankan market in a cluster of (non-competitive) suppliers, which can be done in a fully private way or in a public-private-partnership (PPP). Some (not limited) examples of such Dutch clusters are:
- Food Tech Holland (targeting the Indian market): www.foodtechholland.nl
- NethWork (targeting the Latin American market): www.nethwork.info
- Desert Growing Group (targeting the Middle East market): www.desertgrowing.com
- Green Farming (targeting Ethiopia and Kenia): www.greenfarming.nl.

Clusters, more than individual suppliers, are able to come up with integrated and even turn-key solutions. Furthermore, while introducing higher levels of technology in a market, it's indispensable to add knowledge and training to the product delivery in order to ensure that the client fully exploits the advanced technology and/or more expensive inputs. While working in a cluster, even better in a PPP, it's easier to include knowledge and training through relationships with governmental institutions, universities, (vocational) schools and other knowledges institutions at both sides. Dutch commercial knowledge providers or training institutions can even be cluster member.

Ad 2. Technology for the Sri Lankan postharvest segment

Sri Lankan growers and exporters do not use improved postharvest technologies. The estimated amount of postharvest losses for fruits, vegetables and ornamental products reaches up to 40%.

In the cut flower industry the lack of proper handling and packaging systems is a major drawback for floriculture trade, both at domestic and international levels. Technologies and systems to facilitate sorting, grading and packaging and to ensure that cut flowers are kept in good condition during the next steps in the chain (flower care), are asked for.

The same counts for the fruit and vegetables industry. Although the scale of production isn't big enough for sophisticated and high-tech equipment, there's room for technologies and systems for sorting, grading, packaging and storage.

Delaying ripening of fruit during long-distance transport is one of the major problems faced by the Sri Lankan fruit exporters, thereby creating opportunities for products and concepts that delay ripening, for instance using ethylene absorbers and scrubbers.

Parallel to what has been mentioned before, it's a valid consideration for Dutch suppliers of any product or service in the postharvest segment, to collaborate with or join in the aforementioned cluster or PPP approach.

Ad 3. Capacity building, training and business consultancy all over the supply chain

Knowledge transfer, education and training are the key to success in the ambition of Sri Lanka to develop its horticulture sector. At present, Sri Lankan entrepreneurs catch up with the latest knowledge and trends through various networks and (commercial) relationships in various countries, including the Netherlands. Such training is costly, whereas the expenses have to be borne either by the Sri Lankan government or by the trainee him- or herself. The commercial price of foreign advisors who usually work on a contract basis, is very high. Therefore, the number of people obtaining training to advanced technologies is relatively low in the Sri Lankan context, despite the need and the growing demand for such training. Hence, an opportunity exists for Dutch companies (for instance in a cluster or PPP approach) to get involved in a practical **training and knowledge** / **demonstration centre**, under the condition that there's (financial) commitment and a central role for any Sri Lankan actor (private or public). Moreover, a sustainable business case has to be developed. Within such a context of train-the trainer programs in combination with demonstration, trials and practical training courses, it becomes feasible for Dutch actors to be involved in training for extension workers, producers, farmers, exporters and their staff.

Some thoughts and considerations for such a training and knowledge / demonstration centre:

- Overall goals:
    - Contribute to adaptation of new technology
    - Increase productivity and quality (= marketability)
    - Reduce costs
- Training topics (not limited)
    - Train-the-Trainer programs for extension workers and other trainers-to-be
    - Hydroponics
    - Climate control
    - Greenhouse concepts
    - Irrigation, fertigation
    - Crop management
    - Energy
    - Certification
    - Postharvest
    - Supply chain management and marketing
    - Business administration
    - Labour management
    - CSR
    - Soft skills (business attitude, management / communication skills, target-orientation, …)

Ad 4. Trade partnerships in seed production, propagation and (semi-finished) ornamental plants

Various examples exist of Dutch breeders or propagators with partnerships in Sri Lanka for seed production (either hybrids or open pollinated) or multiplication (through tissue culture or other means) because of favourable climatic conditions. Although Sri Lanka is still non-compliant with TRIPS and not yet a party to the UPOV, it doesn't hinder successful agreements and collaboration in this field. Sri Lankan producers, nurseries and labs have similar arrangements with Japanese and Australian actors and they're available for new partnerships which Dutch breeders and new variety developers for multiplication and re-exports to defined destinations.

Apart from seeds and propagation materials, the Sri Lankan ornamental plants sector has the potential to supply (more) semi-finished ornamental plants to the European market after exploring and testing sea-freight options.

Ad 5. Trade partnerships in the fruit (and vegetables) sector

Global trade in fresh fruit and vegetables is very competitive. Dutch importers / traders play a leading role and supply retail all over Europe and beyond. Therefore they're connected with all the supplying regions in the world. Currently Sri Lanka doesn't play a serious role in the supply calendar for the European market, partly because of its relatively small scale. Nevertheless, its product assortment, in particular products such as papaya, guava, pineapple, mango, avocado and spices has potential.

The Dutch cluster in trade of fresh fruit and vegetables includes service providers with specialisms in logistics, freight forwarding, customs clearing and related (advisory) services (quality control, insurances, …). Given the hub-position of Sri Lanka, these service providers could be connected as well.

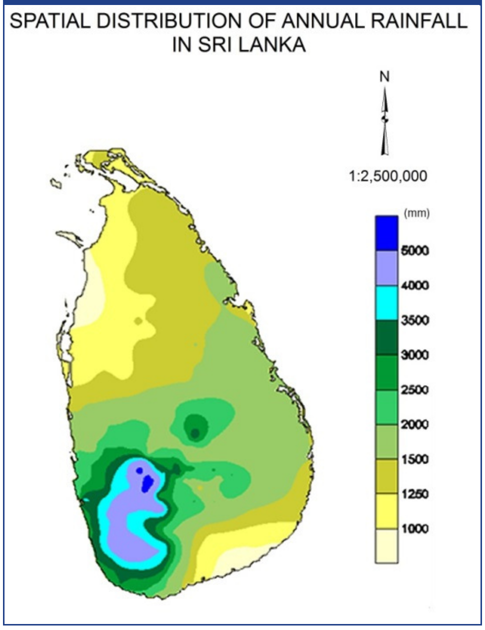
ANNEXES

Annex I Sri Lanka - backgrounds

Annex I.1 Rainfall, temperature and humidity

Rainfall in Sri Lanka has multiple origins. Monsoonal, convection and formation of synoptic weather especially in the Bay of Bengal, account for the majority of the annual rainfall. The average annual rainfall of the island (Figure I.1) varies from about 900 mm in the south-eastern part of the dry zone (*Maha Lewaya* at Hambantota) to over 5,500 mm on the south-western slopes of the Central Highlands (Kenilworth Estate at Ginigathhena).

Figure I.1: Spatial distribution of annual average rainfall in Sri Lanka



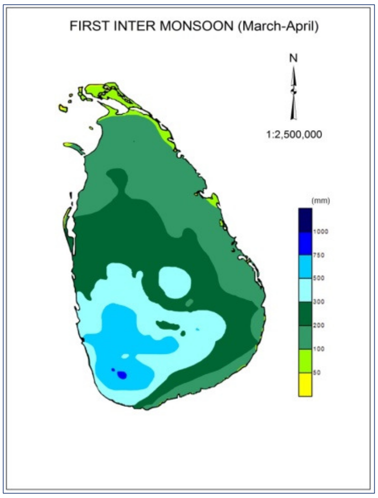
Source: Department of Meteorology, Sri Lanka; values in the legend are in mm

The rainfall experienced during a 12-month period in Sri Lanka can be characterized into four rainfall seasons namely

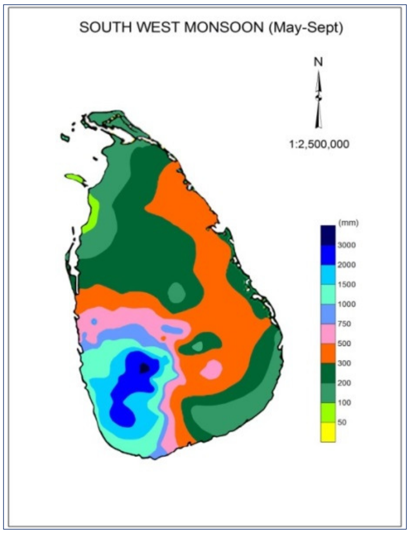
- First Inter Monsoon (FIM): March – April
- South West Monsoon (SWM): May – September
- Second Inter Monsoon (SIM): October – November
- North East Monsoon (NEM): December – February

First Inter Monsoon Season (March – April)

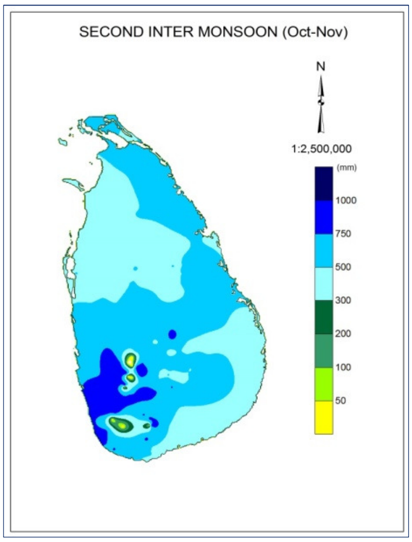
Warm, humid and uncomfortable conditions, with thunderstorm-type rain, particularly during the afternoon or evening, are the typical weather conditions during the first inter-monsoon (FIM) season. The distribution of rainfall during this period shows that the entire South-Western sector of the hill country receives 250 mm of rainfall, with some localized areas on the south-western slopes experiencing rainfall in excess of 700 mm (e.g. 771 mm at the Keeragala Estate). Over most of the island, the amount of rainfall varies between 100 and 250 mm, the notable exception being the Jaffna Peninsula in the Northern Province which has lower rainfall in the FIM season (Jaffna - 78 mm, Elephant pass - 83 mm).



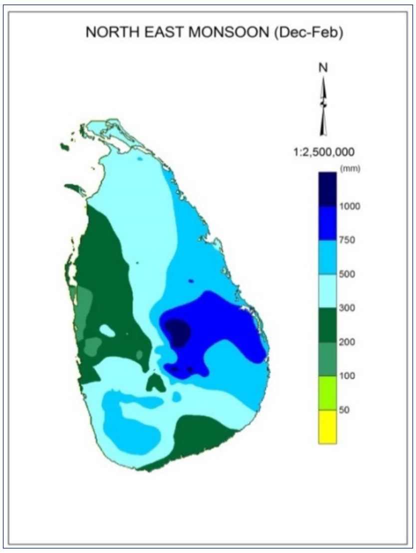
South West Monsoon Season (May - September)
Windy weather during this monsoon results in lower temperatures than prevailing during the FIM season. The south-west monsoon (SWM) rain totals vary from about 100 mm to over 3,000 mm. The highest rainfall is received in the mid-elevations of the western slopes (Ginigathhena - 3,267 mm, Watawala - 3,252 mm, Norton - 3,121 mm). Rainfall decreases rapidly from these maximum regions towards the higher elevation, as in Nuwara Eliya it drops to 853 mm. The lowest rainfall is recorded from the northern and south-eastern regions.



Second Inter Monsoon Season (October-November)
The second inter-monsoon season (SIM) is characterised by convective weather systems that typically generate thunderstorm-type of rain, particularly during the afternoon or evening. However, unlike in the FIM season, the influence of weather systems such as low-level atmospheric disturbances, depressions and cyclonic storms in the Bay of Bengal are common during this period. Under such conditions, the whole country can experience strong winds with wide spread, intense rain, which could lead to floods and landslides. The SIM period of October – November experiences the most even geographic distribution of rainfall in Sri Lanka. Almost the entire island receives in excess of 400 mm of rain during this season, with south-western slopes receiving higher rainfall in the range 750 mm to 1,200 mm (Weweltalawa - 1,219 mm).



North East Monsoon Season (December - February)
The dry and cold wind blowing from the Indian land-mass results in comparatively cool, but dry weather over many parts of Sri Lanka during the NEM season, creating a pleasant and comfortable weather except for some rather cold morning hours in January. Cloud-free skies often provide days full of sunshine and pleasant and cool nights. During this period, the highest rainfall amounts are recorded in the eastern slopes of the Knuckles range of the central hills. The maximum rainfall is experience at Koboneela estate (1,281 mm), and the minimum is in the western coastal area around Puttalam (Chilaw - 177 mm) during this period. There can be high inter-annual variability.



The four rainfall seasons do not bring homogeneous rainfall regimes over the whole island, thus leading to a high agro-ecological diversity in the country despite its relatively small extent. Out of the four rainfall seasons, two consecutive rainy seasons make up the major growing seasons of Sri Lanka, namely *Yala* and *Maha* seasons. Generally *Yala* season is the combination of FIM and SWM rains. As SWM rains are highest over the country's south-western sector, the length (effectiveness) of this season in the rest of the country is generally confined only to two months (mid-March to early May) and hence, the *Yala* season is considered as the minor growing season of the country. The major growing season of the island, i.e. *Maha* season, begins with the arrival of SIM rains in October and continues up to late January/February with the NEM rains. Being mainly convective in nature, rains during the two inter-monsoon periods are usually associated with thunder and lightning along with short-duration high intensity rains, especially during the FIM period.

Temperature
The mean annual temperature in Sri Lanka manifests largely homogeneous temperatures in the lowlands and rapidly decreasing temperatures in the highlands. In the lowlands, up to an altitude of 100 m to 150 m, the mean annual average temperature is 27°C. In the highlands, the temperature falls quickly as the altitude increases. The mean annual temperature of Nuwara Eliya at an altitude of about 1,800 m is 15°C. However, during the period of January to mid-February, the diurnal temperature variation around Nuwara Eliya is large and thus, ground frost can be observed for about 3-7 days early in the mornings or nights when the temperature closer to the ground falls below the freezing point. However, during the period of May to September, if the westerly winds are strong, the leeward area in the east of central highland and the relatively flat terrain extending to the east coast experience warm, dry and gusty winds. Such Föhn-like winds are locally known as the *Kachchan* or *Yal-hulang*. In Föhn conditions, the relative humidity may fall to less than 50% causing vegetation and soil to dry out with possible bush-fire disasters in Badulla and Moneragala. The coldest month with respect to the mean monthly temperature is January and the warmest months are April and August.

Relative humidity
Relative humidity (RH) in Sri Lanka generally ranges from 70 to 90% during mornings and 55 to 80% during late afternoons depending on the geographical location. Relatively low humidity values (from 40 to 60%) are reported in dry lowlands during June to August where the Föhn like wind (*Kachchan* wind) is often prominent. Comparatively high humidity condition that prevails during winter months (December to January) is one of the predisposing factors for plant disease outbreaks during the *Maha* season.

Annex I.2 History

The first Sinhalese arrived in Sri Lanka late in the 6th century B.C., probably from northern India. Buddhism, which is the religion of the majority of Sri Lankan nowadays, was introduced in the mid-third century B.C., and a great civilization developed at the cities of Anuradhapura (kingdom from circa 200 B.C. to circa A.D. 1000) and Polonnaruwa (from about 1070 to 1200) in the north central province.

In the 14th century, a south Indian dynasty established a Tamil kingdom in northern Sri Lanka. The Portuguese controlled the coastal areas of the island in the 16th century and the Dutch in the 17th century. The island was ceded to the British in 1796, became a crown colony in 1802, and was formally united under British rule by 1815. As Ceylon, it became independent in 1948; its name was changed to Democratic Socialist Republic of Sri Lanka (herein after referred to as Sri Lanka) in 1972.

In 1977, Sri Lanka was the first country to adopt liberal economic reforms in South Asia. The main strategy envisioned by liberal economic reforms was achieving an export-driven growth, supported by foreign direct investments, attracted by a cheap and relatively skilled labour force. With economic reforms, Sri Lanka established the Executive Presidency in 1978 with the new constitution. The country was subjected to a period of political and economic instability due to a civil war in the north and east of Sri Lanka, which broke out in 1983, and culminated in May 2009 when Sri Lankan government armed forces defeated the Liberation Tigers of Tamil Eelam.

Sri Lanka has gone through a major structural reform after gaining independence. Agriculture used to be predominant in its economy but it has transformed into a more diversified one, especially in the last three decades. Agriculture contributed 41% to the GDP in 1950 and only 10.1% in 2014 (agriculture, livestock, forestry and fishing). At the time of independence, manufacturing that consisted mainly of processing tea, rubber and coconut, accounted for only 16% of GDP. Manufacturing and services to-date have much higher contributions to GDP than agriculture. In 2014 the industry contributed nearly 32.3% to the GDP, while the contribution of services increased to 57.6%.

The Sri Lankan economy has been and will continue to be an import-export economy. Dependency on food imports has been replaced by a dependency on oil and raw material imports, whose prices will be an important determinant of the country's economic future.

Annex I.3 Government and politics

The executive power is in the hands of HE the **President**, Mr. Maithripala Sirisena (since 9th January 2015). The President also holds the position **Chief of State** and **Head of government**. The **Prime Minister** (deputy to the president) is Mr. Ranil Wickremasinghe (since 9th January 2015). Sri Lanka has a unicameral parliament with 225 seats. Members serve 6-year terms; 196 members are directly elected in multi-seat constituencies by proportional representation vote; the remaining 29 seats are allocated to other political parties and groups in proportion to share of national vote.

The Constitutional Council of Sri Lanka has set up eight independent commissions overseeing the state institutions:

- Commission to Investigate Allegations of Bribery and Corruption
- The Public Service Commission
- The Human Rights Commission of Sri Lanka
- The National Police Commission
- The Election Commission
- The Delimitation Commission
- The Finance Commission
- The National Procurement Commission

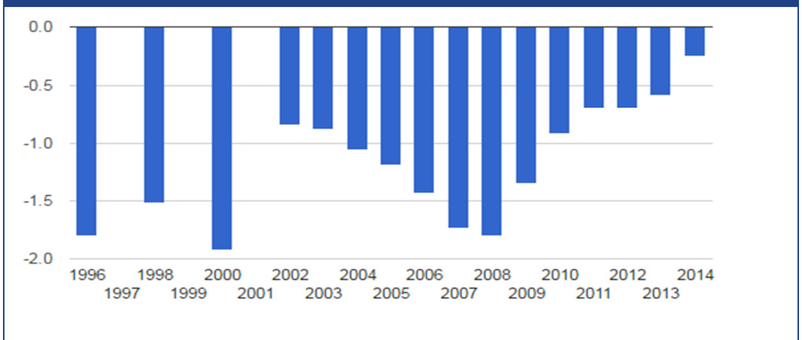
The main political parties (according to parliamentary seating) are:

- United National Front for Good Governance – UNFGG (including the United National Party)
- United People's Freedom Alliance – UPFA (coalition includes SLFP)
- Tamil National Alliance - TNA
- Sri Lanka Muslim Congress – SLMC
- Janatha Vimukthi Peramuna – JVP
- Eelam People's Democratic Party – EPDP

Political Stability Indicator (PSI)

Political stability and economic growth are interconnected. Measures adopted in the recent past towards achieving national integration and harmony contribute to long-term economic development and political stability. Figure I.2 illustrates the recent improvements. In 2014 the PSI was -0.25 (-2.5 weak; 2.5 strong).

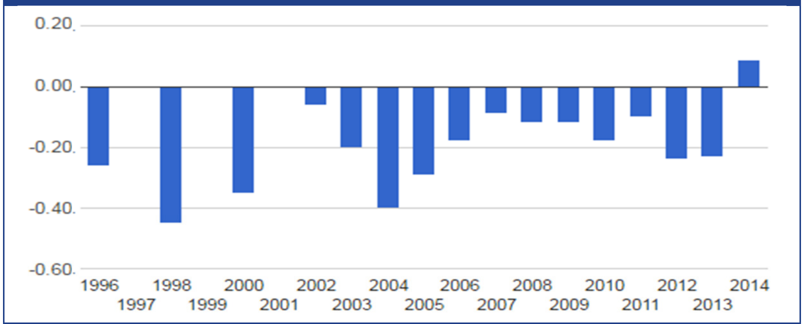
Figure I.2: Political stability indicator of Sri Lanka



Source: http://www.theglobaleconomy.com

Government Effectiveness Indicator (GEI)
The index of Government Effectiveness (Figure I.3) captures perceptions of the quality of public and civil services and the degree of its independence from political pressures, the quality of policy formulation and implementation and the credibility of the government's commitment to such policies. The GEI has been progressively improving during the recent past 0.09 in 2014 (-2.5 weak; 2.5 strong).

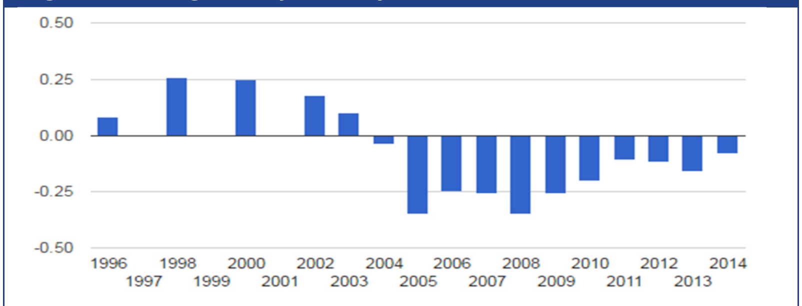
Figure I.3: Government Effectiveness Indicator of Sri Lanka



Source: http://www.theglobaleconomy.com

Regulatory Quality Indicator (RQI)
The index of Regulatory quality shows the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. The RQI of Sri Lanka is below zero (-0.08 in 2014; -2.5 weak; 2.5 strong) but fast approaching being positive (Figure I.4).

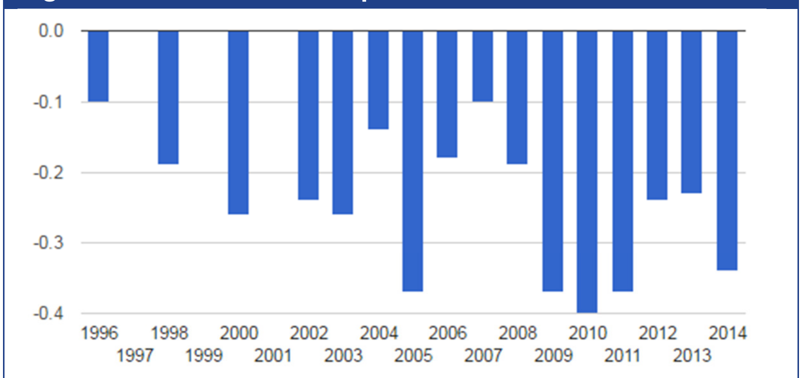
Figure I.4: Regulatory Quality Indicator of Sri Lanka



Source: http://www.theglobaleconomy.com

Control of Corruption Indicator (CCI)
The index for control of corruption captures perceptions of the extent to which public power in Sri Lanka is exercised for private gain. Sri Lanka still needs more efforts to control corruption (Figure I.5). In 2014, the CCI of Sri Lanka was -0.34 (-2.5 weak; 2.5 strong).

Figure I.5: Control of Corruption Indicator of Sri Lanka

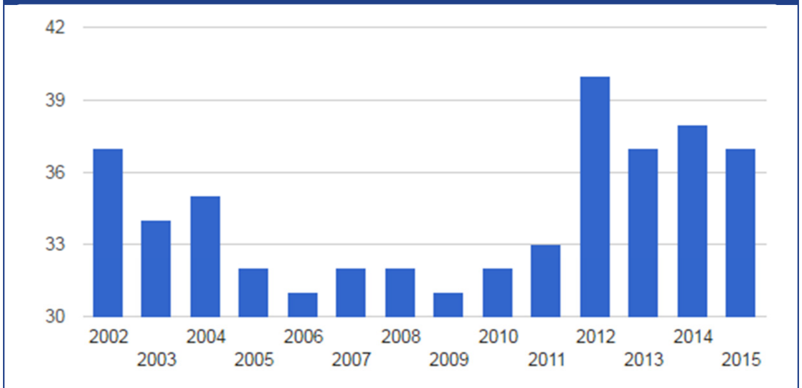


Source: http://www.theglobaleconomy.com

Corruption Perception Index (CPI)

The Corruption Perception Index reflects the perceptions of the public sector corruption, i.e. administrative and political corruption. The index values are determined by using information from surveys and assessments of corruption collected by a variety of reputable institutions (Figure I.6). In 2015, the CPI of Sri Lanka was 37 (No corruption = 100).

Figure I.6: Corruption Perception Indicator of Sri Lanka



Source: http://www.theglobaleconomy.com

Annex I.4 Economy and development

Sri Lanka has a (lower) middle-income economy. In 2014 and 2015, it showed resilience in the face of domestic and external challenges. Its GDP grew by 7% in 2013, 7% in 2014 and 5% in 2015 to a nominal value per capita in 2015 of US$ 3,600. The economy was driven by domestic consumption, while investments, particularly on construction, also contributed to the economic expansion. Inflation remains in the single digit levels with 4.10% in August 2016, compared with the same month in 2015. The core inflation averaged 6.9% from 2004 until 2016, reaching an all-time high of 12.8% in September 2008 and a record low of 0.8% in February 2015.

Table I.1: Macroeconomic performances of Sri Lanka (2010-2014)

Indicator	Unit	2010	2011	2012	2013(a)	2014(b)
Real Sector and Inflation						
Real GDP Growth	%	8.0	8.2	6.3	7.2	7.4
GDP at Market Prices	Rs.bn	5,604	6,543	7,579	8,674	9,785
Per Capita GDP	US$	2,397	2,836	2,922	3,280	3,625
Annual Average Inflation	%	6.2	6.7	7.6	6.9	3.3
External Sector						
Trade Balance	% of GDP	-9.7	-16.4	-15.9	-11.3	-11.1
Current Account Balance	% of GDP	-2.2	-7.8	-6.7	-3.8	-2.7
Overall Balance	US$ mn	921	-1,059	151	985	1,369
External Official Reserves	US$ mn	7,196	6,749	7,106	7,495	8,208
Fiscal Sector						
Current Account Balance	% of GDP	-2.1	-1.1	-1.0	-0.8	-1.3
Overall Balance	% of GDP	-8.0	-6.9	-6.5	-5.9	-6.0
Central Government Debt	% of GDP	81.9	78.5	79.2	78.3	75.5
Monetary Sector (c)						
Broad Money Growth (M_{2b})	%	15.8	19.1	17.6	16.7	13.4
Growth in Credit to the Private Sector (in M_{2b})	%	24.9	34.5	17.6	7.5	8.8

(a) Revised
(b) Provisional
(c) Year-on-year growth based on end year values

Sources: Department of Census and Statistics
Ministry of Finance
Central Bank of Sri Lanka

Source: Central Bank of Sri Lanka, Annual Report, 2015

Currency

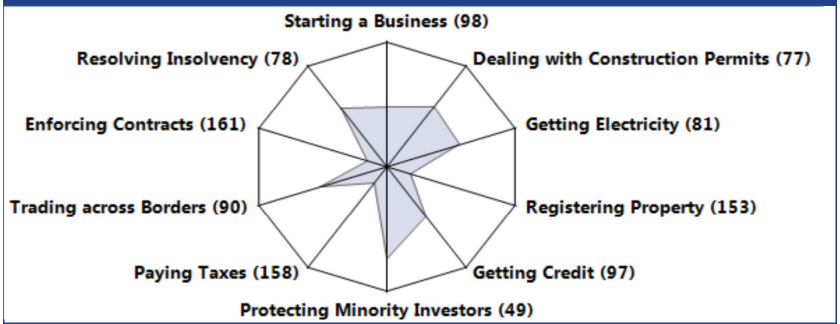
The currency in Sri Lanka is the Sri Lankan Rupee (LKR). Trade and financial transactions are generally carried out in local currencies i.e. Rupees and Cents. In order to facilitate foreign exchange transactions, commercial banks appointed as Authorized Dealers in foreign exchange are permitted to buy, sell, lend and borrow foreign currencies in foreign exchange markets. The buying and selling exchange rates are announced daily by the Central Bank of Sri Lanka (www.cbsl.gov.lk). Permits have also been issued to certain persons and organizations that sell goods and services to tourists, for instance hotels, persons engaged in the gem and jewellery trade, travel agents, duty free shops, hospitals, agency post offices and providers of port services.

Accepted Foreign Currencies
Mainly 8 currencies are accepted by the Central Bank of Sri Lanka: USA Dollar, UK Pound, Euro, Swiss Franc, Canadian Dollar, Australian Dollar, Singapore Dollar and Japanese Yen. However, many other public and private banks exchange the following currencies in addition to the above: Bahrain Dinar, Danish Kroner, Norwegian Kroner, Swedish Kroner, Hong Kong Dollar, Kuwaiti Dinar, New Zealand Dollar, Omanian Riyal, Saudi Riyal, South African Rand, UAE Dirams and Chinese Renminbi

Foreign Banks in Sri Lanka
The licensed commercial bank (LCB) sector comprises 25 LCBs (accounting for 84% of the banking sector assets), of which 11 are branches of foreign banks. Of all foreign banks, Hongkong and Shanghai Banking Corporation Limited, Standard Chartered Bank and Citibank N.A. collectively account for 71% of foreign bank assets. Standard Chartered Bank (UK) and Deutsche Bank AG (Germany) have European roots. Within the rest of the banks, there are four Indian banks.

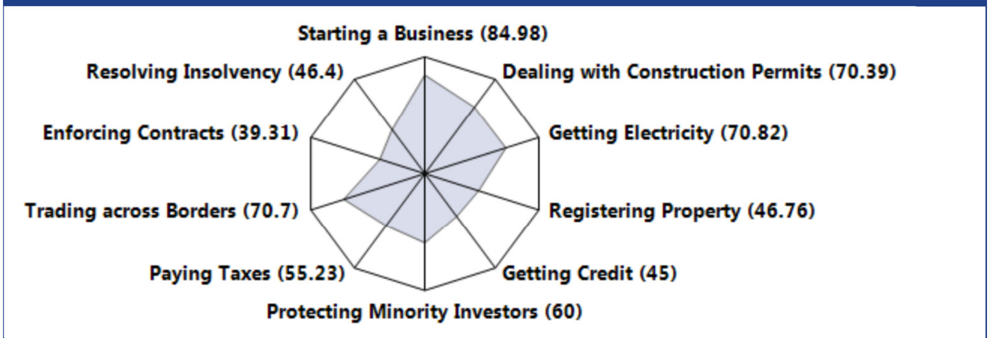
Ease of doing business
Sri Lanka's scores pretty well in global lists of doing business. One way of measuring is the 'Ease of Doing Business' ranking. It deals with 10 topics: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency. See Figure I.7. Here we see that Sri Lanka stands at 98 in the ranking of 189 global economies on the ease of starting a business.

Figure I.7: Rankings on Doing Business topics (scale: rank 189 centre, rank 1 outer edge)



Source: Doing Business, 2016; World Bank Flagship Report

Figure I.8: Distance to frontier scores on Doing Business topics (scale: score 0 centre, score 100 outer edge)

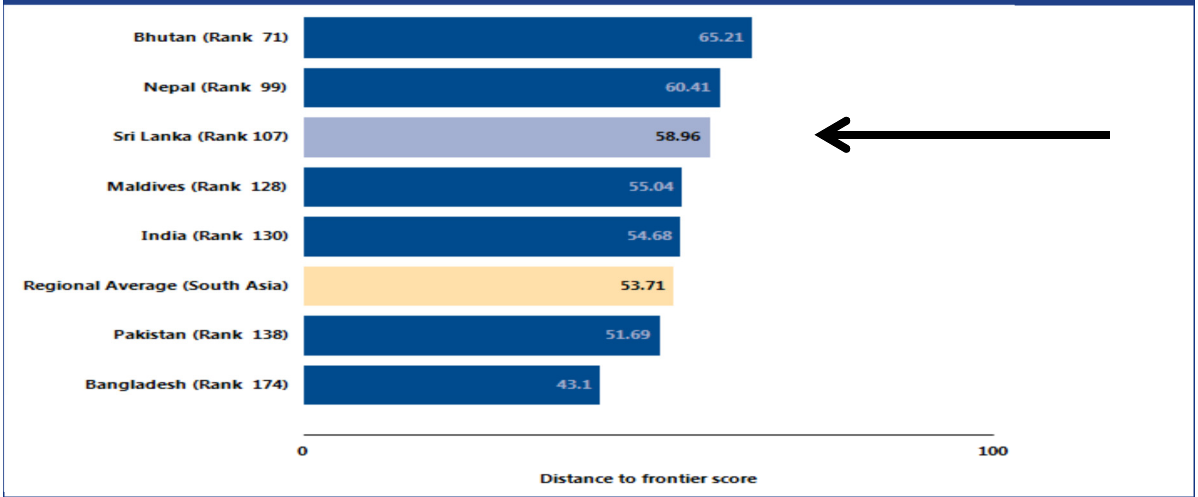


Source: Doing Business, 2016; World Bank Flagship Report

Another way of measuring is ranking economies by sorting the distance to frontier scores (DTF) for the same 10 topics. A DTF score is indicated on a scale from 0 to 100, where 0 represents the worst performance and 100 the frontier. The DTF score benchmarks economies with respect to regulatory practice, showing the absolute distance to the best performance in each Doing Business indicator. See Table I.8.

The rankings for comparator economies and the regional average ranking (Table I.9) provide other useful information for assessing how easy it is for an entrepreneur in Sri Lanka to start a business.

Figure I.9: How Sri Lanka and comparator economies rank on the ease of doing business



Source: Doing Business, 2016; World Bank Flagship Report

(International) donor programs
The (recent) move from a low-income economy to a (lower) middle-income economy affected the landscape of donors: from a Western-dominated aid landscape to a wider development-oriented aid community. New partners have given the government of Sri Lanka more leverage to insist that aid be aligned to national development priorities. The relevance and importance of non-traditional donors such as India and China have changed significantly. Trust fund instruments such as the Global Environment Facility (GEF), the Montreal Protocol and the Habitat Conservation Trust Fund (HCTF) were utilized by some bilateral donors to channelling development funding into Sri Lanka. The World Bank and the Asian Development Bank have substantive buy-in to the government policy framework. Another consequence is the closure of many avenues for obtaining concessionary loans. European donors no longer provide concessionary loans but lend though export-import banks, where terms are largely market guided. Funds from some UN agencies such as the World Food Programme (WFP) are also no longer accessible unless in very exceptional circumstances (such as natural disasters). Concessional funding from the ADB (Asian Development Fund (ADF)) and the World Bank (International Development Association (IDA)) is also on the decline.

Development
Sri Lanka's Human Development Index (HDI) for 2014 is 0.757, which puts the country in the upper part of the global list (at 73 out of 188 countries and territories). The world average in 2014 is 0.711 and South Asia averaged at 0.607. Sri Lanka has integrated human resources and employment strategies in its National Human Resources and Employment Strategy, which began in 2014 to reduce unemployment and create more work opportunities. In Sri Lanka. The annual job growth is 12 %.

Between 1980 and 2014, Sri Lanka's life expectancy at birth increased by 6.7 years and mean years of schooling increased by 3.7 years. Sri Lanka's GNI per capita increased by about 281.7 % between 1980 and 2014. The population below the poverty line was 6.7 % in 2012/2013.

Annex I.5 Foreign investments and safety

Sri Lanka permits up to 100% foreign participation. From 2001 to 2015, the FDI in Sri Lanka averaged US$ 127 million, reaching an all-time high of US$ 386 million in the 4th quarter of 2013. New equity investments or net inflow of risk capital in 2014 was US$ 137 million (8.1% of FDI), compared to US$ 23 million in 2013 (1.7% of total FDI). Private equity investors or long-term financial investors accounted for at least US$ 110 million of primary equity investments in 2014. The majority of primary foreign equity has been in public listed companies. Table I.3 highlights the equity inflows from financial investors in the period 2012-2014 and Table I.4 shows the top 5 FDI countries from 2001 to 2015.

Table I.2: Components of Foreign Direct Investment in Sri Lanka in 2014 , in US$ million	
Equity Capital	137
Debt Capital (from promoters)	427
Borrowings (bank loans)	740
Reinvestment of retained earnings	381
Total	**1,685**

Source: Central Bank of Sri Lanka

Table I.3: Equity capital Foreign Direct Investment, in US$ million			
	2012	**2013**	**2014**
Primary equity inflows (net)	71	23	137
Primary equity investments by financial investors (min.)	25	19	110

Source: Central Bank of Sri Lanka

Table I.4: Top-5 FDI countries 2001 - 2015	US$ million	% total inward
Netherlands	1,851	21%
United Kingdom	1,131	13%
Malaysia	841	9%
Switzerland	829	9%
Mauritius	783	9%

Source: Central Bank of Sri Lanka

Sri Lanka is one of the safest countries in the world to invest in. It has an independent system of courts, which can redress any concerns of investors. Article 157 of the constitution guarantees investment protection. Sri Lanka has signed bilateral Investment Protection Agreements (IPA) with 28 countries (Table I.5) and bilateral Double Tax Avoidance Agreements with 38 countries (Table I.6). It's a founder member of the Multilateral Investment Guarantee Agency (MIGA), an investment guarantee agency of the World Bank, providing a safeguard against expropriation and non-commercial risks.

Table I.5: Countries with bilateral investment treaties with Sri Lanka			
Australia	France	Republic of Korea	Singapore
Belgium-Luxembourg	Germany	Kuwait	Sweden
China	India	Malaysia	Switzerland
Czech Republic	Indonesia	Netherlands	Thailand
Denmark	Iran	Norway	United Kingdom
Egypt	Italy	Pakistan	USA
Finland	Japan	Romania	Vietnam

Table I.6: Countries with double taxation avoidance agreements with Sri Lanka			
Australia	India	Netherlands	Saudi Arabia
Bangladesh	Indonesia	Norway	Singapore
Belgium	Iran	Oman (Limited)	Sweden
Canada	Italy	Pakistan	Switzerland
China	Japan	Philippines	Thailand
Denmark	Republic of Korea	Poland	UAE
Finland	Kuwait	Qatar	United Kingdom
France	Malaysia	Romania	USA
Germany	Mauritius	Russia	Viet Nam
Hong Kong (Limited)	Nepal		

Board of Investment (BOI)
Prior to establishment of any foreign business venture in Sri Lanka, approval is required from the Board of Investment (BOI). Investment in certain restricted sectors is subject to screening; approval is given on a case-by-case basis if the foreign investment exceeds 40%.

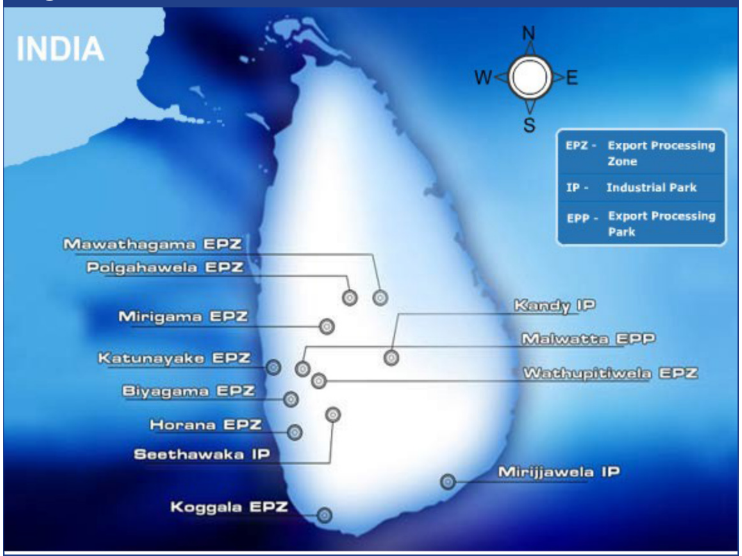
The BOI is an autonomous agency and is the primary government body responsible for foreign investment. Under Section 17 of the BOI law, BOI grants concessions to companies satisfying certain eligibility criteria. Investors are provided with preferential tax rates, constitutional guarantees on investment agreements, exemptions from exchange control and 100% repatriation of profits & capital. Attractive tax incentives are available for investors, depending on the industry and capital investment in Sri Lanka, such as Tax Holidays, Tax concessionary rates and duty exemptions.

The BOI is the only organization a foreign investor should contact & its services include proving advice & assistance at every stage of the investment process. An export oriented enterprise, which has entered into an Agreement with the BOI, may open and operate a foreign currency account with any foreign currency Banking Unit (FCBU) of a commercial bank.

“BOI-companies” employ over 470,000 workers. They account for nearly 65% of Sri Lankan exports and 86% of the country's industrial exports. The BOI is therefore a significant agent of social change and its existence of over 38 years has radically transformed Sri Lanka both economically and socially.

Free trade zones
Export processing zones and industrial parks have been the cornerstone in the industrial development and inflow of foreign direct investment to Sri Lanka. See Sri Lanka’s free trade zones in Figure I.10.

Figure I.10: Free trade zones in Sri Lanka



Annex I.6 Labour force and labour conditions

Sri Lanka’s minimum age limit was increased from 10 years to 15 years only in the year 2013. It’s labour force is spread over 3 main sectors: agriculture 28.5%; industry: 26.5% and services 45%. The total labour force in 2014 was about 8.8 million and the total employment was 8.4 million; the labour force participation rate 53.3% (Table I.7 and Table I.8). The labour force and employed population increased continuously and the unemployed population has decreased until 2012 and slightly decreased since then. The unemployment rate has not significantly changed over the last four years.

Table I.7: characteristics of the labour force of Sri Lanka

Indicator	Total	Male	Female
Population (15 years & over)	16,531,768	7,676,876	8,854,892
Labour force in this age group	8,804,548	5,728,383	3,076,165
Labour force participation rate	53.3	74.6	34.7
Employed population	8,423,994	5,548,131	2,875,862
Employment rate	95.7	96.9	93.5
Unemployed population	380,554	180,252	200,303
Unemployment rate	4.3	3.1	6.5
Not in labour force	7,727,220	1,948,493	5,778,727

Source: Sri Lanka Labour Force Survey, Annual Report, 2014

Table I.8: Total labour force, employed and unemployed population (2010 – 2014)

Year	Household population	Total labour force	Employed Population	Unemployed population	Labour force participation rate	Unemployment rate
2010	16,861,526	8,107,739	7,706,593	401,146	48.1%	4.9%
2011	17,909,743	8,554,730	8,196,927	357,803	47.8%	4.2%
2012	17,915,383	8,464,706	8,128,704	336,002	47.2%	4.0%
2013	16,359,761	8,802,113	8,417,674	384,439	53.8%	4.4%
2014	16,531,768	8,804,548	8,423,994	380,554	53.3%	4.3%

Source: Department of Census & Statistics - Sri Lanka Labour Force Survey

Minimum wages

There is no single minimum wage policy in Sri Lanka. They're determined by sector specific tripartite boards of the government, trade union representatives and employers for more than 40 trades in Sri Lanka. Employers are required to pay these minimum wages, that vary in accordance with the occupation, sector, region and the category of workers. The information given in below Table I.9 represents the industries that are relevant for the agriculture sector: Tea Growing, Rubber Growing, Coconut Growing and Cocoa Cardamom & Pepper Growing trades. The Table shows the trend in recent years. It can be said that the minimum wages in agriculture are generally speaking 5 to 10% higher than wages in the manufacturing sector and 10% lower than in the construction sector.

Table I.9: Annual averages of minimum wages in agriculture, 2008 - 2014

(Rupees)

Trade	2008	2009	2010	2011	2012	2013	2014
01. Tea growing and Manufacturing (Daily Rates)							
Male / Female Worker	195.00	200.00	285.00	380.00	380.00	380.00	390.42
02. Rubber Growing and Manufacturing (Daily Rates)							
Male / Female Worker	195.00	200.00	285.00	380.00	380.00	380.00	386.25
03. Cocoa, Cardamom and Pepper Growing and Manufacturing (Daily Rates)							
Male / Female Worker	270.97	290.58	350.77	460.62	509.59	557.18	581.44
04. Coconut Growing (Daily Rates)							
Male / Female Worker	228.38	250.00	280.00	310.00	355.83	364.58	415.00

Labour unions

The Constitution provides for Freedom of Association and allows workers to form and join Trade Unions. In 2014 2,035 trade unions were registered (compared to 1,500 in 2003), of which 54.5% in the public sector, 27.5% in public corporations and 18% in the private sector. About 9.5% of the workforce is a member of any trade union. The number of strikes and workers involvements in the private sector decreased in the last years and the number of complaints about industrial disputes gradually declined in the past period. Almost all complaints have been settled by the department.

Working hours and public holidays

In accordance with the Shop and Office Employees Act, normal working hours are 8 hours per day and 45 hours per week. Normal working hours must not exceed 9 hours per day, exclusive of intervals allowed for meals and rest. If a worker works beyond the stipulated working hours, he/she is entitled to an overtime pay that is 150%. The overtime hours in a week cannot exceed 12 hours. Workers are entitled to be paid on public and religious holidays. Festival holidays are announced by the Sri Lankan Government at the start of a calendar year. Usually the number is 16. If a public holiday falls on weekly rest day, no additional holiday is granted.

Vacations

An employee is entitled to take annual leave when the next calendar year starts. The duration of that first annual leave period is determined according to the date on which the employment started. From the second year onward, an employee is entitled to 14 days of paid annual leave, after completion of 12 months of continuous service. For the 1st year, an employee would have following annual leave: 14 days if the employment commences on or after the 1st day of January but before the 1st day of April; 10 days if the employment commences on or after the 1st day of April but before the 1st day of July; 7 days if the employment commences on or after the 1st day of July but before the 1st day of October and 4 days if the employment commences on or after the 1st day of October.

Workers are entitled to at least one and a half day of rest per week at the worker's full rate of remuneration. However, the entitlement of full remuneration is not applicable to workers who have worked for less than 28 hours, exclusive of overtime work.

Summary of leave entitlements

- Casual Leave: 1/2 day per month in the 1st year of employment; 7 days per year from the 2nd year.
- Annual Leave: no entitlement in the 1st year of service; the leave earned according to the period of service can be obtained (maximum – 14); In the succeeding years earned leave of 14 days.
- Public Holidays: 8 per year as follows:
    - National Day (February 4)
    - Thai Pongal Day
    - The day previous to the Sinhala Tamil new year day.
    - The Sinhala Tamil new year day (April)
    - May day (May 1). The day following Vesak Poya day.
    - Holy Prophet's Birthday.
    - Christmas Day (December 25)
- *Poya* Holidays: each *Poya* day is considered a holiday (*Poya*= full moon days)
- Maternity Leave: 84 working days for the first and second child births; 42 days for the third and succeeding child births.

Social Security and Pension Schemes in Sri Lanka

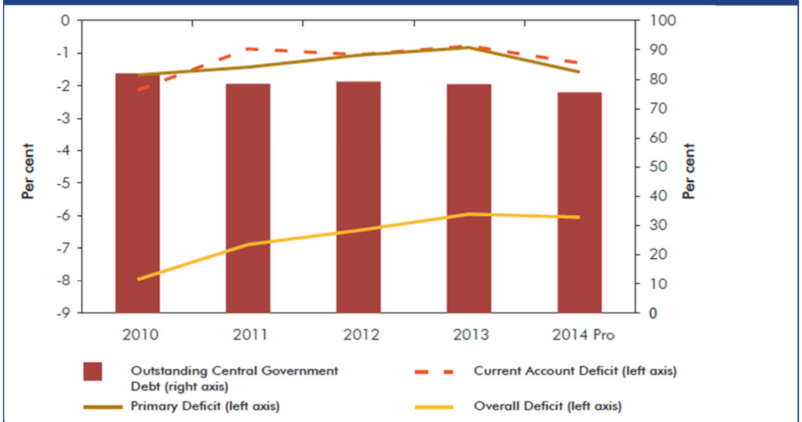
Social security provisions exist for both public sector and private sector employees.

- Public Sector: The Pension Fund
- Private Sector:
    - The Employees' Trust Fund (ETF) administered under Act No. 46 of 1980 is an interim benefit designed to assist the employee during his/her working life;
    - The Employees' Provident Fund (EPF) administered under Act No. 15 of 1958 is a retirement benefit
    - The Payment of Gratuity Act No. 12 of 1983 is a payment made to employees who have served continuously for five years and more under one employer.

Annex I.7 Fiscal aspects

In 2014, a number of key fiscal indicators recorded deviations from annual targets, mainly as a result of the significant shortfall in government revenue. The overall fiscal deficit as a percentage of GDP increased to 6.0% in 2014 compared to 5.9% in the previous year and the annual target of 5.2% envisaged in the budget for 2014. The current account deficit, which reflects government dissaving, increased to 1.3% of GDP in 2014 from 0.8% of GDP in the previous year, deviating considerably from the targeted surplus of 1.1% of GDP in the original budgetary estimates for 2014.

Figure I.11: Major fiscal indicators of Sri Lanka (% of GDP)



Source: Central Bank Annual Report, 2015

Annex I.8 Infrastructure

The Sri Lankan government has launched major infrastructure development programs to upgrade the sea, air, road, power and telecom sector of the country.

Air and sea

Sri Lanka is strategically situated at the crossroads of major shipping routes connecting South Asia, the Far East and the Pacific with the Middle East, Europe and the Americas. The country has strong connectivity with the world via air and sea routes. Sri Lanka has two international airports: Bandaranike International Airport (BIA) is the main one, located about 20 minutes away from Colombo. Around 900 arrivals and departures are handled at BIA per week. Mattala International Airport is located in the Southern Province which is accessible from Colombo through the Southern Expressway (2 hour drive).

Figure I.12: Air routes from Sri Lanka to the world

From November 2016 onwards KLM will return to Colombo with twice-weekly direct flights, departing from Schiphol on Mondays and Fridays, and returning from Colombo on Tuesdays and Saturdays.

Figure I.13: KLM

Netherlands Enterprise Agency

KLM resumes flights to Colombo after nearly 20 years

Amsterdam: At the start of the 2016 winter schedule, KLM Royal Dutch Airlines will resume direct service to Sri Lanka's Colombo International Airport from October, the airline said in a statement Monday.

The first flight to Colombo is scheduled to depart on Monday, 31 October. This marks KLM's return to Colombo after an absence of almost 20 years. KLM suspended service to the Sri Lankan capital (then served via Abu Dhabi) in 1997 as the war escalated.

Sri Lanka has been a safe and stable country since the civil war came to an end in 2009. Since then, the economy - tourism in particular - has grown exponentially.

Figure I.14: Sea routes from Sri Lanka to the world

Relevant air- and see connectivity projects are:

- **Bandaranaike International Airport**: a project is under way to expand the island's international airport at Katunayake, 35 km north of Colombo, to expand the transit area, construction of new baggage-reclaim area, multi-storied car park and widening of the existing runway. A feasibility study is being carried out for a second runway.
- **The second International airport at the Southern province**: this airport includes a runway and a taxi way that allows for larger planes, including the latest airbus A380, to land. This airport opens up the vast southern and eastern areas of Sri Lanka for development including tourism projects. The airport will be in close proximity to the Hambantota seaport.
- **Colombo South Port Expansion**: the Colombo South Port expansion project with three terminals, each terminal having capacity of 2.4 million TEUs per year will increase the capacity of the Colombo Port by 160% upon completion.
- **Hambantota Port Development**: the port is ideally located to serve the main East-West shipping lane connecting Europe and the Middle-East with South East Asia. The aviation fuel stored in the Hambantota Port is to be used for the Mattala Airport, the 2nd international airport in the south.

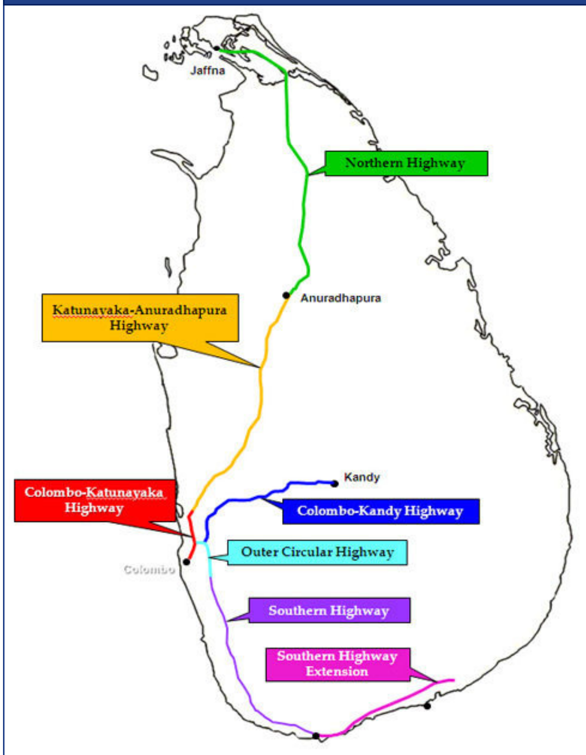
Road

Sri Lanka's road network is among the highest in Asia: it comprises about 11,700 km of paved roads, facilitating safe transport of horticultural commodities. However, the traffic density is high and average speeds are still rather low. See Figure I.15a and I.15b for the national road infrastructure.

Some construction developments:

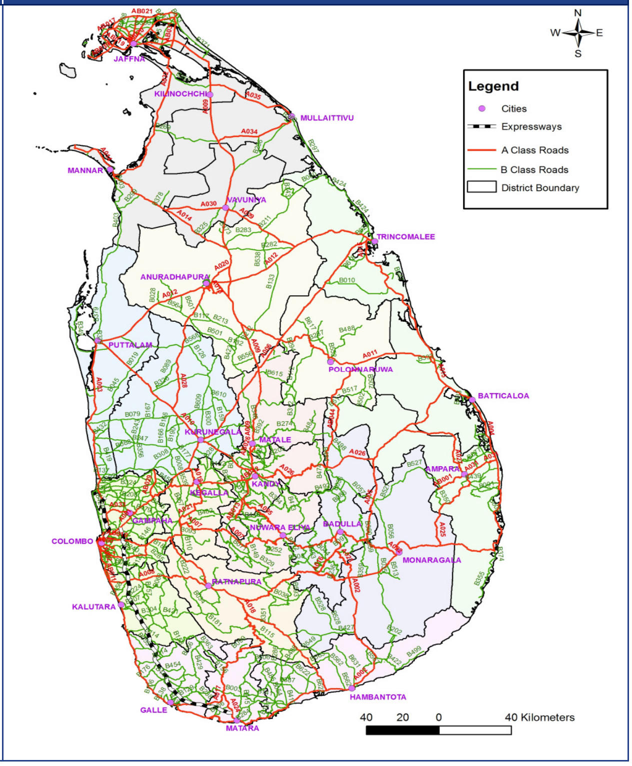
- **Colombo-Katunayake Expressway (25 km; completed)**: the Colombo-Katunayake Expressway connects the Colombo City and the International Airport at Katunayake.
- **Southern Highway (126 km; completed)**: the Southern Expressway is the longest expressway being built in Sri Lanka. The highway from Colombo to Matara is a catalyst for the economic and social development of the Southern region and promotion of and inter-regional transport network.
- **Outer Circular Highway (29.2 km; nearing completion)**: the OCH is located in the Colombo Metropolitan Region and links Colombo to Katunayake and the Southern Expressways.
- **Colombo-Kandy Highway (99 km)**: this proposed expressway (foreseen start late 2016) links Colombo with the hill capital Kandy in the central province. Later on the expressway is expected to be expanded to Jaffna (northern province) and Trincomalee (eastern province).

Figure I.15a: Existing and Proposed Highway Network of Sri Lanka (as of January 2016)



Source: Road Development Authority, Sri Lanka

Figure I.15b National road network



Source: Road Development Authority, Sri Lanka

Power & energy

- **Norochcholai Coal Power Project**: the construction of first phase of the Norochcholai Coal Power Plant (300 MW) was completed by end of 2010 and was added to the national grid by end of March 2011.
- **Upper Kothmale Hydro Power Project (UKHP)**: the upper Kothmale project will have an installed capacity of 150MW (consisting of two 75MW units). Construction of the project was completed and connected to the national grid in 2011.
- **Trincomalee Coal Power Project**: Sri Lanka's second coal fired thermal power plant is implemented as a joint venture of Ceylon Electricity Board and National Thermal Power Corporation (NTPC) of India. The Coal Power Plant will comprise two 250 MW power generators. The power generated will be transmitted to the national grid through high voltage transmission lines from Sampoor through Habarana to the Veyangoda Grid Substations.
- **Telecommunication Infrastructure Development**: Sri Lanka is connected to the South East Asia-Middle East-Western Europe 4 (SEA-ME-WE IV) project, the submarine cable system linking South East Asia to Europe via the Indian Sub-Continent and Middle East. The SEA-ME-WE 4 fibre optics cables provide a bandwidth capacity of 1.28 terabits per second, with a 25 year guaranteed lifespan for the technology.

Communication

Sri Lanka has 2.7 million landline subscriptions (12 per 100 inhabitants - 2014 est.)) and 22.1 million subscriptions for mobile phones (101 per 100 inhabitants - 2014 est.). 19.9% of the population is connected to the internet (4.4 million – 2014 est.). Sri Lanka is connected to the SEA-ME-WE III and IV (South East Asia – Middle East – Western Europe) fibre optic communication backbone with over 11 communication satellites orbiting above the south of the country.

Annex I.9 Trade agreements

Multilateral Agreements

Sri Lanka is a founding member of the World Trade Organization (WTO), which is the main institutional framework under which Sri Lanka conducts its trade relations with some of her most important trading partners, including the United States, EU, Canada, Australia, New Zealand and Japan. Sri Lanka is still to sign the Global System of Trade Preferences among Developing Countries (GSTP) Protocol, pending further negotiations on Rules of Origin.

Free Trade Agreements on reciprocal basis

- Indo-Sri Lanka Free Trade Agreement (ISLFTA): the agreement came into effect in the year 2000, and provides strategic access from Sri Lanka for over 4,200 products (at zero duty) to India, which is the world's second most populous market.
- Pakistan – Sri Lanka Free Trade Agreement (PSLFTA): the agreement came into effect in the year 2005, provides strategic access from Sri Lanka for nearly 4,500 products (duty free from 2008) to the Pakistan market.
- South Asian Free Trade Agreement (SAFTA): SAFTA aims at further enhancing the programme of regional economic integration through promotion of preferential trade, which began with the establishment of the South Asian Preferential Trading Arrangement (SAPTA) in 1993.
- South Asian Preferential Trading Agreement (SAPTA): established in 1993 to promote and sustain mutual trade and the economic co-operation among the member states through exchange of trade concessions. SAPTA is the first step towards higher levels of trade and economic co-operation in the region.
- Asia–Pacific Trade Agreement (APTA): APTA is a dynamic regional agreement, which is the only trade agreement Sri Lanka partakes with China and the Republic of Korea.
- Norwegian Generalized System of Preference (GSP) Plus Scheme: Operative since 2013, the Norwegian GSP scheme provides exporters from Sri Lanka additional duty relief when exporting goods to Norway.

Note: Sri Lanka is the only country to have Free Trade Agreements with both India and Pakistan, giving duty free access to over 1.3 billion consumers.

Annex II Sri Lankan suppliers / exporters registered by the EDB

Lanka Fruit & Vegetable Producers, Processors & Exporters Association
C/O The Ceylon Chamber of Commerce, No: 50, Navam Mawatha, Colombo 02.

01. AITKEN SPENCE EXPORTS (PVT) LTD
No. 315, Vauxhall street, Colombo – 02
Telephone: 011-2308308 Fax: 011-2447249
Mr. Danesha Perera (Asst. Vice President) 011-2308069 / 077 3762102 daneshap@aitkenspence.lk
Mr. Chamila Gunarathna (Manager Exports) 011-2308308 Ext. 6233 exports@aitkenspence.lk
077 2200170

02. AMALGAMATED INTERNATIONAL (PVT) LTD
No. 125/22, Thanksala Gardens, Pannipitiya Road, Battaramulla
Telephone: 011-2865037, 5055764 Fax: 011-2889699 lankaexport@gmail.com
Mr. Ismeth Mohamed (Managing Director) 077 7382316

03. AGROMEL (PVT) LTD
No. 39/4, Flower Road, Colombo 07
Telephone: 011-2667880, 2667881 Fax: 011-2694434
Mr. Nirosh De Mel (Managing Director) 071 4339596/ 0777362762 niroshdemel@gmail.com
Ms. Pubudu (Accounts Div) 0718628394 accounts@agromel.lk
Mr. Jude Manatunga (Finance Manager) 0718628400/ 0714004782 jude@agromel.lk

04. AJITH CHINESE VEGETABLE SUPPLIER (Associate Member)
Dedicated Economic Center – A1,
Udupussellawa Road, Nuwara Eliya
Contact: Mr. A. R. A. Kumara Mobile: 072-2449670 / 052-3533498
Email: ajithchinesevegetable@gmail.com Office: 052-3531710

05. BROWN & COMPANY PLC (Associate Member)
34, Sir Mohamed Macan Markar Mawatha, Colombo 03
Telephone: 0112663000
www.brownsgroup.com
Mr. Sachithra H Yapa- Manager Agri Business Ext 3129 Direct: 2663057 Fax: 2307376
Mobile: 0777320334 sachithra.y@brownsgroup.com
Mr. Chaminda Ediriwickrema- Director chaminda@brownsgroup.com

06. COUNTRY STYLE FOODS (PVT) LTD
No. 210, St. Anthony's Road, Kadawatha
Telephone: 011-2925027, 2928556 Fax: 011-2926062
Mr. Sarath Alahakoon (Managing Director) 077 7736180 smak@sltnet.lk
Sec: Nilanthi 0773742831 nilanthi@smak.lk

07. CONSOLIDATED BUSINESS SYSTEMS (PVT) LTD
No. 184/2, Kaolin Factory Road, Werahera, Boralesgamuwa
www.sunislandonline.com
Telephone: 011-5553920, General: 011-5553922-26 Fax: 011-2545431, 5553927
Mr. Shanthi Wijesinghe (Managing Director) 077 7314098
Sec- shirani cbssltd1@sltnet.lk; cbsltd@cbsltdlk.com

08. CBL NATURAL FOODS (PVT) LTD
No. 156/2, Averiwatta Road, Heenatiyana, Minuwangoda
Telephone: 011-7388500/4 Fax: 011-7388505
Mr. Annes Junaid (Managing Director) 077 7894411 ceciloff@sltnet.lk; annesjuniad1@gmail.com

09. C.R. EXPORTS (PVT) LTD
No. 131/16, Oruthota Road, Mudungoda
Telephone: 011-2224961 Fax: 033-2226863 agro@sltnet.lk OR crgroup@sltnet.lk
Dr. Upali Ranasinghe (Managing Director) 077 7681159

10. DEVELOPMENT INTERPLAN (CEYLON) LTD
No. 80, Reclamation Road, Colombo – 11
Telephone: 011-2332330, 2332773 Fax: 011-2332331
Mr. Zuraish Hashim (Director) 077 7754854 zuraishh@hotmail.com OR diclpurchase@eureka.lk

11. DILARSHAD ENTERPRISE
No. 49, Rosmead Place, Colombo – 07
Telephone: 011-2698440, 2670796 Fax: 011-2699828 information@dilarshad.com
Mr. M. I. Kabir (Managing Partner) 072 2249996
Mr. Arashad Kabir (Managing Partner) 077 7352808 arshad@dilarshad.com

12. DOLE LANKA (PVT) LTD.
2nd Floor 33, Park Street, Colombo 02.
Tel 0114641050-52 Fax 0115346931 www.doleintl.com
vindhya.weerasekera@doleintl.com Vindhya Weerasekera- Director- Corporate Affairs

13. EASTERN & ALLIED AGENCIES (PVT) LTD
No. 175, Kirula Road, Colombo 05
Telephone: 011-2589282, 2510807, 2589276 Fax: 011-2510808
Mr. S. Gnanaskandan (director) 0777876530 gnana@easternallied.com & enquiries@easternallied.com

14. EXPOLANKA (PVT) LTD
127, Mabima Road, Heiyantuduwa, Biyagama
Telephone: 011-2981616 Fax: 011-2981690, 2981796
www.expolimited.com E mail: expoltd@expolanka.com
Mr. Imdadh Marikkar (General Manager) 077 7 530060
Tel: +94 112 401575 | Mobile: + 94 777 530060 | Fax: +94 112 401576 imdadh@expolanka.com

15. ELLAWALA HORTICULTURE (Pvt) LTD
No.14, Carlwil Place, Colombo -03.
Telephone: 0112575756 Fax: 2573098 ellawala.horticulture@gmail.com
Mr. Suresh Ellawala (Director) Tel: 0112 575756 /0777564969
Mr. Mahinda Karunaratne (Administrative Officer) Telephone: 0779959212/ 2575756

16. FORBES AND WALKER FARMS PVT LTD
46/38, Navam Mawatha, Colombo 02.
Telephone: 0114767222 Fax 2341765
Web www.forbesfinefoods.com Email info@forbeswalker.com
Mr. Upali Bandaranayake (Director) Tel: 011 2439372
Mr. Shardha Sosa (Managing Director) Tel: 0114767350 finance@forbeswalker.com &
shardha@forbeswalker.com
Chaminda Wickramasinghe (Marketing Manager) 0777767222 marketing@forbeswalker.com

17. GULF INTERNATIONAL MARITIME (PVT) LTD
208, R A De Mel Mawatha, Colombo 3 Telephone: 011-2395751-1, 2381879 Fax: 011-4722882
Mr. Ranjith Anthick (Director) 071 4175296
Mr. Jeyakumar Senathirajah (General Manager) 077 2642778 gim@slt.lk
Mr. Zahlool Mohamed (Chairman) zahlool@gmail.com
Mr. Mushtaq Mohamed (Managing Director) mushtaqmim@gmail.com

18. H J S CONDIMENTS LIMITED
No. 25, Foster Lane, Colombo – 10
Telephone: 011-2688960-3 Fax: 011-2697202
Mr. Upali Gangoda (CEO) upali.gangoda@gmail.com
Ms. Anusha De Silva (Management Executive) Mobile: 077 3705433 anusha.desilva@agro.hayleys.com
Mr. Ananda Pathirage (Director- HJS Condiments) HJS Condiments Ltd (HAYLEYS AGRICULTURE)
25, Foster Lane Colombo 10. Email: ananda.pathirage@hjs.hayleys.com Mobile: 0773 295017

19. **INTERNATIONAL FOODSTUFF COMPANY (PVT) LTD**
No. 27A, Pepiliyana Road, Nugegoda
Telephone: 011-2884017 or 011-4300405, Fax: 011-2884082 or 011-4548066
Mr. Sarath De Silva (Chairman) 077 7411589, 072 2220107
sarathdsifco@yahoo.com OR sarathds@sltnet.lk OR purchase@sarath-info.com
Mr. Chandran Mather (Chief Executive Officer) 0773110902
Dr. Sujeewa 0773582086

20. **JEWELEX AGRI KUMARAGAMA (PVT) LTD**
16, De Fonseka Road**,** Colombo 05
Tel: 0112502007/2580493Fax: 0112501753
Web: www.jewelex.lk Email: info@jewelex.lk
Mr. C Hewawasan (Director) 0772519000 chandrah@jewelex.lk

21. **JAGRO (PVT) LTD.**
131, Vijaya Kumaratunga Mawatha (Polhengoda Road),Colombo 05
Tel: (+94 11) 2199041-3 |Fax: (+94 11) 2199024
Web : www.jagrofresh.lk sales@jagrofresh.lk
Mr. Jagath Fernando (Director) 077 7756777
Irangika Siriwardena 0777877355 irangika@jagrofresh.lk

22. **KESTREL INTERNATIONAL (PVT) LTD (Associate Member)**
74, C Cyril Mathew Mw, Bulugaha Junction, Kandy Road, Kelaniya.
Tel: 0112919422/0776081225 Fax: 0112919422
Web: www.hotelsneed.com
Email: sisira_kestrel@sltnet.lk
Mr. Sisirakumara Mudalige Mobile: 0776081225

23. **KINETIC TRADING (PVT) LTD (Associate Member)**
578- 1/1, Nawala Road, Rajagiriya
Tel: 0114380151 Fax: 0112867848
Mr. A J Rumy (Director) 0114308015/ 0777730290
rumy@azeeznsons.com

24. **NELNA AGRI BUSINESS**
110/A, New Parliament Road, Battaramula.
Tel: 0115404442
sales@nelnamango.com
Mr. Wasantha Warshapperuma (Director) 0777774031 wawa@nelnamango.lk

25. **NIDRO SUPPLY (PVT) LTD**
No. 129, Reid Avenue, Colombo – 04
Telephone: 011-4407104, 2507452 Fax: 011-4407104 nidrosup@sltnet.lk
Mrs. Dawn Austin (Managing Director) 071 4732234
Sec: Heather 0777789896 dawn@nidro-lanka.lk & dawn@nidro-lanka.com
Mr. Channa Madawala channa@nidro-lanka.lk

26. **PROTECTED AGRICULTURAL ENTREPRENEURS ASSOCIATION (Associate Member)**
254/1, Shodans Building,Muruthalawa Road, Peradeniya.
Telephone: 081 2387121 Fax: 081 238 7121 Email: paea@sltnet.lk Web:www.protectedagri.lk
Mr. Sujeewa Kirindigoda (President) Mobile: 0718 103 261

27. **RALLY PACKAGING (PVT) LTD**
No. 149/7, Colombo Road, Bandarawatte, Biyagama
Telephone: 011-4852201-02 Fax: 011-4619514 rally@sltnet.lk
Mr. H. A. Shyam Deen (Managing Director) 077 7300060 shiyam@rallypackaging.com

28. **SERENE INTERNATIONAL (PVT) LTD**
No. 54/1, Theresa Mawatha, Kandana
Telephone: 011-2582301 Fax: 011-2508476
sereneinternational@gmail.com OR serene-i@sltnet.lk
Mr. Hyder (Director) 077 3020838

29. SUNCHOICE IMPORTS & EXPORTS CO.
No. 65-2/1, Level 2 – Bankshall Street, Colombo 11
Contact: Mr. M. A. Aziz, partner
Mobile: 077-7639540 Email: info@sunchoice.lk Office: 011-2323274

30. TRANSGROW (PVT) LTD
No. 448/6, Lake Road, D. P. Wijesinghe Mawatha, Thalangama South
Telephone: 011-4918703 Fax:
Mr. Harsha Karunaratna (Director) 077 7772865 harshak.pht44@yahoo.com
Mr. Sajith Sitiwardena (Director) 071 7317540

31. VEGILAND EXPORTERS (PVT)LTD
No. 54, St. Theresa Mawatha, Rilaulla, Kandana
Contact: Mr. Thangavelayuthan Ainkaran, managing director Mobile: 077-3405974
Email: a_ainkaran@yahoo.com & info@vegilandexport.lk & accounts@vegilandexport.lk
Office: 011-2938525 / 2947352

32. VIJEYA ENTERPRISE (Associate Member)
18/3, Dr. E A Cooray Mw, Colombo 06.
Tel: 0112360926/0114654444 Fax: 0112361139
Web:www.gtventer.com, Email: info@gtventer.com
Mr. G Vijeyananth 0766908990

33. WATERWAYS EXPORTS (PVT) LTD
No. 7-1/1, Hunupitiya Cross Road, Colombo – 02
Telephone: 011-4716173/4 Fax: 011-4741999
Mr. M. H. M. Musaddique (Managing Director) 077 7680807 musa@wwslk.com
Mr. Shukri (Accounts) 0777256090

34. SRI LANKA EXPORT DEVELOPMENT BOARD
No. 42, Nawam Mawatha, Colombo – 02
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srima@edb.tradenetsl.lk
Mr. Darshana Perera (Asst. Director Export Agriculture) Tel: 011-2300732, 0714452024
darshana@edb.tradenetsl.lk
Mrs. Sujatha Weerakoon (Director General) sujatha@edb.tradenetsl.lk

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MOBILE: 077 8839910
Email: hasini@chamber.lk

CO-ORDINATING SECRETARY

MOHAN SILVA
NO. 141/2, LAXAPATHIYA ROAD
LAXAPATHIYA
MORATUWA
TELEPHONE: 077 7650844
Email: mohansilva@ymail.com

Floriculture		
#	Company	Contact Person & Contact details
1.	**Allied Horticultural Enterprises** 306/37, Talawatugoda Rd. Madiwala, Kotte	Mr. Amitha Nugawela, managing director Tel: +94-11-2778597 Mobile;+94 77 318 5003 Fax: +94-11-2778597 Email: aheltd@sltnet.lk Web www.alliedhorticultural.com
2.	**Asian Cuttings Lanka (Pvt) Ltd** Kandawela, Katana	Mr. Karunarathne Tel: +94-31-2241599 Fax: +94-31-2240152 E-mail : asiancut@sltnet.lk & alberti@asiancuttings.com
3.	**Anuradha Foliage & Nursery** 224, Kosowita, Gampaha	Mr. Gamini Owitigala, Tel:+94 77 6013672 & +94 33 2227782 Fax: +94 33 2234071 Email : anuradhafoli@sltnet.lk
4	**Borneo Exotics (Pvt) Ltd** P.O. Box 02, Thalawathugoda.	Mr. Robert Cantley, managing director Tel: +94-11-230 7287 Fax: +94-11-230 7287 Email: nepenthes@borneoexotics.com sales @borneoexotics.com Web: www.borneoexotics.com
5.	**Ceylon Foliage (Pvt) Ltd.** 8A, Kassapa Road, Colombo -05	Mr. Gayan Weerakoon, general manager Tel: +94-11-5350199 & +94-11-2508999 Fax: +94-11-2586679 Email: gayan.weerakkody@gmail.com & n_ellegala@sltnet.lk
6.	**Ceylon Tropica (Pvt) Ltd** Melekele Watta, Sirigampola, Nattandiya	Mr Wim van der Knaap / Mr. Upul Godage, general manager Tel/Fax: +94-32-2255150 Mobile: +94 77-3417603 Email: ceylontropica@yahoo.com, ceylontropica@gmail.com & info@gebrvanderknaap.nl
7.	**CIC Agri Business Pvt Ltd** 205, D R Wijewardena MAwatha, Colombo 10	Mr Asela De Soysa Tel: +94 11 268 8200/2 Fax: +94 11 2691909 Email: asela@cicagri.com
8.	**Decor Foliage** Rathnasiriya, Meegahamulawatta Pannala, Ibbagamuwa.	Mr. B.M. Gamini Ratnasiri, proprietor Tel: +94-37-4698453 & +94 77 7448896 & 94-37-2259637 Fax: 94-37-2259637 Email: décor@panlanka.net & decorfoliagesl@gmail.com & decorfoliage@yahoo.com Web: www.tradenetsl.lk/decor
9	**Dikkanda Gardens (Pvt) Ltd** No. 107, Galle Road, Colombo 3	Mr. Arjuna Obesekara, chairman Tel: +94-11-2394842 Email: rotundaflora@slt.lk & rotundaflora@sltnet.lk Web: www.rotundaflora.com
10.	**Dulvin Flowers & Nursary,** Karaulla, Udubaddawa,	Ms. Chnadima Alahakoon Tel:+94 71 8129493 & +94 37 2286700 dulvinflowers@mobitelnet.lk

#	Company	Floriculture Contact Person & Contact details
11.	**EVR Exporters**	Mr Viraj Ekanayake, director Tel: +94 77 728 8000 Email viraj@evrexports.com
12.	**Frontier Holdings Pvt Ltd** 51/6, Perera Mawatha, Thalangama South, Battaramulla	Mr J S Peramuna, managing director Tel :+94 77 7580261 Fax:+94 33 2260737 Email frontierholdings@gmail.com
13.	**Green Farm Ltd** No.54, Horton Place, Colombo 07	Mr. A. Swinningen, managing director Tel: +94-11-2684344 & +94-11-4724762/3 Fax: +94-11-2684345 E mail: arne@greenfarms.lk & helene@greenfarms.lk
14.	**Green Goddes (Pvt) Ltd.** No.01, Ihala Imbulgoda, Imbulgoda.	Mr. Thilanga Senarathne, director Tel: +94-33-2260344 & +94-33-2264589 & +94-72-2251063 Fax: +94-33-2260344 Email: greegod@isplanka.lk & nurseru.office@gmail.com; Mob: 0773559242
15.	**Green Pets Pvt Ltd** 187/A, Puwakgas Junction, Negombo Rd, Kurunegala	Mr Ranjith Kumanra, director Tel: +94-37-4941335, +94 77 722 6122 Email: ranjith@greenpetslanka.com
16.	**Green Lanka Foliage Exports** 99/44, Nandiwala Wata, Kuruduhinna, Kegaale	Mr Viraj Hemawansa +94 77 3997321 & +94 71 445 4207 Email: greenlankafoliage@yahoo.com Web www.greenlankafoliage.com
17.	**Greenet Plants & Flowers (Pvt) Ltd** 870/3, Negombo Road, Mabole Wattala.	Mr. S.T.S Manuwendra, managing director Tel: +94-11-2933043 & +94 777-686440 Fax: +94-11-2933042 Email: greenet@slt.lk & sanathm1@sltnet.lk & sanathm1@gmail.com & greenetsales@gmail.com & tropigreen@gmail.com; Web: www.greenplants.com
18.	**Green Lanka Plants** Dunukewatte, Inguruwatte, Mawathagama	Mr. Lanka Attale, partner Tel : +94-37-4981011 Fax: +94-37-2298742 Email: lanka02@hotmail.com & greenlp02@hotmail.com; Mob: +94 77 308 0068
19.	**Green Guard Foliage (Pvt) Ltd** No. 25, Mulleriyawa North, Ambatale (Old Road)	Mr. D.A.K. Hewagama, managing director +94 72 3268587 Tel/Fax: +94-11-2567192 Email: greenfoliage@hotmail.com
20.	**Huejay International (Multiflora) Ltd** "Huejay Court" 32B, Sir Mohamed Macan Marker Mw Colombo 3.	Mrs. S. Jayakody, managing director Tel: +94-11-2437655 & 2347640 Fax: +94-11-2447760 Email: huejay@slt.lk
21.	**Interex Enterprises (Pvt) Ltd** 99/5, 2nd Lane, Subadrarama Road Nugegoda	Mr. M.Z.M Shamil, managing director Tel: +94-11-2854225 & +94 777-385856 Fax: 94-11-2810989 Email: info@interex.lk Web: www.interex.lk

#	Company	Contact Person & Contact details
		Floriculture
22.	**Ita Lanka Foliage (Pvt) Ltd.** Atiyawala, Dankotuwa.	Ms Hansika Peiris TP:+94-312258816 & +94-772 349767 Email: itlankafoliage@hotmail.com Web: www.italanka.com
23	**Kalani Flora** Koko Watte, Hospital Rd, Rambukkana.	Ms Kalani Tel: Ms Kalani +94 77 2803531 / Mr Dias +94 71 8121437 Email : Kalaniflora@gmail.com & mahesha_dias@yahoo.com;
24.	**Kandyan Flora** Margaret Valley Estate, Gelioya	Mr. U. P. Gunawardena, managing director Tel: +94-81-2312527 Fax: +94-81-2311269 Email: flora@kandyan.net
25.	**Multiplanats (Pvt) Ltd** "Huejay Court" 32B, Sir Mohamed Macan Marker Mw Colombo 3	Mrs. S.. Jayakody, managing director Tel: +94-11-2437655 & +94-11-2440845 Fax: +94-11-2447760 E mail: huejay@slt.lk Web www.shirohana.com
26	**Mike Flora Ltd** **Mike Biotech (Pvt) Ltd** No: 11/65 Orchid Place (Off Swarnadisi Place) Koswatte, Nawala, Rajagiriaya	Mr. Sanath Ranmandala, manager Sales & Marketing Tel: +94-11-2866200-2 Fax: +94-11-2866555 Email: export@mikeflora.com & info@mikeflora.com & mgmkt@mikeflora.com & mikeflor@slt.lk Web: www.mikeflora.com
27.	**McCallum Nurseries (Pvt) Ltd** 46/38 2nd floor, Fobson Walkers Building Nawam Mw, Colombo - 02	Mr. I Ukwatte, chairman Mr Thushara, nursery manager 072 7873043 Tel: +94-11-5359944 & + 94-11-5561000 Fax: +94-11-5359948 E mail: nursery@mccallum.lk & thusharawijesinghe@mccallum.lk
28.	**Mascons Agrotech Ltd.** 175, Sri Sumanatissa Mawatha Colombo 12. .	Mr. Sivamohan, director Tel: +94-11-2325561-3 Fax: +94-11-2449537 Email: mascons@eureka.lk & saraths@srilanka.net Web: www.mascons.com
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37	**Serendib Horticulture Technologies (Pvt) Ltd** Kandy Road, Kalagedihena	Mr. Dilip de Silva, managing director Mob: +94 77-7555877 Tel / Fax: +94-33-2287342 E mail: dilipdsa@gmail.com Web: www.serendibhort.com
38	**Shekulanka Foliage Pvt Ltd** Katukenda, Badalgama	Mr Shehan Fernando Tel: +94 31 2237472 / Mob:+94 77 3511067 Email: shekulanka@sltnet.lk
39	**Spado International (Pvt) Ltd** Haldauwana, Dankotuwa **Nurseries** ▪ Puliakkulama- Pallma ▪ Haton "Hatton Foliage" ▪ Deraniyagala	Mr Chandana De Silva, general manager Tel: +94-31-2259518 & +94-31-2256585 Mob: +94 11 3113857 Fax: +94-31-2256585 E mail: spadoint@sltnet.lk
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Annex III Export destination markets of selected Sri Lankan products (HS 6-digits)

Floricultural products

060210 Unrooted cuttings and slips *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	1,599	1,617	2,384	1,916	1,230
Leading importers:					
Netherlands	471	497	945	673	560
Japan	589	698	869	738	372
Denmark	235	131	131	105	84
Korea, Republic of	31	8	34	66	57
Poland	2	20	32	43	44
United States of America	4	71	77	34	29
Germany	69	24	92	96	25
Bahrain	1	1	5	0	14

Source: Trade Map, International Trade Center

060290 Live plants, incl. roots and mushroom spawn (excl. bulbs, tubers, tuberous roots, ... *(= rooted cuttings)* *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	5,268	3,394	3,863	4,300	3,707
Leading importers:					
Netherlands	2,652	1,769	1,871	1,859	1,521
Japan	953	272	148	503	613
Germany	634	442	834	609	466
Australia	122	70	69	280	272
United States of America	38	94	81	115	127
Maldives	120	232	248	122	112
United Arab Emirates	25	21	95	82	101

Source: Trade Map, International Trade Center

060314 Fresh cut chrysanthemums and buds, of a kind suitable for bouquets or for ornamental purpose ... *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	262	34	20	26	1
Leading importers:					
United Arab Emirates	24	3	10	13	1
Japan	230	15	8	12	0

Source: Trade Map, International Trade Center

060319 Fresh cut flowers and buds, of a kind suitable for bouquets or for ornamental purposes (excluding ... *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	56	43	104	81	61
Leading importers:					
Saudi Arabia	3	14	46	32	28
Qatar	20	9	39	23	17

Source: Trade Map, International Trade Center

060390 Dried, dyed, bleached, impregnated or otherwise prepared cut flowers and buds, of a kind suitable ... *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	269	125	76	110	88
Leading importers:					
Netherlands	113	116	74	83	82
Belgium	0	0	1	2	6

Source: Trade Map, International Trade Center

060420 Foliage, branches and other parts of plants, without flowers or flower buds ... *(= fresh)* *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	0	0	5,875	6,872	7,412
Leading importers:					
Japan	0	0	1,039	1,175	1,934
Netherlands	0	0	1,585	1,604	1,693
Saudi Arabia	0	0	728	979	1,060
United Kingdom	0	0	822	1,230	827
United Arab Emirates	0	0	594	649	557
Kuwait	0	0	284	399	396
Qatar	0	0	316	356	327
Bosnia and Herzegovina	0	0	1	5	134
Bahrain	0	0	57	68	81

Source: Trade Map, International Trade Center

060490 Foliage, branches and other parts of plants, without flowers or flower buds ... *(= other)* *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	-	-	1,786	1,518	1,258
Leading importers:					
Japan	-	-	493	364	208
Qatar	-	-	146	120	164
United Arab Emirates	-	-	71	76	159
Netherlands	-	-	101	41	78
United Kingdom	-	-	147	237	75
Australia	-	-	9	22	71
Germany	-	-	20	152	35
Switzerland	-	-	3	23	27

Source: Trade Map, International Trade Center

Fruits

080310 Fresh or dried plantains *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	-	-	8,480	16,498	15,868
Leading importers:					
United Arab Emirates	-	-	1,836	4,939	6,147
Saudi Arabia	-	-	3,675	5,799	4,155
Qatar	-	-	1,283	4,473	3,697
Iran, Islamic Republic of	-	-	17	34	884
Kuwait	-	-	1,334	497	380
Italy	-	-	31	86	119
Oman	-	-	-	82	117
United Kingdom	-	-	32	206	113

Source: Trade Map, International Trade Center

080390 Fresh or dried bananas (excluding plantains) *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	0	0	229	500	680
Leading importers:					
United States of America	0	0	132	368	316
Germany	0	0	32	48	191
New Zealand	0	0	17	25	43
France	0	0	27	24	28

Source: Trade Map, International Trade Center

080430 Fresh or dried pineapples *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	1,795	1,513	2,959	4,916	5,069
Leading importers:					
Germany	558	808	987	1,656	1,422
United States of America	212	108	332	491	1,120
United Arab Emirates	169	81	602	1,006	645
France	244	73	118	514	516
Austria	26	14	62	8	319
Canada	96	119	63	235	237
Maldives	43	46	312	374	187
Netherlands	15	18	15	33	111
United Kingdom	43	49	72	114	106
Australia	27	9	30	21	93

Source: Trade Map, International Trade Center

080450 Fresh or dried guavas, mangoes and mangosteens *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	303	316	258	515	413
Leading importers:					
Germany	78	102	165	137	103
United States of America	24	27	7	15	80
Switzerland	7	7	3	50	78
Netherlands	0	5	6	27	30
Japan	51	2	1	4	19
Singapore	0	0	1	0	19

Source: Trade Map, International Trade Center

080550 Fresh or dried lemons "Citrus limon, Citrus limonum" and limes "Citrus aurantifolia, Citrus ... *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	971	347	358	643	742
Leading importers:					
Saudi Arabia	673	195	234	343	398
United Arab Emirates	201	30	98	225	241
Kuwait	11	29	10	41	49
Germany	22	0	4	5	33

Source: Trade Map, International Trade Center

080590 Fresh or dried citrus fruit (excluding oranges, lemons "Citrus limon, Citrus limonum", limes ... *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	3,185	3,123	2,680	1,508	1,705
Leading importers:					
Maldives	651	681	815	796	784
United Arab Emirates	1,243	1,188	906	166	256
Seychelles	-	-	5	144	225
Qatar	491	577	462	98	124
Saudi Arabia	214	210	142	38	112
United Kingdom	121	84	61	75	60
Switzerland	30	29	80	60	56
France	26	12	20	42	22
Norway	5	7	48	40	20
Germany	120	45	32	37	15

Source: Trade Map, International Trade Center

080720 Fresh pawpaws "papayas" *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	725	775	1,164	1,844	1,908
Leading importers:					
United Arab Emirates	300	552	838	1,401	1,226
Japan	137	133	148	169	231
United States of America	166	3	75	84	165
Germany	16	40	31	90	111
Qatar	-	11	14	25	38
Kuwait	-	-	1	-	34
Austria	57	10	-	-	25

Source: Trade Map, International Trade Center

081010 Fresh strawberries *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	131	282	372	173	95
Leading importers:					
Maldives	2	17	0	40	45
United Arab Emirates	0	9	12	26	37

Source: Trade Map, International Trade Center

081090 Fresh tamarinds, cashew apples, jackfruit, lychees, sapodillo plums, passion fruit, carambola, ... *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	2,829	1,395	4,104	8,218	7,087
Leading importers:					
Maldives	1,379	950	1,312	2,311	2,319
United Arab Emirates	404	45	1,014	1,934	1,725
Qatar	293	86	579	1,222	1,104
Saudi Arabia	114	31	162	376	326
United Kingdom	52	25	91	228	204
Oman	16	2	55	181	182
Bahrain	50	6	99	212	151
Kuwait	11	21	68	176	148
France	94	30	101	273	147
Switzerland	102	71	200	366	141
Germany	53	57	195	266	124
Canada	13	39	114	146	96
Pakistan	-	-	-	10	70
Czech Republic	2	-	-	97	69

Source: Trade Map, International Trade Center

Vegetables

070959 Fresh or chilled edible mushrooms and truffles (excluding mushrooms of the genus "Agaricus" ... *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	473	899	2,462	1,710	1,452
Leading importers:					
Maldives	8	271	1,682	1,542	1,385
Saudi Arabia	65	32	165	79	23
France	4	4	102	15	15
United Arab Emirates	166	126	188	29	13

Source: Trade Map, International Trade Center

070993 Fresh or chilled pumpkins, squash and gourds "Cucurbita spp." *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	0	0	6	7	190
Leading importers:					
United Arab Emirates	0	0	0	1	186
Canada	0	0	0	1	2
Qatar	0	0	0	0	2

Source: Trade Map, International Trade Center

070999 Fresh or chilled vegetables n.e.s. *Exports by Sri Lanka, in US$ thousand*					
	2011	**2012**	**2013**	**2014**	**2015**
World	-	-	7,932	11,593	11,086
Leading importers:					
Maldives	-	-	2,656	4,212	4,289
United Arab Emirates	-	-	1,055	1,663	1,730
Switzerland	-	-	976	1,416	987
United Kingdom	-	-	621	709	878
Qatar	-	-	329	622	712
France	-	-	491	685	621
Kuwait	-	-	338	530	430
Saudi Arabia	-	-	383	440	402
Canada	-	-	393	451	337
Oman	-	-	117	133	151
Italy	-	-	175	177	128
Bahrain	-	-	194	210	117
Swaziland	-	-	-	13	105
Germany	-	-	140	159	100

Source: Trade Map, International Trade Center

Annex IV Sri Lankan – Dutch trade statistics

Floricultural products

Below tables show existing import and export figures of Sri Lanka and the Netherlands in floricultural products, indicating the potential extra trade between the two countries.

Table IV.1: Bilateral trade between Sri Lanka and Netherlands for floricultural items* (2013-2015), targeting expanding exports from Sri Lanka to the Netherlands, in US$ thousand

Code	Product label	Sri Lanka's exports to Netherlands			Netherlands's imports from world			Sri Lanka's exports to world		
		2013	2014	2015	2013	2014	2015	2013	2014	2015
'0602	Plants, live, nes (incl their roots), cuttings & slips; mushroom spawn	2,816	2,532	2,082	608,636	573,941	448,710	6,276	6,246	4,996
'0604	Foliage, branches etc	1,686	1,645	1,771	254,128	258,264	228,906	7,660	8,390	8,670
'0603	Cut flowers and flower buds for bouquets, fresh or dried	74	83	82	863,484	975,915	961,951	202	217	151
'0601	Bulbs, tubers, corms, etc	0	1	0	95,397	97,475	71,709	1	2	0

**Product category: 06 Live trees, plants, bulbs, roots, cut flowers etc*
Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table IV.2: Bilateral trade between Sri Lanka and Netherlands for floricultural items* (2013-2015), targeting expanding imports to Sri Lanka from the Netherlands, in US$ thousand

Code	Product label	Sri Lanka's imports from Netherlands			Netherlands's exports to world			Sri Lanka's imports from world		
		2013	2014	2015	2013	2014	2015	2013	2014	2015
'0604	Foliage, branches etc	0	0	0	247,403	244,258	237,706	35	306	117
'0603	Cut flowers and flower buds for bouquets, fresh or dried	6	0	2	3,863,303	3,870,180	3,160,970	61	65	48
'0602	Plants, live, nes (incl their roots), cuttings & slips; mushroom spawn	47	16	25	3,440,631	3,358,554	2,600,537	354	473	633
'0601	Bulbs, tubers, corms, etc	74	105	29	1,234,226	1,253,914	1,042,783	177	107	49

**Product category: 06 Live trees, plants, bulbs, roots, cut flowers etc*
Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table IV.3: Existing and potential trade between Sri Lanka and Netherlands for Product: 0603 Cut flowers and flower buds for bouquets, fresh or dried													
Code	**Product label**	**Sri Lanka's exports to Netherlands**			**Netherlands's imports from world**			**Sri Lanka's exports to world**			**Indicative potential trade**		
		2013	**2014**	**2015**	**2013**	**2014**	**2015**	**2013**	**2014**	**2015**	**2013**	**2014**	**2015**
'060390	Cut flowers & flower buds for bouquets or ornamental purposes, ex fresh	74	83	82	6,720	6,217	60,648	76	110	88	2	27	6
'060314	Fresh cut chrysanthemums and buds, of a kind suitable for bouquets or	0	0	0	1,274	945	677	20	26	1	20	26	1
'060311	Fresh cut roses and buds, of a kind suitable for bouquets or for ornamental purposes	0	0	0	546,434	637,577	677,043	2	1	0	2	1	0
'060319	Fresh cut flowers and buds, of a kind suitable for bouquets or for ornamental purposes	0	0	0	184,663	187,984	154,934	104	81	61	104	81	61
'060313	Fresh cut orchids and buds, of a kind suitable for bouquets or for ornamental purposes	0	0	0	7,537	8,722	4,537	0	0	0	0	0	0

Source: Trade Map, International Trade Center

Table IV.4: Existing and potential trade between Sri Lanka and Netherlands for the Product: 0602 Plants, live, nes (incl their roots), cuttings & slips; mushroom spawn													
Code	**Product label**	**Sri Lanka's exports to Netherlands**			**Netherlands's imports from world**			**Sri Lanka's exports to world**			**Indicative potential trade**		
		2013	**2014**	**2015**	**2013**	**2014**	**2015**	**2013**	**2014**	**2015**	**2013**	**2014**	**2015**
'060290	Plants live, nes	1,871	1,859	1,521	467,623	446,181	323,361	3,863	4,300	3,707	1,992	2,441	2,186
'060210	Cuttings and slips, unrooted	945	673	560	125,983	115,283	107,714	2,384	1,916	1,230	1,439	1,243	670
'060230	Rhododendrons and azaleas, grafted or not	0	0	0	1,026	1,157	592	0	0	0	0	0	0
'060220	Trees, edible fruit or not, shrubs and bushes, grafted or not	0	0	0	7,850	6,114	1,151	26	30	58	26	30	58
'060240	Roses, grafted or not	0	0	0	6,154	5,205	15,892	3	0	0	3	0	0

Source: Trade Map, International Trade Center

Table IV.5: Existing and potential trade between Sri Lanka and Netherlands for the Product: 0604 Foliage, branches, etc.													
Code	**Product label**	**Sri Lanka's exports to Netherlands**			**Netherlands's imports from world**			**Sri Lanka's exports to world**			**Indicative potential trade**		
		2013	**2014**	**2015**	**2013**	**2014**	**2015**	**2013**	**2014**	**2015**	**2013**	**2014**	**2015**
'060420	Foliage, branches and other parts of plants, fresh	1,585	1,604	1,693	210,825	218,204	200,759	5,875	6,872	7,412	4,290	5,268	5,719
'060490	Foliage, branches and other parts of plants, dried, dyed, bleached, impregnated or otherwise	101	41	78	43,303	40,060	28,148	1,786	1,518	1,258	1,685	1,477	1,180

Source: Trade Map, International Trade Center

Fruits

Below tables show existing import and export figures of Sri Lanka and the Netherlands in fruit products, indicating the potential extra trade between the two countries.

Table IV.6: Bilateral trade between Sri Lanka and Netherlands for fruit items* (2013-2015) targeting expanding exports from Sri Lanka to the Netherlands, in US$ thousand

Code	Product label	Sri Lanka's exports to Netherlands			Netherlands's imports from world			Sri Lanka's exports to world		
		2013	2014	2015	2013	2014	2015	2013	2014	2015
'0801	Brazil nuts, cashew nuts & coconuts	2,711	4,933	2,137	331,885	414,597	472,449	69,829	151,554	103,694
'0804	Dates, figs, pineapples, mangoes, avocadoes, guavas	21	60	141	854,413	944,766	942,333	3,841	5,877	5,518
'0813	Dried fruit	11	20	34	60,325	93,281	89,107	7,572	8,669	4,459
'0803	Bananas and plantains, fresh or dried	9	2	19	316,695	344,286	458,157	8,709	16,998	16,548
'0807	Melons (including watermelons) & papayas, fresh	6	7	14	256,155	314,738	267,661	1,171	1,871	1,949
'0810	Fruits nes, fresh	50	3	8	590,892	660,080	584,958	4,477	8,399	7,182
'0802	Nuts nes	2	0	1	449,698	525,048	580,754	16,752	64,698	69,931
'0805	Citrus fruit, fresh or dried	0	0	0	1,075,025	1,037,885	971,047	3,049	2,169	2,449
'0809	Apricots, cherries, peaches, nectarines, plums & sloes, fresh	0	0	0	249,721	208,594	176,256	75	25	3
'0806	Grapes, fresh or dried	0	0	0	1,086,076	1,128,821	936,054	0	1	0
'0811	Frozen fruits & nuts	0	0	0	247,347	223,260	207,901	331	289	26
'0814	Citrus fruit and melon peel	0	0	0	4,481	5,073	3,305	4	0	14
'0808	Apples, pears and quinces, fresh	0	0	0	696,382	492,194	387,355	0	0	0
'0812	Provisionally preserved fruits & nuts (unfit for immediate consumption	17	14	0	6,607	5,937	6,178	24	16	0

** Product category: 08 Edible fruit, nuts, peel of citrus fruit, melons*
Sources: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table IV.7: Bilateral trade between Sri Lanka and Netherlands for fruit items* (2013-2015) targeting expanding imports to Sri Lanka from the Netherlands, in US$ thousand

Code	Product label	Sri Lanka's imports from to Netherlands			Netherlands's exports to world			Sri Lanka's imports from world		
		2013	2014	2015	2013	2014	2015	2013	2014	2015
'0811	Frozen fruits & nuts	6	8	15	236,483	218,803	171,184	173	132	175
'0810	Fruits nes, fresh	4	0	6	755,490	824,851	719,809	590	688	1,123
'0813	Dried fruit	10	12	5	43,620	73,602	51,999	321	165	653
'0814	Citrus fruit and melon peel	1	7	5	2,488	1,760	1,556	39	37	22
'0805	Citrus fruit, fresh or dried	0	0	0	699,252	702,159	671,161	7,988	6,708	7,798
'0809	Apricots, cherries, peaches, nectarines, plums & sloes, fresh	0	0	0	138,175	118,389	111,852	43	23	37
'0804	Dates, figs, pineapples, mangoes, avocadoes, guavas	0	0	0	772,773	886,539	882,429	2,458	3,112	3,882
'0812	Provisionally preserved fruits & nuts (unfit for immediate consumption	0	0	0	1,696	2,149	1,728	1	1	3
'0808	Apples, pears and quinces, fresh	0	0	0	831,481	617,187	546,995	19,871	17,309	19,725
'0803	Bananas and plantains, fresh or dried	0	0	0	278,319	300,246	400,365	0	0	0
'0802	Nuts nes	0	0	0	281,516	316,780	318,589	1,257	40,271	13,411
'0807	Melons (including watermelons) & papayas, fresh	0	0	0	220,087	290,379	229,902	0	0	9
'0801	Brazil nuts, cashew nuts & coconuts	0	0	0	255,315	283,230	311,470	758	2,140	6,349
'0806	Grapes, fresh or dried	0	0	0	836,393	792,276	675,187	11,206	10,390	14,316

** Product category: 08 Edible fruit, nuts, peel of citrus fruit, melons*
Sources: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table IV.8: Existing and potential trade between Sri Lanka and Netherlands for the Product: 0801 Brazil nuts, cashew nuts & coconuts

Code	Product label	Sri Lanka's exports to Netherlands			Netherlands's imports from world			Sri Lanka's exports to world			Indicative potential trade		
		2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
'080111	Coconuts, desiccated	1,455	3,576	1,812	26,243	47,533	34,191	59,293	133,936	92,645	24,788	43,957	32,379
'080112	Coconuts: in the inner shell (endocarp)	1,256	1,355	287	1,491	1,813	1,628	9,536	14,936	7,387	235	458	1,341
'080119	Coconuts, excluding desiccated	0	0	34	10,679	12,029	10,401	400	1,212	2,262	400	1,212	2,228
'080132	Cashew nuts, without shell, fresh or dried	0	0	4	273,236	324,320	384,312	595	1,365	1,279	595	1,365	1,275
'080131	Cashew nuts, in shell, fresh or dried	0	2	0	322	2,082	1,356	3	92	113	3	90	113
'080122	Brazil nuts, without shell, fresh or dried	0	0	0	17,438	22,690	39,139	1	13	6	1	13	6

Source: Trade Map, International Trade Center

Table IV.9: Existing and potential trade between Sri Lanka and Netherlands for the Product: 0804 Dates, figs, pineapples, mangoes, avocadoes, guavas

Code	Product label	Sri Lanka's exports to Netherlands			Netherlands's imports from world			Sri Lanka's exports to world			Indicative potential trade		
		2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
'080430	Pineapples, fresh or dried	15	33	111	248,651	293,770	224,135	2,959	4,916	5,069	2,944	4,883	4,958
'080450	Guavas, mangoes and mangosteens, fresh or dried	6	27	30	243,507	275,618	274,001	258	515	413	252	488	383
'080410	Dates, fresh or dried	0	0	0	16,879	22,883	22,520	8	33	17	8	33	17
'080420	Figs, fresh or dried	0	0	0	19,197	19,461	18,304	589	374	9	589	374	9
'080440	Avocados, fresh or dried	0	0	0	326,180	333,034	403,372	27	39	10	27	39	10

Source: Trade Map, International Trade Center

Table IV.10: Existing and potential trade between Sri Lanka and Netherlands for the Product: 0803 Bananas and plantains, fresh or dried

Code	Product label	Sri Lanka's exports to Netherlands			Netherlands's imports from world			Sri Lanka's exports to world			Indicative potential trade		
		2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
'080390	Fresh or dried bananas (excl. plantains)	5	2	19	291,303	320,100	401,769	229	500	680	224	498	661
'080310	Plantains	4	0	0	25,392	24,186	56,389	8,480	16,498	15,868	8,476	16,498	15,868

Source: Trade Map, International Trade Center

Table IV.11: Existing and potential trade between Sri Lanka and Netherlands for the Product: 0807 Melons (including watermelons) & papayas, fresh

Code	Product label	Sri Lanka's exports to Netherlands			Netherlands's imports from world			Sri Lanka's exports to world			Indicative potential trade		
		2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
'080720	Papaws (papayas), fresh	5	7	14	15,571	18,987	20,299	1,164	1,844	1,908	1,159	1,837	1,894
'080711	Watermelons, fresh	0	0	0	64,505	88,119	74,615	1	21	35	1	21	35
'080719	Melons, fresh, other than watermelons	1	0	0	176,079	207,632	172,747	6	5	5	5	5	5

Source: Trade Map, International Trade Center

Table IV.12: Existing and potential trade between Sri Lanka and Netherlands for the Product: 0802 Nuts nes

Code	Product label	Sri Lanka's exports to Netherlands			Netherlands's imports from world			Sri Lanka's exports to world			Indicative potential trade		
		2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
'080290	Nuts edible, fresh or dried, whether or not shelled or peeled, nes	0	0	1	82,103	71,315	83,086	4,989	1,042	2,416	4,989	1,042	2,415

Source: Trade Map, International Trade Center

Table IV.13: Existing and potential trade between Sri Lanka and Netherlands for the Product: 0805 Citrus fruit, fresh or dried

Code	Product label	Sri Lanka's exports to Netherlands			Netherlands's imports from world			Sri Lanka's exports to world			Indicative potential trade		
		2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
'080510	Oranges, fresh or dried	0	0	0	415,853	376,142	363,220	11	9	0	11	9	0
'080550	Fresh or dried lemons "Citrus limon, Citrus limonum" and limes "Citrus	0	0	0	248,606	266,085	241,852	358	643	742	358	643	742
'080590	Citrus fruits, fresh or dried, nes	0	0	0	5,357	5,471	4,181	2,680	1,508	1,705	2,680	1,508	1,705

Source: Trade Map, International Trade Center

Vegetables

Below tables show existing import and export figures of Sri Lanka and the Netherlands in vegebales, indicating the potential extra trade between the two countries.

Table IV.14: Bilateral trade between Sri Lanka and Netherlands for vegetable items* (2013-2015), targeting expanding exports from Sri Lanka to the Netherlands, in US$ thousand

Code	Product label	Sri Lanka's exports to Netherlands			Netherlands's imports from world			Sri Lanka's exports to world		
		2013	2014	2015	2013	2014	2015	2013	2014	2015
'0711	Vegetables, provisionally preserved (unfit for immediate consumption)	0	12	35	24,664	18,534	7,631	1,175	1,708	1,235
'0709	Vegetables nes, fresh or chilled	0	0	3	565,088	496,388	439,316	10,410	13,333	12,757
'0713	Dried vegetables, shelled	6	0	1	82,902	88,947	67,748	13,232	26,635	16,614
'0710	Frozen vegetables	7	0	1	153,939	152,254	118,944	1,369	1,832	2,943
'0703	Onions, garlic and leeks, fresh or chilled	0	0	0	192,333	164,053	143,630	161	86	48
'0708	Leguminous vegetables, shelled or unshelled, fresh or chilled	0	0	0	163,633	166,493	147,066	61	35	56
'0714	Manioc, arrowroot salep (yams) etc	1	1	0	53,551	72,098	77,868	2,033	2,942	3,258
'0702	Tomatoes	0	0	0	295,986	266,149	222,325	29	23	1
'0706	Carrots, turnips and salad beetroot, fresh or chilled	0	0	0	54,747	44,681	40,631	30	4	2
'0701	Potatoes	0	0	0	359,005	261,865	208,463	5	1	1
'0707	Cucumbers and gherkins, fresh or chilled	0	0	0	119,782	115,533	93,275	17	0	8
'0712	Dried vegetables	0	0	0	112,822	115,942	107,781	140	163	289
'0704	Cabbages and cauliflowers, fresh or chilled	0	0	0	115,032	91,748	72,588	4	1	0
'0705	Lettuce and chicory, fresh or chilled	0	0	0	111,284	91,937	72,055	0	0	0

** Product category: 07 Edible vegetables and certain roots and tubers*
Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table IV.15: Bilateral trade between Sri Lanka and Netherlands for vegetable items* (2013-2015) targeting expanding imports to Sri Lanka from the Netherlands, in US$ thousand

Code	Product label	Sri Lanka's imports from Netherlands			Netherlands's exports to world			Sri Lanka's imports from world		
		2013	2014	2015	2013	2014	2015	2013	2014	2015
'0701	Potatoes	1,284	1,537	1,947	924,588	788,487	604,203	29,952	37,496	37,618
'0711	Vegetables, provisionally preserved (unfit for immediate consumption)	77	46	103	41,780	30,635	17,833	198	151	300
'0704	Cabbages and cauliflowers,fresh or chilled	0	0	12	184,529	175,230	162,280	33	9	27
'0710	Frozen vegetables	15	9	10	341,083	357,730	321,312	171	258	361
'0708	Leguminous vegetables, shelled or unshelled, fresh or chilled	0	0	1	123,235	118,908	105,959	15	10	4
'0714	Manioc, arrowroot salep (yams) etc	0	0	0	40,921	52,534	51,186	4	0	0
'0703	Onions, garlic and leeks, fresh or chilled	18	0	0	701,241	611,040	538,765	99,704	65,261	122,078
'0702	Tomatoes	0	0	0	1,700,952	1,870,659	1,674,649	0	0	5
'0706	Carrots, turnips and salad beetroot, fresh or chilled	0	0	0	235,200	224,795	192,254	7	0	2
'0705	Lettuce and chicory, fresh or chilled	0	0	0	181,515	176,819	163,155	17	0	4
'0707	Cucumbers and gherkins, fresh or chilled	0	0	0	501,395	457,818	410,109	1	0	1
'0712	Dried vegetables	0	0	0	90,365	94,981	81,425	608	604	652
'0713	Dried vegetables, shelled	0	0	0	61,168	76,982	40,740	155,599	176,886	231,036
'0709	Vegetables nes, fresh or chilled	0	0	0	1,824,667	1,705,636	1,578,690	25	11	17

** Product category: 07 Edible vegetables and certain roots and tubers*
Source: Export Development Board, Sri Lanka and Trade Map, International Trade Center

Table IV.16: Existing and potential trade between Sri Lanka and Netherlands for the Product: 0709 Vegetables nes, fresh or chilled

Code	Product label	Sri Lanka's exports to Netherlands			Netherlands's imports from world			Sri Lanka's exports to world			Indicative potential trade		
		2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
'070999	Fresh or chilled vegetables	0	0	3	92,764	76,613	72,069	7,932	11,593	11,086	7,932	11,593	11,083
'070951	Mushrooms, fresh or chilled	0	0	0	41,329	40,944	28,828	6	12	12	6	12	12
'070959	Fresh or chilled edible mushrooms (excl. mushrooms of the genus "Agari	0	0	0	20,382	20,538	20,522	2,462	1,710	1,452	2,462	1,710	1,452
'070920	Asparagus, fresh or chilled	0	0	0	75,254	67,884	67,179	0	0	0	0	0	0
'070930	Aubergines(egg-plants), fresh or chilled	0	0	0	24,735	19,057	15,809	2	0	1	2	0	1
'070970	Spinach,N-Z spinach & orache spinach (garden spinach),fresh or chilled	0	0	0	12,145	11,441	7,703	0	0	0	0	0	0
'070992	Fresh or chilled olives	0	0	0	725	903	805	0	0	0	0	0	0
'070991	Fresh or chilled globe artichokes	0	0	0	1,601	1,379	1,039	0	8	10	0	8	10
'070960	Peppers of the genus Capsicum or of the genus Pimenta,fresh or chilled	0	0	0	204,481	184,451	156,953	3	2	5	3	2	5
'070993	Fresh or chilled pumpkins, squash and gourds	0	0	0	74,242	58,418	56,960	6	7	190	6	7	190

Source: Trade Map, International Trade Center

Table IV.17: Existing and potential trade between Sri Lanka and Netherlands for the Product: 0713 Dried vegetables, shelled

Code	Product label	Sri Lanka's exports to Netherlands			Netherlands's imports from world			Sri Lanka's exports to world			Indicative potential trade		
		2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
'071339	Beans dried, shelled, whether or not skinned or split, nes	0	0	0	1,868	2,396	4,016	383	34	9	383	34	9
'071350	Broad beans & horse beans dried, shelled, whether or not skinned or split	1	0	0	658	970	858	1	2	2	0	2	2
'071390	Leguminous vegetables dried, shelled, whether or not skinned or split, nes	0	0	0	790	1,185	931	15	19	15	15	19	15
'071334	Dried, shelled bambara beans	0	0	0	0	10	61	0	0	0	0	0	0
'071320	Chickpeas, dried, shelled, whether or not skinned or split	3	0	0	3,306	4,583	3,789	2,432	2,609	1,518	2,429	2,609	1,518
'071360	Dried, shelled Pigeon peas	0	0	0	10	20	69	2,131	1,269	981	10	20	69
'071310	Peas dried, shelled, whether or not skinned or split	0	0	0	24,590	25,505	11,111	219	791	1,459	219	791	1,459
'071331	Urd, mung, black/green gram beans dried shelled, whether/not skinned/split	0	0	0	6,457	7,783	9,554	171	66	1,956	171	66	1,956
'071332	Beans, small red (Adzuki) dried, shelled, whether or not skinned or split	0	0	0	514	503	760	0	0	0	0	0	0
'071335	Dried, shelled cow peas	0	0	0	98	171	448	1	3	6	1	3	6
'071340	Lentils dried, shelled, whether or not skinned or split	3	0	0	6,997	6,782	10,517	7,878	21,840	10,644	6,994	6,782	10,517
'071333	Kidney beans & white pea beans dried shelled, whether or not skinned or split	0	0	0	37,614	39,039	25,634	1	1	24	1	1	24

Source: Trade Map, International Trade Center

Table IV.18: Existing and potential trade between Sri Lanka and Netherlands for the Product: 0710 Frozen vegetables

Code	Product label	Sri Lanka's exports to Netherlands			Netherlands's imports from world			Sri Lanka's exports to world			Indicative potential trade		
		2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
'071090	Mixtures of vegetables, frozen	7	0	1	24,300	22,155	20,286	1,326	1,670	2,820	1,319	1,670	2,819
'071010	Potatoes, frozen	0	0	0	5,653	3,492	1,242	2	1	1	2	1	1
'071030	Spinach, N-Z spinach and orache spinach (garden spinach), frozen	0	0	0	3,848	4,530	3,110	0	2	2	0	2	2
'071040	Sweet corn, frozen	0	0	0	3,962	3,932	2,275	1	0	0	1	0	0
'071029	Leguminous vegetables frozen nes	0	0	0	2,739	3,035	1,689	12	0	0	12	0	0
'071021	Peas, frozen	0	0	0	11,287	10,991	8,728	0	2	0	0	2	0
'071022	Beans, frozen	0	0	0	13,428	11,003	8,034	3	0	0	3	0	0
'071080	Vegetables, frozen nes	0	0	0	88,722	93,116	73,579	25	156	120	25	156	120

Source: Trade Map, International Trade Center

Table IV.19: Existing and potential trade between Sri Lanka and Netherlands for the Product: 0714 Manioc, arrowroot salep (yams) etc.

Code	Product label	Sri Lanka's exports to Netherlands			Netherlands's imports from world			Sri Lanka's exports to world			Indicative potential trade		
		2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
'071440	Taro, fresh, chilled, frozen or dried, whether or not sliced or in the form of pellets	0	0	0	1,902	2,320	1,858	0	0	0	0	0	0
'071490	Arrow root, salep etc for dried whether or not sliced or pellet & sago pith	1	1	0	1,704	2,455	1,696	366	436	358	365	435	358
'071410	Manioc (cassava), fresh or dried, whether or not sliced or pelleted	0	0	0	11,773	10,293	10,830	1,664	2,490	2,887	1,664	2,490	2,887
'071420	Sweet potatoes, fresh or dried, whether or not sliced or pelleted	0	0	0	33,438	52,093	59,146	3	15	8	3	15	8
'071430	Yams, fresh, chilled, frozen or dried, whether or not sliced or in the form of pellets	0	0	0	4,619	4,650	4,084	0	1	4	0	1	4
'071450	Yautia, fresh, chilled, frozen or dried, whether or not sliced or in the form of pellets	0	0	0	116	287	254	1	0	0	1	0	0

Source: Trade Map, International Trade Center

Annex V National Agriculture Policy of Sri Lanka

The Government of Sri Lanka aims at promoting sustainable agricultural development with efficient and effective utilization of resources. The major policy statements of the National Agriculture Policy (origin 2007) in relation to the horticulture sector, among the 22 identified sections, are given below.

Agriculture production (Section 1)

- Increase local food supply, employment opportunities and agricultural exports by emphasizing on cultivation of rice and other field crops, horticultural and floricultural crops, roots and tuberous crops, export agricultural crops, herbal crops, other underutilized crops and bee-keeping as well as supplementary food crops such as sugar cane, cashew and coconut.
- Promote good agricultural practices such as Integrated Pest Management (IPM) and Integrated Plant Nutrition Management (IPNM), for sustainable agricultural development.
- Formulation of production plans that will cater to the market needs and nutritional requirements.
- Cultivation of crops based on agro-climatic conditions and promoting agro-based industries.
- Introduce improved and modern technologies to the village whenever and wherever possible.

Agricultural credit (Section 9)

- Strengthen rural credit institutions connected with farmers' investments, savings and risk management.
- Introduce simple procedures in providing loan facilities for agricultural activities and agro based industries.
- Ensure availability of credit to farmers at concessionary interest rates.
- Establish a mandatory share for agricultural credit in the state bank's overall lending for the benefit of the farming communities.

Post-harvest technology (Section 13)

- Develop and popularize better harvesting, processing, value addition, storage and transport methods to minimize pre and post-harvest losses to improve quality to meet domestic and export market demands.
- Enforce sanitary and phytosanitary measures in post-harvest processing and value addition of agricultural products.

Marketing (Section 14)

- Minimize problems associated with marketing of agricultural products through government intervention as and when necessary for price stabilization.
- Promote private sector investment to improve infrastructure facilities necessary for marketing agricultural products.
- Explore and promote foreign markets for crops with high export potential.
- Encourage product branding, certification and use of geographical indicators for products to enter competitive markets.
- Facilitate marketing information dissemination and marketing operations through the establishment of district level agro enterprise centers.
- Appropriately align the agricultural sector in the current multi and bilateral trade agreements.
- Identify the requirements of agro business enterprises to cater to the needs of small farmers and promote public and private investments in such agro business.
- Promote the involvement of producers in agricultural processing and marketing.
- Strengthen the supply chain management to develop an efficient agricultural marketing system.

Agro-based industries (Section 15)

- Promote agro-based industries and product diversification in collaboration with the private sector.

Investment in agriculture (Section 18)

- Encourage private sector investments particularly in areas of seed and planting material
- production, agricultural research and development, human resources development, post-harvest management, marketing, export promotion and agricultural entrepreneurship.

Utilization and sharing of plant genetic resources (Section 20)

- Adopt suitable strategies to preserve national identity on utilization and sharing of benefits of genetic resources with other countries through international treaties.

Agriculture exports (Section 24)

- Facilitate promoting all forms of agro based exports.
- Establish coordination mechanisms among governmental institutions and agriculture producers, marketers and the trade sector, to promote agricultural exports.
- Establish food safety and quality assurance mechanisms for crops with export potential that could meet international food safety standards.

Annex VI Stakeholder meetings and interviews

In March and April 2016 the survey team of the University of Peradenyia met various sector stakeholders in Sri Lanka:

Date	Organization	Person(s)
March 4	Export Development Board, No. 42 Nawam Mawatha, Colombo-02.	▪ Ms. Jeevani Siriwardena, Additional Director General - Development ▪ Ms. Malani Baddegamage, Director – Export Agriculture ▪ Mr. Darshana ▪ Ms. Gayani Wijayathilake
March 4	Hayleys Agriculture Holdings Private Limited	▪ Mr. M.R. Zaheed, Managing Director ▪ Mr. Ruwan Rajapakse, Director / CEO, Hayleys Agro Biotech, Secretary/ Floriculture Produce Exporters Association
March 16	Hayleys Agro Biotech, Nuwara Eliya	▪ Mr. Arjuna Samarasinghe, Laboratory Manager ▪ Mr. Amila Harshana, Management Executive
March 16	Ceylon Foliage, Yalkumbura, Boralanda	▪ Mr. Gayan Weerakkody, General Manager
March 16	Quality Seeds Company Pvt Ltd, Olugantota, Boralanda	▪ Mr. Arjuna Balasooriya – General Manager ▪ Mr. Chandana Wimalakeerthi – Production Manager ▪ Mr. Kushana Goonawardena – Assistant Manager
March 18	Council for Agriculture Research Policy (CARP) Office, Colombo	▪ Mr. K. Nanayakkara Yapa, Director General / Department of National Botanic Gardens ▪ Dr. Rohan Wijekoon, Director General, Department of Agriculture ▪ Mr. I. Anandatissa, Managing Director, Omega Green Pvt. Ltd. ▪ Mrs. Srimathi Narandeniya, Director, Export Development Board ▪ Dr. N. D. R. Weerawardena, Additional Conservator of Forests, Department of Forest ▪ Mrs. Ramya Weerakoon, President of Floriculture Produce Exporters' Association, ▪ Mr. Ruwan Rajapakse, Secretary of Floriculture Produce Exporters' Association, ▪ Dr. Hemal Fonseka, Director, Horticultural Crop Research and Development Institute ▪ Mrs. L. U. N. Sumanasekera, Director, Ministry of Agriculture ▪ Dr. Jayantha Senanayake, Additional Director, National Plant Quarantine Service ▪ Prof. Sriyanie Peiris, Horaizon University, Malabe
April 21	Sri Lanka Customs, Airport, Colombo	▪ Mr. A.M.K.B. Atapattu – Assistant Superintendent of Customs ▪ Mr. Chamara Kaushalya – Assistant Superintendent of Customs

On March 21 and 22, 2016 Jos Leeters visited Sri Lanka. On the 21st the survey team (Buddhi Marambe, Chalinda Beneragama and Jos Leeters) met stakeholders in Kandy and visited an enterprise in Rambukkana.

March 21	Faculty of Agriculture, University of Peradeniya	▪ Prof. Gamini Pushpakumara, Dean, Faculty of Agriculture
March 21	HORDI, Gannoruwa, Kandy	▪ Dr. Hemal Fonseka – Director/ Horticultural Crop Research and Development Institute
March 21	Mike Flora, Rambukkana	▪ Mr. Ranjith Galwaduge, Chief Operating Officer

On the 22nd the team took part in two stakeholder meetings in the Embassy of the Netherlands in Colombo, initiated and facilitated by Nishan Dissanayake, Agricultural Policy Officer of the Dutch

Embassy. From the side of the Sri Lankan public sector and the industry the participants in these two meetings were:

EDB – Mrs. Indira Malwatte, chairperson & chief executive **Ministry of Industry & Commerce** – Mr. Rohan Jayatilake, deputy director **HORDI** – Mr. Hemal Fonseka, director **Lanka Fruit & Vegetable Producers, Processors and Exporters Association** – Mr. Annas Junaid, chairman **Ceylon Foliage** – Mr. Gayani Weerakkody, director / general manager **Hayleys Agro Biotech Ltd**. – Mr. Arjuna Samarasinghe, deputy general manager **Unipower Ltd. (UPL)** – Mr. Jayantha Rajapakse, managing director **Eastern & Allied** – Mr. S. Gnanaskandan, executive director **Ramya Horticulture Ltd.** – Mrs. Thushari Weerakoon, director **Omega Green** – Mr. I. Ananda Tissa, managing director **Spado International Ltd.** – Mr. Sieb van Doorn, director **Green Farms Ltd.** – Mr. Arne Svinningen, chairman / managing director **CIC Agri Business** – Mr. Sunith Subawickrama, director exports and new ventures **Nidro Supply Ltd.** – Mr. Channa Madawela, chief operations officer and Mrs. Dawn Austin, managing director **Ruvini Aqua Plans Lanka Ltd.** – Dr. Gayani Fernando, director **SL Real Bio Food Products Ltd. (SLBF)** – Mr. Saman Dewage, managing director **Dilarshad Enterprise** – Mr. A.K.M. Arshad, managing partner

In August 2016 8 on-distance interviews were held by Jos Leeters via conference or Skype calls. The interviewees in August were:

Hayleys Quality Seeds & Flowers – Mr. Ruwan Rajapakse, general manager **Vegiland** – Mr. Thangavelayuthan Ainkaran, managing director **Eastern & Allied** – Mr. S. Gnanaskandan, executive director **Ellawala Horticulture** – Mr. Suresh Ellawala, director **Serendib Horticulture** – Mr. Dilip da Silva, chairman **Mike Flora** – Mr. Dhammika Gunaratne, general manager **Ceylon Foliage** – Mr. Gayan Weerakkody, director / general manager **EDB** – Mrs. Gayani Indunila

A concise overview of the results out of all these stakeholders sessions:

1. The performance / role of the government in general

Generally speaking the private sector is satisfied with the role of the government. There’s commitment and eagerness to support the sector, though some feel that horticulture is not always recognized as a potential star in Sri Lanka’s economy. The DOA (for cultivation-related issues) and the EDB (for export-related issues) are actively mentioned as well-functioning organisations.

In several fields the private sector sees room for improvement and thus more effective interventions of the government:
- Infrastructure at the airport (storage, cooling, handling)
- Applied R&D and testing (especially targeting better varieties and new technologies)
- Promotion of mid- and high technology, aiming to raise productivity and quality in primary production and postharvest practices and to reduce costs
- Integration and streamlining of procedures and protocols (in particular export permits were mentioned several times)

2. The performance / role of education; how relevant and useful for the private sector

Schools and universities updated floriculture and horticulture curricula in the recent past and even implemented more practical education methods. The private sector is rather positive and optimistic, though it takes several years (even a generation) to fully see the change. Against that background, various entrepreneurs still judge that at present graduates don’t have enough practical skills and miss the right attitude to work in agriculture.

3. The performance / role of the extension; how relevant and useful for the private sector

There's no problem with the number of available (public) extension workers and their services (of which 24 hours online services by DOA). There is an issue with the quality of the services. Extension officers have limited chance to update their knowledge and skills and cannot transfer the latest technological developments towards their clients. Generally speaking the private sector judges extension as weak, not beneficial and not as it should be. Companies have to look for other ways (through suppliers, trade partners and/or commercial methods) to realize knowledge transfer.

4. The availability of (good quality) seeds, young plants, fertilizers, crop protection and other supplies for cultivation and postharvest

Although Sri Lanka has an open market and various (international) suppliers are active on the market, there's not a full coverage of all necessary supplies for a professional sector. And generally speaking the prices are high. Mostly mentioned fields with room for improvement are:

- up to date varieties, especially in cut flowers and vegetables
- agro-chemicals with a short pre-harvest interval
- mid- and high-technology in general for cultivation (irrigation, fertigation, greenhouse concepts, IPM) and postharvest / cold-chain (sorting, grading, storage)

5. The availability and quality of logistical infrastructure in the country

There's satisfaction about recent and upcoming improvements in the national road network. The issue is that travel times are still long; 200 km takes 4 hours.
There's satisfaction as well about the water supply and water quality.
The lack of an adequate cold-chain is mentioned regularly as a weakness. It's about not enough refrigerated trucks but mainly about the lack of (cold) storage and handling facilities, both in the regions as at the airport.
The time-consuming procedures at the airport are mentioned as well as a negative factor

6. The availability of (good quality) labour for affordable costs

The common opinion is positive. Labour is available and people are quick-learners. The costs are competitive for the region (US$ 7 to 10 / day): higher than Bangladesh, lower than China and Thailand.
Though labour costs take a high share of the production costs (sometimes even up to 85%), the salary levels as such aren't considered as the main issue; the missing economies of scale are the real thing. There's hardly any mass-production in the sector.
It was also mentioned that the horticulture sector doesn't face problems with unions. In the tea, rubber and coconut sectors they're important and sometimes negatively influence productivity.

7. The availability of (good quality) labour at management level for affordable costs

Many graduates miss up to date practical skills and miss the right mentality to work in the agribusiness. The majority of young people / graduates prefers government jobs, where they have better guarantees and less risks. And some other industries (for instance the banking sector and other commercial services) provide higher salaries. So the private sector cannot easily find enough good graduates to fulfil market needs. However, it's not mentioned as a big issue.

8. The availability of sufficient market channels for domestic and to export markets

For domestic sales, market channels are available but generally speaking they're not efficient. Too many middlemen are in the scene.

For export markets the general opinion is that exporters lack the awareness and capacity to catch up with developments and requirements in high end markets. It's difficult to find and maintain sustainable export positions, mainly because they lack networks and market information at retail and consumer level.

Based on various inputs and opinions, the following picture with priority markets for the next decade is made, including a list of the main competitors:

Product	Main markets for Sri Lanka in the coming decade	Main competitors of Sri Lanka
Cut flowers	Netherlands (EU), Gulf (Saudi Arabia, Qatar, UAE, …), UK, Japan , Australia	Almost all countries who produce cut flowers
Foliage	Netherlands (EU), UK, Eastern Europe, Japan, Gulf (Saudi Arabia, Qatar, UAE, …)	Malaysia, Indonesia, Central America, South Africa, West Africa
Propagation materials (tissue culture, cuttings)	Netherlands, Japan, Denmark, Korea, Poland, UK, Australia	Malaysia, Vietnam, China, East Africa
Ornamental plants	Netherlands, Japan, Germany, Australia, USA, Maldives, Gulf (Saudi Arabia, Qatar, …), New Zealand, Pakistan	Central America, Africa, China, Vietnam
Fruits	India, USA, Iran, Gulf (Saudi Arabia, Qatar, UAE, …), Pakistan, Iraq, Australia, Canada	Iran, Middle east, China, Vietnam, India, Thailand, Bangladesh
Vegetables	Maldives, UAE, India, UK, Malaysia, USA, Mauritius	India, Myanmar, Thailand

Several entrepreneurs mentioned the need for more and smarter (country) branding.

9. The availability of sufficient and affordable financing options for investments

Banks are obliged and supported by the government to pay attention to the agricultural sector. Loans are available (Rupee loans on average at 6.5% interest level) There're even grants available for out-grower schemes. But altogether the entrepreneurs judge that the system isn't satisfactory. The main issue is providing collateral, as farmers cannot give any mortgage.
Insurance schemes are inadequate

10. What is your top 3 of headaches / obstacles that hinder the development of your company?

Obstacle	# times mentioned
Marketing capacity / market awareness / market access	5x
Access to new technology, especially for reducing the costs of production	5x
Management capacities (practically skilled middle and senior management)	4x
No quantities, too many fluctuations and inconsistencies in supply	3x
Cold storage facilities / postharvest infrastructure	2x
R&D & testing, availability of varieties	2x
Key inputs (varieties)	2x
Access to finance / cost of capital	2x
Meeting market access requirements (especially MRL / pesticide levels)	1x

11. What is your top 3 of potential opportunities that will bring your company more and sustainable profit in the coming decade?

Opportunity	# times mentioned
Bringing management capacities to a higher level > skilled manpower	5x
New varieties and cultivation technology, eco-friendly practices	3x
Sri Lanka branding (making use of perfect climate, nice country, …)	3x
Year round supply, more diversity, more volumes and more consistency in supply	3x
New markets and stronger partnerships in the supply chain	2x
Land	1x
Government support (especially tax schemes)	1x
Added value	1x

12. Give priority 1, 2 and 3 for the following 3 fields in which Sri Lanka's horticulture should focus / invest for the coming decade: technology, marketing, people (knowledge and skills)

Focus field	Relative priority
Technology	For 62% of the interviewees this factor has the highest priority
Marketing	For 26% of the interviewees this factor has the highest priority
People (knowledge and skills)	For 12% of the interviewees this factor has the highest priority