INDUSTRY CAPABILITY REPORT

Fresh Fruits & Vegetable

Prepared by:
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1. THE INDUSTRY

Agriculture is the most common livelihood of Sri Lankans, and almost eighty (80) different varieties of fruits and vegetables are grown in Sri Lanka's in varied agro climatic areas.

While identifying the opportunities in international and local market, the present development programs are targeted to establish small farm cluster companies merged with exporters or marketing enterprises to expand productivity, promote convenient products, increase sustainable farm income, etc.

2. PRODUCTION

The majority of the population involved in agriculture is small producers or home garden growers whose individual extent of land does not exceed a hectare.

While identifying the opportunities in international and local market, the present development programmes are targeted to establish small farm cluster companies linked to exporters or marketing enterprises to expand productivity, promote convenient products, increase sustainable farm income, etc. Private sector involvement in commercial cultivation too has been encouraged in the country.

FRUIT	Prod. 000 Units	Prod.MT	VEGETABLE	PRODUCTION
BANANA	75610*	907,322	ASH PLANTAIN	68,129
CASHEW	3,481,949		ASH PUMPKIN	11,425
LIMES	391,161	19,558	BANDAKKA	81,443
MANGOES	529,528	185,335	BEANS	82,973
ORANGES	61,203	9,180	BEET ROOT	36,262
PAPAW	87,122	130,684	BITTER GOURD	47,632
PASSION FRUIT	9,758	976	BRINJALL	141,882
PINE APPLE	42,516	53,145	CABBAGE	125,746
RAMBUTAN	523,842	18,334	CAPSICUM	31,509
AVOCADO	58,406	19,274	CARROT	90,225
KILO PERA	26,809	12,064	CUCUMBER	38,676
MELON	25,244	37,866	KNOLKHOL	17,045
GRAPES	2,959		LEEKS	35,695
STRAWBERRY	493		RADDISH	55,773
DURIAN	8,566	14,561	RED PUMPKIN	113,322
MANGOSTEEN	8,966	717	SNAKE GOURD	32,868
PEARS	386	85	TOMATO	90,507
			LUFFA	45,945
			ASH PLANTAIN	68,129
			ASH PUMPKIN	11,425

Source: Department of Agriculture, Department of Census and Statistics

2.1 Key products and Varieties

Broadly, the climatically cool and salubrious condition in the hill country are ideal for temperate crops such as carrot, leeks, cabbage, Chinese cabbage, cauliflower, salad leaves, beet, bean, bell pepper, salad cucumber, tomatoes, cherry tomatoes, sukini, strawberries while the low country and dry wet areas are suitable for a variety of tropical fruits and vegetables ranging from green chili, red onion, pumpkin, bitter gourd, melon, sweet and sour banana types, cavendish banana, queen pineapple, papaya, mango, lemon and gherkins etc.

Certain indigenous yams such as innala (Lecranthus) and kiri ala (Xanthasoma sagittifolium), underwater stems of kohila (Lasia spinosa) and nelum ala (Nymphea lotus) and fruits and pods of perennial crops such as bread fruit, young jak fruit and drumsticks (murunga) are foreign exchange earners for the country.

3. SUPPLY CHAIN

- Small farms and home gardens
- Commercial cultivation
- Cluster organizations / Commercial farms
- Integrated agriculture model projects
- Village / Central collecting centres
- Provincial wholesale markets / Economic centre.

4. SPECIALTIES ASSOCIATED WITH PRODUCTS

There are superior flavours compared to certain products exported from the region. There are couples of belts where produced natural vegetation in organic nature by default.

It is the same with Sri Lankan fruits such as mango, pineapple, passion fruit, papaya, banana, mangosteen, ripe jak fruit, avocado, rambutan, star fruit and anoda (sour sup) which has a special flavour. Tropical produce of Sri Lanka origin such as mango, pineapple, rambutan, mangosteen, passion fruits etc. are very popular among the nations in the world due to their unique characteristics such as flavour, aroma and colour.

5. QUALITY STANDARDS

Sri Lanka is adjusting well to the stringent ISO 22000 series and to the health & safety regulations stipulated by the European Community. Farmers are constantly educated to practice Good Agricultural Practices (GAP) at the nurseries and some farms are certified under the GLOBAL GAP certification. The Processing/ Manufacturing facilities owned by the export companies comply with local standards (SLSI) and also with International Quality Standards such as FSSC, ISO, HACCP, and EU Standards. Traceability throughout the supply chain is monitored in order to guarantee a safe product to the consumers.

6. TECHNOLOGY

Improved technologies on crop cultivation especially cultivation under poly tunnels, application of drip irrigation systems, optimum input applications, pest and disease control, postharvest management, quality packaging and improved transportation methods are practiced specially for export marketing.

7. EXTENT AND PRODUCTION OF MAJOR FRUIT CROPS

YEAR	PLANTAIN		CASHEW		LIMES		MANGOES		ORANGES	
	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.
	Hec.	000 Bchs.	Hec.	000 Nuts	Hec.	'000 Nos.	Hec.	'000 Nos.	Hec.	'000 Nos.
2014	56216	44177	21490	6378	12138	221328	29744	382665	6725	38593
2015	53246	5998	20102	1825624	11394	215832	27786	424063	7847	45280
2016	47958	54395	18683	1915183	10967	257230	32207	432755	6333	47647
2017	49307	62549	21014	9158	10798	247655	28272	433523	6891	46990

YEAR	PAPAW		PASSION FRUIT		PINE APPLE		RAMBUTAN		AVOCADO	
	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.
	Hec.	'000 Nos.	Hec.	'000 Nos.	Hec.	'000 Nos.	Hect.	'000 No.	Hect.	'000 No.
2014	6943	62448	509	6350	5410	38582				
2015	6666	61345	642	8954	5161	43909	3923	352351	2469	54528
2016	5913	49661	508	14841	4775	40339	4939	240125	2588	62953
2017	6975	57479	470	7313	4783	42229	5899	409686	2923	30606

Source: Department of Census and Statistics.

7.1 Varieties of Fruits Developed by the Department of Agriculture

Crop	Variety
Avocado	Simmonds, Fuerte, TowerII, Booth Pollock Purple hybrid
Papaya	Ratna
Mango	Malwana, Kartha colomban, Willard & Vellai Colomban,
	Peterpassand
Rambutan	Malwana No. 1
Banana	Nadee
Mandarin	Madhu

Source: Department of Agriculture

7.2 Main Fruits Exports in Sri Lanka (US$ 000)

Description	2018		2019		2020		2021	
	Qty. Kg	**Value**	**Qty. Kg**	**Value**	**Qty. Kg**	**Value**	**Qty. Kg**	**Value**
Other Fruits	8,592,532	14,994.48	9,505,460	18,665.04	5,201,676	11,892.31	6,915,954	15,924.66
Bananas	17,036,266	14,934.31	17,651,798	13,834.33	17,663,649	12,755.60	18,715,992	12,324.74
Melons & Papayas	6,210,135	3,737.89	10,463,819	6,028.77	12,567,162	5,499.54	16,162,423	6,528.63
Pineapple	795,362	2,769.59	643,868	2,038.08	622,701	1,855.85	1,362,723	2,353.03
Goraka Garzenia	213,999	353.2	507,944	906.33	137,065	427.3	134,387	980.21
Tamarind	4,375,831	2,293.55	414,547	159.75	2,541,702	920.73	229,736	151.28
Lemons	424,046	753.18	141,918	180.52	216,548	362.46	74,479	47.32
Total :	**37,648,171**	**39,836.20**	**39,329,354**	**41,812.83**	**38,950,503**	**33,713.79**	**43,595,694**	**38,309.87**

Source: Sri Lanka Customs

8. VARIETIES OF VEGETABLES BRED BY THE DEPARTMENT OF AGRICULTURE

Crop	Variety
Luffa	LA33
Cucumber	LY53
Bitter gourd	MC 43
Snake gourd	TA-2
Pumpkin	ANK
Tomato	KWR, T-146, T245
Eggplant	Vihara Hybrid
Capsicum	SM-164, Padagoda
Radish	CA-8
Okra	Beeralu, Bola
Wing bean	Haritha, MI5, SL44, SLS 40, UPS 122

Source: Department of Agriculture

9. GEOGRAPHICAL DISTRIBUTION ACROSS THE COUNTRY

Main crops grown in each district

No.	District	Crop
1	Kurunegala	Cucumber (10%), Orange (11%), lime (12%), Mangoes (19%), Banana (19%), Pineapple (40%)
2	Monaragala	Brinjals (10%), Cucumber (10%), Ash Pumpkin (29%), Red Pumpkin (15%), Ash Plantain (20%), Oranges (13%), Limes (37%) Plantain (13%) Papaw (10%)
3	Anuradhapura	Luffa (10%), Okra (12%) Brinjals ((15%), Ash Pumpkin (29%), Red Pumpkin (27%)
4	Badulla	Tomato (24%), Cabbage (33%), Carrot (32%), Knolkhol (33%), Beetroot, (11%), Raddish (16%), Beans (46%), Leeks (10%), Capsicum (18%) Brinjals (10%), Oranges (20%)
5	Rathnapura	Beans (10&), banana (16%), Passion Fruit (23%)
6	Kandy	Tomato (14%), Cabbage (10%), Beans (13%)
7	Nuwara Eliya	Tomato (17%), Cabbage (38%), Carrot (60%), Knolkhol (51%), Beetroot (50%), Raddish (30%), Beans (14%), Leeks (86%), Capsicum (18%)
8	Gampaha	Pineapples (35%)
9	Hambantota	Luffa (19%), Bitter Guard (16%), Snake Gourd (15%), Cucumber (11%), Ash Plantian (10%). Papaw (12%)
10	Puttalam	Beetroot (19%), Capsicum (15%)
11	Ampara	Cucumber (17%), Red Pumpkin (10%)
12	Kaluthara	Passion Fruit (34%)

Source: Department of Agriculture

10. MAIN VEGETABLE EXPORTS IN SRI LANKA (US$ 000)

Description	2018		2019		2020		2021	
	Kg	Value	Kg	Value	Kg	Value	Kg	Value
Other Vegetables	9,027,708	16,351.55	12,433,421	21,779.95	6,404,990	15,025.20	6,643,205	18,694.47
Manioc	5,036,134	2,951.11	5,186,104	3,440.71	4,738,327	3,458.78	6,017,191	3,386.86
Chilies	416,788	1,457.26	448,249	1,305.92	464,867	1,627.97	534,625	1,936.48
Mushroom	834,217	2,117.32	987,792	2,328.43	338,881	956.07	390,241	1,377.95
Gherkins	1,608,039	1,225.52	2,516,080	1,972.13	3,118,654	2,635.97	1,689,918	1,354.01
Kiri Ala	303,805	230.81	253,443	363.32	176,987	298.67	156,120	264.79
Sweat Potatoes	25,305	44.58	64,056	73.85	103,587	198.5	223,456	249.37
Onions	65,189	117.72	205,079	376.28	479,404	1,410.56	20,930	69.68
Garlic	934	2.54	15,857	38.97	17,121	49.46	25,071	51.61
Potatoes	91,289	78.66	87,053	73.87	76,901	36.9	74,291	36.35
Tomato	13,769	13.94	1,671	2.24	35,316	39.49	16,096	14.69
Carrots	102,476	34.43	7,833	23.49	3,750	3.65	1,295	2.66
Cabbage	567	2.29	23	0.3			79	0.72
Total :	**17,526,220**	**24,627.70**	**22,206,661**	**31,779.45**	**15,958,785**	**25,741.22**	**15,792,51**	**27,439.64**

Source: Sri Lanka Customs

The export revenue has been increased over the last few years due to high demand in the world, and the value of export of fresh and processed fruits and vegetables stud at USD & 59.46 Million in year 2020 and has been increase up to USD 65.75 Million in year 2021, with a growth rate of 10.06. The fruits and vegetable exports account for about 0.53% percent of total exports of the country. Fruit & Vegetable sector is expected to achieve the export target of US $ 104 Million in year 2025.

11. EXPORT MARKET FOR FRUIT & VEGETABLE

Processed food and Fruits & vegetables sectors have been identified as a sector with high potential in the world due to the increasing demand from end consumers and for value added products in the world market. Sri Lanka exports both fresh and processed fruits and vegetables and 65 per cent of the fresh products are targeted to the Middle East and the Maldivian market. United Arab Emirates, Maldives, Saudi Arabia, United Kingdom, Qatar, Switzerland are the top fruit & vegetable importing countries from Sri Lanka.

12. TOP 10 FRUIT & VEGETABLE EXPORTING COUNTRIES FROM SRI LANKA (US $ 'MN)

Country	2017	2018	2019	2020	2021	% Avg. Growth
	Value	Value	Value	Value	Value	
United Arab Emirates	15.06	13.55	14.7	11.67	12.99	-4.46
Maldives	12.12	10.88	14.68	7.11	10.95	-6.26
Saudi Arabia	8.82	7.64	8.39	7.94	6.49	-5.74
United Kingdom	1.94	2.35	3.34	3.89	5.9	27.32
Qatar	7.1	9.34	9.82	7.32	5.34	-8.12
Switzerland	3.28	2.43	3.01	2.6	3.94	4.3
Germany	2.26	2.05	2.27	2.55	2.89	7.14
France	1.61	2.24	3.25	2.34	2.75	11.11
United States	2.32	1.24	1.83	2.44	2.54	8.54
Canada	1.12	1.76	2.35	1.75	2.32	14.57
Other Markets	11.48	10.99	9.95	9.84	9.63	-4.61
Total :	**67.11**	**64.46**	**73.59**	**59.45**	**65.75**	**-1.22**

Source: Sri Lanka Customs

13. KEY PLAYERS IN THE SECTOR (TOP 10 EXPORTERS)

- DOLE LANKA PVT LTD
- Y A S LANKA PVT LTD
- NIDRO SUPPLY PVT LTD
- GLOBAL TRADING & MARKETING PVT LTD
- EXPOLANKA PVT LTD
- H J S CONDIMENTS LTD
- NOTHERN FOOD COMPANY PVT LTD
- C R EXPORTS PVT LTD
- C B L NATURAL FOODS PVT LTD
- EASTERN & ALLIED AGENCIES PVT LTD

Source: Sri Lanka Customs

14. GOVERNMENT POLICY AND SUPPORT AVAILABLE IN THE SECTOR

Ministry of Agriculture has introduced wide range of assistance and development programs for this sector since many years. The EDB also has initiated a number assistance programmes to assist export-oriented agriculture project at regional level. The program includes awareness programs on different varieties of horticultural crops, soil testing, crop selection, crop protection, poly house and post-harvest technologies including pack houses and quality certifications, Interrelated Agriculture Projects, GMP centers etc. Premier quality institutions like SLSI and other institutions also runs awareness programs on Global GAP and other Market access requirements of developed world.

The government has also initiated couple of support programs for integrated farming basically meant for a group of farmers with an intend to do contract farming. The scheme also offers cash subsidy/grants to the beneficiaries.

15. R & D AND PRODUCT DEVELOPMENT FACILITIES AVAILABLE

Research and Development facilities are available in Sri Lanka to support the industry and here are large numbers of Institutions involved in agricultural researches. A couple of prominent institutions at regional levels are also established to support the sector such as Department of Agriculture in Peradeniya, Gannoruwa Agrarian Research Centre – Kundasale and Angunakolapelessa Agrarian Research Centre – Matara are the few important institutions.

16. INFRASTRUCTURE/LOGISTICS REQUIRED/ AVAILABLE FOR THE SECTOR

A well-established road-rail network and high ways constantly developed to meet the demand of the modern age, facilitates production, for both local consumption and export trade. Within a few hours of motoring, produce can be delivered to the port. Modern communication systems are well established in the Island. Sri Lanka is well served by major international airlines while the national carrier, Sri Lankan Air Lines, itself operates regular and charter services to major destinations in the world, for passengers and commercial cargo. The cargo village at the Colombo International Airport is equipped with cold room facilities and many other modern equipment. The dry zone, with an intricate network of irrigation facilities, and long recognized as the hub of agricultural activity in Sri Lanka, has its own in-built cold chain facilities, catering especially to the fruit and vegetable sector.

17. AVAILABILITY OF TECHNOLOGY AND SKILLED LABOUR

Improved techniques on crop cultivation, input application, post-harvest management, packaging, transport etc. are practiced specially for export marketing

Organic production is also coming up well and large number of players getting certified under farmer's certification schemes for becoming export capable in organic produce of fruits and vegetables.

18. STRENGTHS AND WEAKNESSES OF THE SECTOR

Strength	Weakness
• Diverse Climatic conditions • Skilled and effective labour • Unique Characteristics in selected fruit varieties such as Pineapple, Passion Fruit, Rambutan etc • Technology • Traceability • Quality Standards (SLSI, HACCP, GAP, GMP, EU Standards for fresh fruits & vegetables, Organic, ISO 22000, FSSC)	• Fragmented production by small and marginal farmers • No continuity in supply • Small land holding • Lack of awareness about quality standards • Lack of infrastructure • Lack of quality supply • High cost of production • High Cost of labour, Packaging, Transport, Air freight, Electricity etc. • Inadequate quality seed materials • High cost of investments for new technology • Inadequate researches • High interest rates • Labour issues

19. NEW TRENDS IN THE FRESH FRUIT AND VEGETABLE INDUSTRY

1. **A focus on health and longevity** - Consumers increasingly see a correlation between what they eat, how they feel, and their health needs. While shopping, consumers are paying more attention to exotic or special-quality fruit and vegetables. Especially in north/western Europe, products with specific health characteristics such as berries, avocados, mangoes, pomegranates, papayas and sweet potatoes have become more popular, and named as "super foods".

2. **Convenience food** - Stores are predicting high demand for refrigerated snacks in "single-serve packaging." Healthy snacking is on the rise, with "grabbing and going" becoming the norm. "Whole Foods" predicts products such as nutrition bars will be increasingly made using fresh fruit and vegetables and for that, there are higher levels of innovation required.

3. **The popularity of pure and organic** - A significant number of North American and European consumers are seeking pure and natural products. The principal motivation for them to purchase organically produced fruit and vegetables Currently, the demand for organic products exceeds the supply, making it easier to find buyers and better margins.

4. **Retail success determined by quality** - consumers are becoming much more sophisticated in terms of how they shop. Consumers are selecting the place to buy their groceries based on the quality of the store's fresh food, the fresh fruit and vegetable section being the top priority.

5. **Sustainability** - There is a large range of environmental and socio-economical sustainability aspects related to the fresh produce industry that can have an impact in various stages of the fruit and vegetable supply chain. Some of the most important in the industry, excluding economic sustainability, is water, food loss/waste, packaging, chemical use and energy.

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Disclaimer: