2

NATIONAL OUTPUT, EXPENDITURE AND INCOME

2.1 Overview

The growth of the Sri Lankan economy moderated further to 2.3 per cent in 2019, compared to the growth of 3.3 per cent in 2018, amidst the challenging domestic environment, particularly following the Easter Sunday attacks which slowed down the growth reverberating adversely across most of the key economic activities. The decade-long peaceful environment in the country was shaken up by the attacks, primarily devastating the tourism segment which has many backward and forward linkages to other key economic activities especially related to Services and Industry. Reflecting the adverse impact of the event, the Purchasing Managers Indices compiled by the Central Bank of Sri Lanka (CBSL) recorded its historically lowest levels in April and May. In this background, Services activities expanded at a slower pace during the year with the sluggishness in wholesale and retail trade activities, personal services and transportation activities. Further, Industry activities recorded a moderate growth during the year mainly supported by the recovery in construction and mining activities. Meanwhile, Agricultural activities recorded only a marginal growth during the year with a decline in key activities including fishing and growing of some major crops, mainly due to weather related disturbances. Despite the accommodative monetary policy stance adopted by the CBSL with the view to stimulating economic growth, investment expenditure dampened further in 2019 mainly on account of tumbled investor confidence with a dejected outlook owing to policy and political uncertainty that prevailed in the country. However, consumption expenditure recorded a moderate growth in 2019. A considerable improvement was witnessed in net external demand in 2019, where the import of goods and services grew marginally while the export of goods and services expanded at a higher rate buttressed by the policy measures taken to curtail non-essential imports. Meanwhile, domestic savings contracted at a higher rate. Further, the net primary income from the rest of the world in rupee terms continued to contract during the year, while the net secondary income (net current transfers) from the rest of the world in rupee terms recorded a growth during the year. Reflecting these developments, national savings declined during the year while the resource gap narrowed due to the contraction in investments.

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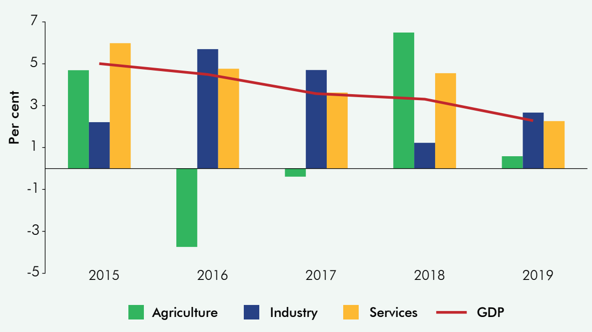
2.2 GDP,[1] GDP Per Capita and Gross National Income (GNI)

During 2019, Gross Domestic Product (GDP) at constant market prices (herein-after referred to as constant prices) recorded a slower growth of 2.3 per cent compared to the growth of 3.3 per cent recorded in 2018. GDP at constant prices was estimated at Rs. 9,889.4 billion in 2019, in comparison to Rs. 9,668.6 billion in 2018. Meanwhile, GDP at current market prices (herein-after referred to as current prices) was estimated at Rs. 15,016.1 billion (US dollar 84.0 billion) in 2019, while in 2018 it stood at Rs. 14,366.1 billion (US dollar 88.4 billion), recording an increase of 4.5 per cent in 2019, compared to the growth of 7.8 per cent in 2018. Accordingly, the GDP implicit deflator increased by 2.2 per cent in 2019, in comparison to the increase of 4.3 per cent in 2018.

1 The Department of Census and Statistics (DCS) estimates GDP in the three approaches of production, expenditure and income.

Figure 2.1
Annual GDP Growth Rate (a)



(a) Based on the GDP estimates (base year 2010)

Source : Department of Census and Statistics

Table 2.1
Gross Domestic Product by Industrial Origin at Constant (2010) Prices (a) (b)

Economic Activity	Growth (%)		Contribution to Change (%)		As a Percentage of GDP (%)	
	2018 (c)	2019	2018 (c)	2019	2018 (c)	2019
Agriculture, Forestry and Fishing	**6.5**	**0.6**	**13.5**	**1.8**	**7.1**	**7.0**
Growing of cereals (except rice)	2.0	- 9.5	0.1	- 0.5	0.1	0.1
Growing of rice	44.7	- 0.3	7.0	- 0.1	0.7	0.7
Growing of vegetables	4.0	1.5	0.7	0.4	0.6	0.6
Growing of sugar cane, tobacco and other non-perennial crops	- 10.9	8.4	- 0.1	0.1	0.0	0.0
Growing of fruits	11.4	8.5	1.8	2.1	0.6	0.6
Growing of oleaginous fruits (coconut, king coconut, oil palm)	7.1	18.2	1.2	4.7	0.6	0.7
Growing of tea (green leaves)	0.4	- 1.3	0.1	- 0.4	0.7	0.7
Growing of other beverage crops (coffee, cocoa, etc.)	25.6	- 23.4	0.1	- 0.2	0.0	0.0
Growing of spices, aromatic, drug and pharmaceutical crops	5.9	- 1.0	1.2	- 0.3	0.7	0.7
Growing of rubber	- 0.3	- 9.5	- 0.0	- 1.0	0.2	0.2
Growing of other perennial crops	- 2.5	- 0.3	- 0.1	- 0.0	0.2	0.2
Animal production	8.0	3.2	1.5	0.9	0.7	0.7
Plant propagation and support activities to agriculture	0.2	- 6.3	0.0	- 0.3	0.1	0.1
Forestry and logging	- 0.8	- 4.8	- 0.2	- 1.4	0.6	0.6
Fishing	0.2	- 4.3	0.1	- 2.3	1.2	1.1
Industries	**1.2**	**2.7**	**10.0**	**30.8**	**26.3**	**26.4**
Mining and quarrying	- 5.2	2.8	- 4.0	2.9	2.3	2.3
Manufacturing	3.6	1.9	16.8	12.8	15.6	15.6
Electricity, gas, steam and air conditioning supply	5.9	4.0	1.8	1.8	1.0	1.1
Water collection, treatment and supply	5.8	5.5	0.3	0.4	0.1	0.2
Sewerage, waste treatment and disposal activities	6.7	7.3	0.6	1.0	0.3	0.3
Construction	- 2.5	4.0	- 5.5	11.9	6.8	6.9
Services	**4.6**	**2.3**	**78.2**	**56.8**	**57.5**	**57.4**
Wholesale and retail trade, transportation and storage, and accommodation and food service activities	3.5	1.8	24.6	17.9	23.1	23.0
Information and communication	9.6	15.7	1.8	4.5	0.7	0.7
Financial, insurance and real estate activities including ownership of dwellings	9.6	2.5	38.6	15.4	14.1	14.2
Professional services and other personal service activities	2.9	2.2	10.2	10.9	11.4	11.4
Public administration, defence, education, human health and social work activities	1.2	2.3	3.0	8.2	8.1	8.1
Equals Gross Value Added (GVA) at Basic Price	**3.7**	**2.2**	**101.6**	**89.4**	**90.8**	**90.8**
Taxes less subsidies on products	- 0.6	2.6	- 1.6	10.6	9.2	9.2
Equals Gross Domestic Product (GDP) at Market Price	**3.3**	**2.3**	**100.0**	**100.0**	**100.0**	**100.0**
Net primary income from rest of the world	- 6.0	- 6.3				
Gross National Income at Market Price	**3.2**	**2.2**				

(a) Based on the GDP estimates (base year 2010)
(b) Provisional
(c) Revised

Source : Department of Census and Statistics

Figure 2.2
Snapshot of National Output, Expenditure & Income - 2019

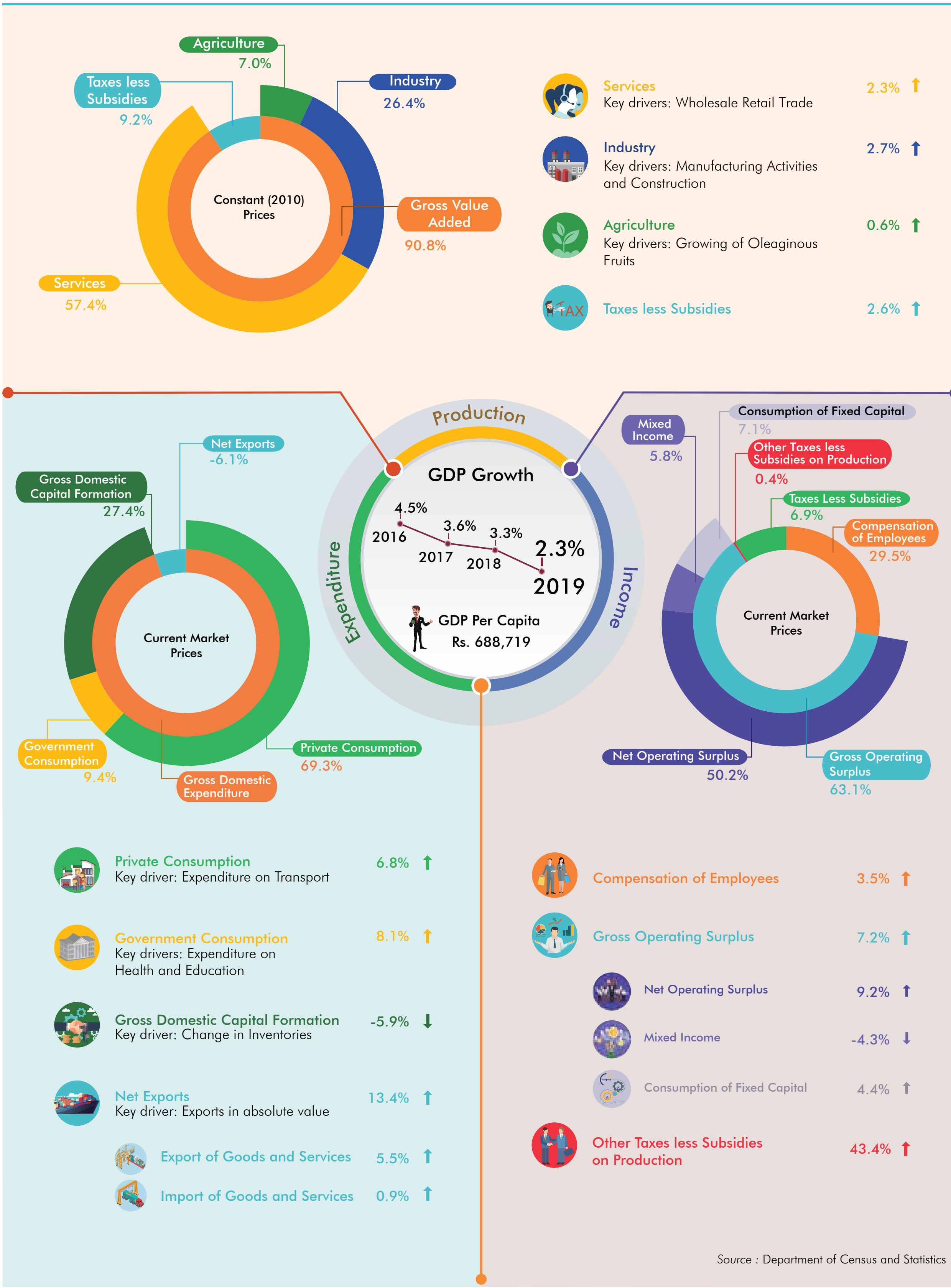


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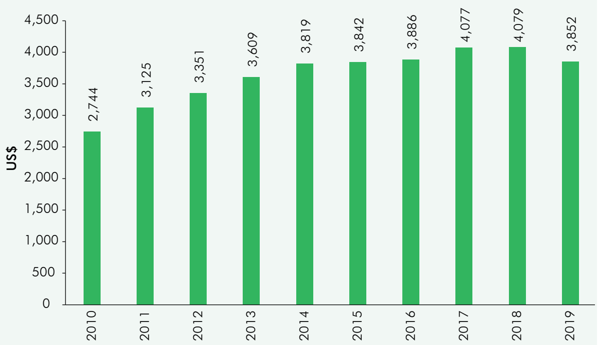
Figure 2.3
Per Capita GDP (a)



(a) Based on the GDP estimates (base year 2010) and latest population figures

Source : Department of Census and Statistics

GDP per capita was estimated at Rs. 688,719 in 2019, compared to Rs. 662,949 in 2018, which is an increase of 3.9 per cent in 2019 in comparison to the increase of 6.7 per cent in 2018. The slower growth in GDP per capita in rupee terms was mainly on account of the slowdown in GDP at current prices. Meanwhile, per capita GDP in US dollar terms was US dollars 3,852 in 2019, in comparison to US dollars 4,079 in 2018, registering a decrease of 5.5 per cent, compared to a marginal increase of 0.05 per cent in 2018, due to the slower growth of GDP at current prices, as well as the depreciation of the domestic currency against the US dollar, on an annual average basis.[2]

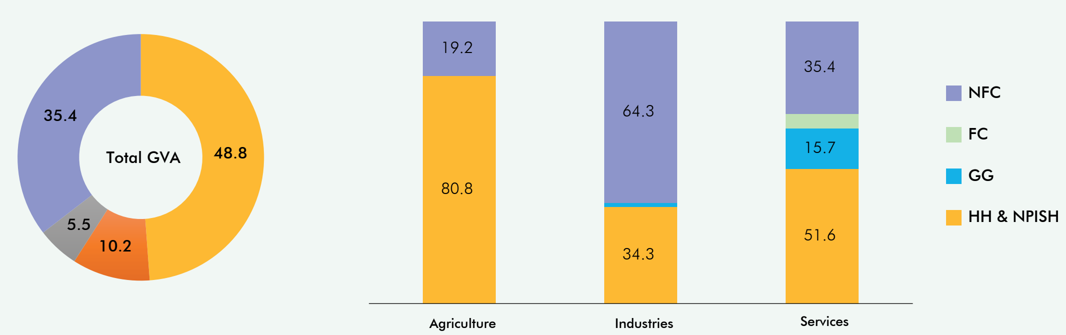
2 GDP per capita is calculated using annual average exchange rate.

GNI, which is derived by adjusting GDP for the net primary income from the rest of the world, increased to Rs. 14,583.9 billion at current prices, recording a slower growth of 4.3 per cent in 2019, compared to the growth of 7.7 per cent in 2018. This slowdown in GNI was a combined outcome of the slower growth in the GDP at current prices, and the negative growth of 10.9 per cent in net primary income in 2019 compared to its contraction of 10.4 per cent in 2018.

2.3 Contribution from Institutional Sectors

The Household and Non-Profit Institutions Serving Households (HH and NPISH) sector continued to be the major contributor to the Gross Value Added (GVA) of the economy at current prices. Accordingly, the HH and NPISH sector grew by 5.0 per cent in 2019, compared to the growth of 7.7 per cent recorded in 2018, accounting for 48.8 per cent of the GVA of the economy in 2019. Being the second largest contributor, the Non-Financial Corporations (NFC) sector, accounted for 35.4 per cent of the GVA of the economy, recording a growth of 7.9 per cent in 2019 compared to its growth of 8.2 per cent in 2018. Meanwhile, the General Government (GG)

Figure 2.4
Percentage Share of Gross Value Added (GVA) by Institutional Sectors in 2019 (at Current Market Prices) (a)



(a) Based on the GDP estimates (base year 2010)

Source : Department of Census and Statistics

Table 2.2
Gross Value Added by Institutional Sector at Current Market Prices (a)(b)

Item	As a Percentage of GVA (%)							
	2018 (c)				2019			
	Non-Financial Corporations	Financial Corporations	General Government	Households and Non-Profit Institutions Serving Households	Non-Financial Corporations	Financial Corporations	General Government	Households and Non-Profit Institutions Serving Households
Agriculture	18.6	-	-	81.4	19.2	-	-	80.8
Industries	63.7	-	1.7	34.6	64.3	-	1.4	34.3
Services	23.6	8.7	15.9	51.8	23.9	8.9	15.7	51.6
Gross Value Added at Basic Price	34.8	5.4	10.4	49.3	35.4	5.5	10.2	48.8

(a) Based on the GDP estimates (base year 2010)
(b) Provisional
(c) Revised

Source: Department of Census and Statistics

sector and Financial Corporations (FC) sector grew by 4.5 per cent and 8.4 per cent, respectively, in 2019 compared to the respective growth rates of 18.1 per cent and 8.2 per cent recorded in 2018. Accordingly, the GG and FC sectors accounted respectively for 10.2 per cent and 5.5 per cent of the GVA of the economy.

Considering the contribution of institutional sectors to the major economic activities at current prices, the HH and NPISH sector remained as the major contributor to the value added of Agriculture and Services activities in 2019 while the value added of Industry activities was mainly driven by the NFC sector. Accordingly, the HH and NPISH sector contributed to 80.8 per cent of value added of Agriculture activities indicating a slight decline in its contribution compared to that of 81.4 per cent in 2018. Further, 51.6 per cent of value added of Services activities was generated by the HH and NPISH sector in comparison to the contribution of 51.8 per cent in 2018. Meanwhile, the NFC sector contributed to 64.3 per cent of value added of Industry activities in 2019 compared to its contribution of 63.7 per cent recorded in 2018.

2.4 Output, Policies, Institutional Support and Issues

Agriculture

Agriculture activities recorded a marginal growth of 0.6 per cent in 2019 in value added terms, compared to the growth of 6.5 per cent in 2018, owing to the considerable decline in key activities including fishing, forestry, and growing of major crops such as rubber and tea. Further, growing of cereals, spices, plant propagation and support activities to agriculture, and growing of other beverage crops such as coffee, cocoa etc., rice and other perennial crops also contracted, deterring expansion in overall agriculture activities, mainly on account of the unexpected weather related disturbances that occurred during the year. However, growing of oleaginous fruits (including coconut), other fruits and vegetables, and animal production expanded during the year fostering the growth in agriculture activities. The slowdown in valued added of agriculture related activities was reflected in the sub-indices related to the Agriculture segment of the Business Outlook Survey (BOS) conducted by the Central Bank on a quarterly basis. Accordingly, the Production sub-index of the BOS on average recorded a deterioration during the year.

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BOX 4
Adoption of Modern Technologies in Agriculture

Introduction

Global demand for food is growing continuously as a result of population growth and dietary changes, and as per the World Population Prospects - 2019 of the United Nations, the world population is expected to reach 9.7 billion by 2050 from today's 7.8 billion level. Rise in population brings a range of global sustainability issues, including food security. Sri Lanka, as a developing nation, faces similar concerns about food security amidst growing population, substantial postharvest losses and regular adverse weather shocks, and these challenges need to be tackled through efficient agriculture practices. The recent COVID-19 pandemic has also reiterated the importance of food security for a developing nation such as ours. Traditional agriculture, through the accumulation of farmers' knowledge and experiences, managed to feed the entire population for many centuries in the past. The cascade tank-village system (Ellanga system), the hill side cascade paddy fields (Helmalu) and the irrigation systems developed in the historical past were remarkable agro-biodiversity systems in Sri Lanka with regard to water management efficiency, climate change adaptability and buffers against natural disasters such as floods, droughts and pest attacks. However, during the colonial period, priority was given to plantation agriculture and little attention was paid to other crop cultivations, except for subsistence farming. With little government attention, subsistence farming alone became insufficient to meet the growing food demand in the country. Subsequently, the green revolution, which was a major policy response of many developing nations in the 1960s, sought to increase the efficiency of agricultural processes through various techniques such as high yielding robust varieties, hybridised seeds, expansion of irrigation infrastructure, synthetic fertiliser, and pesticides. Although the agriculture sector has undergone considerable transformation and improvements in response to green revolution practices, productivity levels have been stagnant in recent years, raising concerns about food security as well as low farmer income. However, reverting back to the agro-ecosystem that is based on traditional agriculture practices is not feasible under the current context, since available resources for agriculture activities such as land and water resources have been diminishing rapidly owing to other industrial activities and urbanisation. Despite a significant share of the labour force employed in the sector, labour shortages have been increasingly common in relation to labour intensive cultivation activities. In addition, recent experiences of erratic weather patterns and resultant natural disasters, such as droughts and floods, tend to impose additional restrictions on agricultural activities. These trends emphasise the importance of improving productivity and efficient resource usage in the agriculture sector through innovative technologies.

Rapid technological advancements in the world over the last two decades have led to a variety of new innovations, which have the potential to address technological needs of farmers and other agriculture sector stakeholders much faster and with far more accuracy than ever before. Countries such as India, Israel and Brazil have experienced rapid transitions in the agriculture sector, with accelerated mechanisation and usage of advanced technologies. Although an array of new technological adoptions such as vertical farming, hydroponics, Good Agricultural Practices (GAP), and Geographic Information Systems (GIS) are available in Sri Lanka too, usage of these technologies is relatively limited. Therefore, Sri Lanka still has a long way to go to embrace new advanced technologies for farming activities as a norm.

New Technologies to Enhance the Performance of the Agriculture Sector

New advancements in technology, ranging from micro devices to macro networks, have completely transformed modern global agriculture in a productive way. Innovative agriculture techniques no longer depend on the application of inputs such as water, nutrients and crop protection substances equally to all fields. Given the limited resources available for agriculture production and the rising demand for agriculture products, precision or smart agriculture techniques have emerged, suggesting the application of a precise amount of agriculture inputs to crops by observing, gauging and responding to inter-field and intra-field variability in field conditions through the usage of a range of modern information and telecommunication technologies. Hence, smart farming concepts integrate modern technologies and current farming practices to increase the output and the quality of agricultural products.

Fourth Industrial Revolution (4IR) technologies such as the Internet of Things (IoT), artificial intelligence (AI), drones and robots can be effectively used for productivity improvements in the agriculture sector. Today, billions of physical devices, such as smartphones, computers and smart electronic appliances around the world are connected to the internet, gathering and sharing data. Incorporating sensors to this network of devices will add a certain level of digital intelligence to these devices, enabling them to communicate real-time data without any involvement of human beings (Ranger, 2020). This technology is known as IoT. IoT devices can be fixed in or on land, vehicle, water, plant and livestock to access data such as moisture content, nutrients availability in soil, pest and disease attacks, tracking of vehicles, storage capacity, livestock monitoring, and other farm operations. The data collected is processed and analysed using AI to generate usable information, which can be easily accessed by farmers and other stakeholders via computers or mobile phones. AI, which uses machine learning techniques, can be used to analyse a range of data such as temperature, moisture, weather conditions, water usage and other field conditions collected at farm level on a real time basis. For instance, a moisture sensor and irrigation system augmented with AI can determine the exact water requirement of a crop based on soil moisture level, stage of crop cultivation as well as weather forecasts, and enable the irrigation of the field accordingly without human intervention. For instance, in Nigeria, the Hello Tractor IoT service connects tractor owners who wish to hire their tractor with farmers, with the aim of sharing resources and fully utilising available tractors. Moreover, food supply chain inefficiencies indicate a disconnection between supplier and retailer in the sector. Blockchain technology creates a direct link between all participants in the supply chain, ensuring efficiency, traceability and transparency at each stage of the production process. For example, the government of Thailand has introduced a pilot project to use blockchain traceability solutions for organic rice, particularly to track and trace Thailand's jasmine rice from production to export. In the sequence of technological developments, drones and automated robots have emerged as versatile technologies for smart farming activities. Drone technology is used for soil and field analysis, planting, crop spraying, crop monitoring and analysis, irrigation, and crop health assessments. Hence, drone technology facilitates time saving in cultivation activities, reduces usage of scarce human and other resources, stores data for future analysis and increases yields by effective resource usage. Farmers of Andhra Pradesh in India, for instance, have commenced using drones to spray their farms with required pesticides. Further, private tech companies in India use drones to offer agriculture survey services to insurance companies as well as the government to efficiently implement crop insurance schemes. In addition, advanced robotic systems, such as weeding robots, driverless tractors and soil sterilisation robots, are used in agriculture fields for supplying inputs, land preparation, weed control, pruning, seeding, spraying, thinning, harvesting and picking, and sorting and packing. Therefore, drone and robot technologies support farmers for efficient resource management while reducing cost of production through reduced labour usage.

Today, nanotechnology has grown into a mature field of science, and it has a wide variety of potential applications in agriculture. Nanotechnology broadly refers to a field of applied science and technology that aims to control matter at the molecular level in scale, usually in the range of one to 100 nanometers, and create devices within that size range (ScienceDaily, 2020). Nanotechnology is used in all stages of farm activities such as production, value addition, storage and packaging, and transportation of agricultural products. The application of nanomaterials, such as nanocapsules and nanoparticles, especially aims at efficient usage of plant protection products through enhanced plant absorption and delivery of ingredients to specific sites. For example, fertiliser applied in the form of nanomaterial minimises nutrient losses by slow and controlled release of substances, and thereby increases yield via optimised resource usage and reduces environmental costs by preventing over usage of fertiliser. Moreover, nanotechnology is also explored in the fields of soil fertility improvement, crop disease diagnosis and control, seed coating, herbicide applications, livestock medicines as well as plant breeding and genetic transformation.

Postharvest losses result in lower supply of food to consumers and high retail prices. Hence, postharvest technologies play a critical role in maintaining the quality of food, extending the shelf life of perishables and reducing food losses. Postharvest loss management requires careful handling of goods from the time of harvest until they reach the market. In addition to cold storage, numerous postharvest technologies such as chemical treatments (applying antioxidants, anti-browning and antimicrobial chemicals) and physical treatments (radiation, heat and edible coatings) are regularly used in food supply chains. The purpose of these technologies is to slow down food quality deterioration due to physiological processes and maturation while minimising the risk of microbial growth and contamination. In addition to the application of postharvest treatments, improved packaging techniques also help to reduce postharvest losses at different stages of the food value chain such as storage and transportation. Active packaging that incorporates oxygen and ethylene absorbers will slow down physiological processes in food, thereby extending their shelf life. Meanwhile, intelligent packaging that incorporates sensors, indicators and radio frequency identification systems are increasingly used in monitoring food quality and package integrity. Further, genetic experts have developed plant strains that are resistant to some of the postharvest changes.

Efficient exchange of farm knowledge is a crucial prerequisite for smart farming. Farmers and related stakeholders require the latest information on the most effective planting practices, best prices in the markets, available credit supply, soil conditions, nutrients and plant protection. Moreover, early warnings on drought and flood conditions, pest and disease outbreaks, and forest fire are sought by farmers on a frequent basis. Electronic extension programmes can be used to disseminate such information and alerts to stakeholders through digital technologies. Instead of always physically contacting the farmers, extension agents could use a combination of voice, text, videos, and internet methods to contact farmers frequently in a more cost effective manner given the increasing mobile phone usage by farmers. For example, the AgroStar tech platform in India offers a wide range of agronomy advice coupled with agricultural inputs and services to farmers to increase their productivity and quality of produce while solving common problems occurring in farming activities. Currently, AgroStar operates in the Indian states of Gujarat, Maharashtra, and Rajasthan, linking over 500,000 farmers on its digital platform. Meanwhile, Kenya Agricultural Commodity Exchange (KACE) has introduced a short messaging service (SMS) called 'SMS SOKONI' and farmers from anywhere in the country can access current and reliable market information on prices and offers via SMS or a mobile phone App at subsidised service charges. The data-driven digital technologies have shifted the agriculture sector from more production centric activities to market centric activities in view of balancing production and market demand conditions.

Current Status of New Technology Adoption in Sri Lanka

Advanced technology usage in the Sri Lankan agriculture sector is limited, not only among the farmers, but also among the agribusinesses. With the aim of using Information Communication Technology for productivity improvements in the agriculture sector, several e-agriculture programmes such as interactive ICT and mobile platforms and software applications have been already developed to disseminate agriculture information. Few e-agriculture services such as the Wikigoviya web, AgMIS (an SMS service and market price information system), Boga Purokathanaya (a mobile phone App that provides advice to farmers on crops that should be cultivated to receive a better market price), SL paddy fertiliser (a mobile phone App that provides fertiliser recommendations to farmers) and Govipola (a mobile phone App that supports the farming community by strengthening market linkages, improving price awareness and matching supply and demand to give easy access to markets) are currently in operation in Sri Lanka, as initiatives of the Department of Agriculture and several private institutions. Meanwhile, a seed and planting material management information system, a QR code system for GAP certification, and a progress monitoring system for the National Food Production programme are currently being developed. In addition, the Sri Lanka Institute of Nanotechnology (SLINTEC) is carrying out numerous nanotechnology related research and development activities to produce slow-release fertiliser, nanofungicidal formulations, organic acid based weedicides, seed coating to reduce negative effects of fertiliser, and improve soil remediation and rehabilitation. Further, numerous private tech companies in Sri Lanka have also initiated several technological solutions to agricultural matters, such as drone technology and smart weather solutions (e.g. WeatherGuru). Amidst restrictions imposed on movement of people and gatherings during the ongoing COVID-19 pandemic, smart technologies and social media have been put to use increasingly to support the agriculture supply chain, linking wholesalers, retailers and end consumers. In the same vein, smart technologies can be effectively used to link agriculture producers with markets to manage harvesting periods, reduce postharvest losses and wastage and ensure better price realisation for the farming community.

However, research and development initiatives of Sri Lanka's private sector in relation to advanced agriculture technologies are still limited to a few pioneering companies and a broad based use is yet to be realised. Further, agriculture firms as well as farmers in Sri Lanka appear to adopt new technologies slower than expected, and farms are investing in productivity enhancing technology at a slower pace as they are sheltered from competition. Concerns over the adaptability of new technologies, limited capital to make initial investment required to make the transition to high tech agriculture, lack of technical education and skills, reluctance of tech-savvy youth to engage in farming activities have resulted in slow-paced technological adoption by agriculture firms and the farming community. The availability and speed of internet connections in rural areas and lack of awareness of available services also limit smart technology usage by farmers.

Way Forward

The Sri Lankan agriculture sector has undergone a considerable transformation in terms of all farming activities, over time. However, further progress towards technology-oriented agriculture, with the aim of enhancing agricultural value chains, is crucial for the next level of development and to tackle emerging challenges in the agriculture sector. Identifying sectoral and grassroots level limitations of technology adoption will help mitigate constraints in transformation from conventional practices to tech-based agriculture. Policy reforms on capital allocation for technology transformation and technical education as well as strengthening digital infrastructure are important, thereby addressing persistent structural obstacles that deter technological adoption in the sector. Increased public investment in research and development activities through the numerous agriculture related research organisations in the country for data-driven, smart tech-based agriculture practices and creating a conducive investment environment for the private sector to invest in such activities, and increased access to credit at concessional rates are vital to boost technology innovations in the agriculture sector. In addition, increasing awareness on available services and enhancing access to concessional loans to support farmer level investments are also critical to address constraints for technological adoption at the grassroots level. In the medium to long run, introducing subjects related to advanced agriculture technologies to curricula of technical and tertiary education programmes is also essential to promote technology adoption in the agriculture sector. At the same time, it is appropriate to revisit Sri Lanka's historical agriculture systems, in view of integrating best practices of such systems with modern technology as far as possible, in order to enhance the resilience and eco-friendliness of the agriculture practices.

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Agriculture Production

The Agriculture Production Index, which measures the output of the agriculture and fisheries sectors, broadly remained unchanged recording a growth of 0.03 per cent in 2019, compared to a growth of 11.0 per cent in 2018. Within the index, the sub indices of paddy, coconut and livestock increased, while tea, rubber and other crops (vegetables, fruits and other field crops) sub indices declined in comparison to the previous year. Meanwhile, a contraction in fisheries activities was also recorded during the year.

Table 2.3
Agriculture Production Index (2007-2010 =100)

Item	2018 (a)	2019 (b)	Growth Rate (%) 2017/18 (a)	Growth Rate (%) 2018/19 (b)
Agriculture and Fisheries	126.1	126.2	11.0	0.03
1 Agriculture	119.6	121.0	14.7	1.1
1.1 Agriculture Crops	112.5	113.3	16.7	0.7
Paddy	105.1	122.8	64.9	16.9
Tea	97.5	96.3	-1.0	-1.3
Rubber	61.5	55.7	-0.6	-9.5
Coconut	92.6	108.9	7.1	17.6
Other Crops	152.8	136.3	12.6	-10.8
o/w Vegetables	145.3	123.0	17.7	-15.3
Fruits	183.9	150.1	12.1	-18.4
OFC	134.2	118.8	13.8	-11.4
1.2 Livestock	176.4	181.9	5.9	3.1
2 Fisheries	158.0	151.6	-0.8	-4.0

(a) Revised
(b) Provisional

Source: Central Bank of Sri Lanka

Paddy

Paddy production in 2019 grew notably with a bumper harvest recorded during the 2018/19 Maha season. Accordingly, paddy production increased by 16.9 per cent in 2019 in comparison to the previous year, to 4.6 million metric tons. The net extent of land harvested during the year increased by 8.3 per cent to 957,596 hectares, while the overall average paddy yield increased to 4,795 kilogrammes per hectare in 2019 from 4,443 kilogrammes per hectare in 2018. This increase in paddy yield in 2019 was an outcome of the growth in the 2018/19 Maha production, amidst a decline in production in the Yala season.

Paddy production in the 2018/19 Maha season amounted to 3.0 million metric tons and it was a 28.2 per cent growth over the production in the previous Maha season. The 2018/19 Maha season production was the highest paddy production recorded in the country over the last four decades. The considerable increase in the Maha production can be partly attributed to both higher yield per hectare and increased extent of land sown in major paddy producing areas, owing to favourable rainfall experienced during the latter part of 2018. The extent harvested during the 2018/19 Maha season increased considerably by 16.2 per cent to 647,243 hectares. The paddy yield per hectare during the 2018/19 Maha season

Table 2.4
Paddy Sector Statistics

Item	Unit	2018 (a)			2019 (b)		
		Maha	Yala	Total	Maha	Yala	Total
Gross Extent Sown	hectares '000	667	374	1,041	748	369	1,117
Gross Extent Harvested	hectares '000	620	363	983	724	346	1,070
Net Extent Harvested	hectares '000	557	327	885	647	310	958
Production	mt '000	2,397	1,533	3,930	3,073	1,519	4,592
	bushels '000	114,874	73,466	188,340	147,256	73,466	220,722
Average Yield (c)	kg/ hectare	4,302	4,683	4,443	4,747	4,896	4,795
Credit Granted	Rs. mn	3,986	2,893	6,879	4,233	3,068	7,301
Rice Imports (d)	mt '000	n.a.	n.a.	249	n.a.	n.a.	24
Paddy Equivalent of Imported Rice (d)	mt '000	n.a.	n.a.	356	n.a.	n.a.	35

(a) Revised
(b) Provisional
(c) Yield per hectare for Maha and Yala seasons are calculated using data from the Department of Census and Statistics, which are based on crop cutting surveys, while average yield is calculated by dividing total production by the net extent harvested.
(d) Annual figure

Sources: Department of Census and Statistics
Sri Lanka Customs
Central Bank of Sri Lanka

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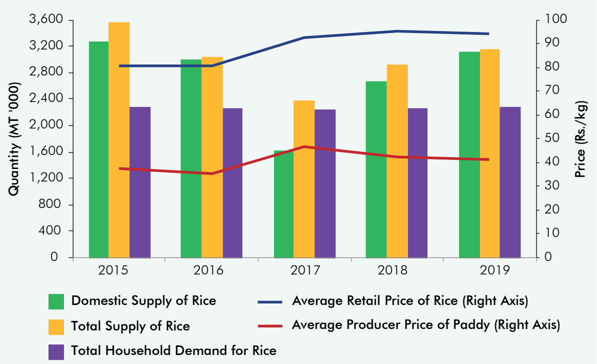
Figure 2.5
Rice : Supply and Demand



Source : Central Bank of Sri Lanka

increased by 10.3 per cent to 4,747 kilogrammes, from 4,302 kilogrammes in the corresponding season of the previous year. Meanwhile, paddy production during the 2019 Yala season declined marginally by 0.9 per cent to 1.5 million metric tons compared to that of the 2018 Yala season, largely due to drought conditions and pest attacks in major producing areas. As a result, the land extent harvested during the 2019 Yala season decreased by 5.2 per cent to 310,353 hectares. However, the paddy yield per hectare during the 2019 Yala season increased by 4.5 per cent to 4,896 kilogrammes, from 4,683 kilogrammes in the corresponding Yala season in 2018. The annual paddy production of both Maha and Yala seasons, which was equivalent to 2.9 million metric tons of rice, was estimated to be adequate to meet the domestic demand for rice for approximately 14 months.

Paddy prices in the open market remained low during the first half of the year, although they showed an increasing trend during the second half. The guaranteed paddy purchasing price for Samba and Nadu varieties were Rs. 41.00 per kilogramme and Rs. 38.00 per kilogramme, respectively, in 2019. Farmgate prices of paddy were low in the first half of the year supported by the increased paddy supply from the 2018/19 Maha season. However, prices of all paddy varieties escalated in most of the paddy producing areas during the latter part of 2019, largely due to increased purchases of paddy by private millers at competitive prices in the open market and the limited supply of paddy during the 2019 Yala season. Overall, the average price of Samba paddy decreased to Rs. 42.78 per kilogramme in 2019 from Rs. 51.04 per kilogramme in 2018, while the average price of Nadu paddy recorded an increase to Rs. 43.01 per kilogramme in 2019 from Rs. 40.17 per kilogramme in 2018. In line with the movements of paddy prices, the average retail prices of Samba rice decreased by 6.4 per cent to Rs. 102.29 per kilogramme, whereas the average retail price of Nadu rice increased by 1.7 per cent to Rs. 93.48 per kilogramme during the year. With the bumper harvest, the importation of rice in 2019 declined significantly by 90.3 per cent from the last year. Accordingly, the quantum of rice imports in 2019 dropped to 24,193 metric tons from 248,901 metric tons imported during the previous year. However, towards the end of the year, a shortage in supply of rice from the private sector to the market caused an increase in retail rice prices. Therefore, the government took measures to stabilise rice prices by milling approximately 40,000 metric tons of paddy stocks, which were stored in the granaries of the Paddy Marketing Board and provided rice to the market through Lanka Sathosa Ltd. Moreover, the Cabinet of Ministers decided to fix a maximum retail price for Samba rice and Nadu rice at Rs. 98.00 per kilogramme with a view to preventing rice millers and traders earning exorbitant profits at the expense of the consumers. However, the maximum retail price was not applicable for special varieties of rice, such as Keeri Samba and Suduru Samba.

Tea

The downward trend in tea production that was observed since 2017, continued in 2019 as well, primarily due to domestic factors. Tea production in 2019 declined by 1.3 per cent to 300.1 million kilogrammes, owing to labour issues that emerged during wage negotiations in the sector, dry weather conditions that prevailed in the first half of the year as well as heavy rains in the fourth quarter. Accordingly, high grown tea production reported a decline of 3.0 per cent to 63.1 million kilogrammes, while the medium grown tea output increased marginally by 0.1 per cent to 47.2 million kilogrammes. Low grown teas, which account for around 62 per cent of the total output, declined by 1.0 per cent in 2019 to 189.9 million kilogrammes. The average yield in the smallholder sector was generally higher than that in the large plantation sector, reflecting the potential for increasing the yield by replanting and infilling old plantations with high yielding tea plants and applying good agricultural practices.

Despite the reduction in output, the quantity of tea traded at the Colombo auction as well as the amount exported increased in 2019. However, the average export price (FOB) of tea decreased by 9.1 per cent to US dollars 4.6 per kilogramme in 2019, compared to US dollars 5.1 per kilogramme recorded in 2018. Meanwhile, the annual average price at the Colombo Tea Auction (CTA) declined by 6.0 per cent to Rs. 546.67 per kilogramme from Rs. 581.58 per kilogramme reported in 2018. The highest year-on-year decrease in tea prices at the CTA was observed for high grown tea (10.9 per cent), followed by medium grown tea (10.0 per cent) and low grown tea (3.6 per cent). In order to increase earnings from tea exports, it is essential to enhance value addition in the sector, improve warehousing and packaging facilities as well as quality assurance throughout the value chain up to the consumer. Building direct linkages with foreign buyers by developing producers' own brand names will ensure better prices and a stable market for tea producers.

Rubber

Rubber production, which has been on a declining trend in recent years, further reduced by 9.5 per cent to 74.8 million kilogrammes in 2019, reporting the lowest annual output in history. This decline was reflected in both smallholder and plantation sectors, and was mainly driven by disruptions to tapping operations due to rainy weather conditions in the latter part of the year and abandonment of tapping operations due to low remunerative prices. The decline was reflected by a significant drop in the production of sheet rubber, which accounts for about a 50 per cent share of total rubber production. Accordingly, sheet rubber production declined by 9.5 per cent to 37.4 million kilogrammes from 41.3 million kilogrammes in 2018. Crepe rubber production also recorded a marginal decline of 0.5 per cent to 14.4 million kilogrammes. Production of other categories of rubber, which accounts for around 30 per cent of total rubber production, declined by 14.3 per cent to 22.9 million kilogrammes, in comparison to the previous year's production of 26.8 million kilogrammes.

Lower output in the rubber sector during 2019 in turn reduced the volume exported. Accordingly, natural rubber exports of Sri Lanka declined by 7.0 per cent to 13.0 million kilogrammes in 2019 in comparison to the previous year. Domestic consumption of rubber in the industrial sector, which decreased over the last few years, further declined by 16.8 per cent to 113 million kilogrammes due to the subdued performance of the rubber related domestic manufacturing sector. Meanwhile, the cost of production of rubber increased by 2.4 per cent to Rs. 210.00 per kilogramme in 2019. However, average prices of Ribbed Smoked Sheet No. 1 (RSS1) and latex crepe were Rs. 288.51 per kilogramme and Rs. 302.32 per kilogramme, respectively, at the Colombo Rubber Auction,

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resulting in lower profit margins, which discouraged tapping operations and further investments in rubber plantations by producers. Both international and domestic demand for natural rubber was low under the slowing down of global economic activities and relatively low petroleum prices. During the year, natural rubber imports dropped by 24.0 per cent to 50.0 million kilogrammes, although synthetic rubber imports increased by 2.1 per cent to 64.0 million kilogrammes owing to relatively low global crude oil prices.

Coconut

Coconut production in 2019, estimated at 3,085.6 million nuts, was an improvement of 17.6 per cent over the output in 2018. The increase in output is attributed to the lagged effect of favourable rainfall in 2018 reported in the coconut triangle and other coconut growing areas. In line with increased nut production, the production of major coconut based products also showed an improvement. Accordingly, the production of desiccated coconut (DC), which reported a 16.7 per cent decrease in the previous year, rebounded considerably with an increase of 79.0 per cent to 44,081 metric tons. Coconut oil production also increased by 309.2 per cent to 44,648 metric tons while virgin coconut oil production increased by 2.8 per cent to 12,725 metric tons in 2019. Accordingly, the importation of palm oil declined significantly to 155,997 metric tons in 2019 from 217,730 metric tons in 2018. Meanwhile, improved coconut production helped expand the value added industries in 2019, including coconut cream, coconut milk powder and coconut milk, which are mainly produced for the export market, recording a 5.8 per cent growth in comparison to the previous year.

Table 2.5
Trends in Principal Agricultural Crops

Category	Unit	2018 (a)	2019 (b)	Change (%) 2017/18 (a)	Change (%) 2018/19 (b)
1. Tea					
1.1 Production (c)	kg mn	303.9	300.1	5.0	-1.3
1.2 Total Extent	hectares '000	200	200	-0.5	-
1.3 Extent Bearing	hectares '000	193	193	-	-
1.4 Cost of Production (d)	Rs/kg	475.29	483.79	-0.5	1.8
1.5 Average Price					
- Colombo Auction	Rs/kg	581.58	546.67	31.1	-6.0
- Export (F.O.B.)	Rs/kg	820.75	822.25	26.2	0.2
1.6 Replanting	hectares	1,027	638	-9.6	-37.9
1.7 New Planting	hectares	435	296	95.7	-32.0
1.8 Value Added as % of GDP (e)		0.7	0.7	-	-
2. Rubber					
2.1 Production	kg mn	82.6	74.8	5.1	-9.5
2.2 Total Extent	hectares '000	137	138	2.9	0.7
2.3 Area under Tapping (f)	hectares '000	107	112	3.8	4.7
2.4 Cost of Production	Rs/kg	205.00	210.00	8.3	2.4
2.5 Average Price					
- Colombo Auction (RSS 1)	Rs/kg	281.36	288.51	40.7	2.5
- Export (F.O.B.)	Rs/kg	363.93	332.29	16.7	-8.7
2.6 Replanting (f)	hectares	870	1,006	-8.8	15.6
2.7 New Planting (f)	hectares	980	1,099	10.1	12.1
2.8 Value Added as % of GDP (e)		0.2	0.2	-	-
3. Coconut					
3.1 Production	nuts mn	2,623	3,086	-18.7	17.6
3.2 Total Extent	hectares '000	499	503	-3.0	0.8
3.3 Cost of Production	Rs/nut	18.84	18.33	-0.1	-2.7
3.4 Average Price					
- Producer Price	Rs/nut	60.68	47.04	95.2	-22.5
- Export (F.O.B.) (g)	Rs/nut	68.29	41.60	50.7	-39.1
3.5 Replanting / Under Planting (h)	hectares	7,548	5,931	64.6	-21.4
3.6 New Planting (i)	hectares	10,183	6,842	63.6	-32.8
3.7 Value Added as % of GDP (e)		0.6	0.7	-14.3	16.7

(a) Revised
(b) Provisional
(c) Including green tea
(d) Includes green leaf suppliers' profit margin
(e) In growing and processing only
(f) Extent covered by cultivation assistance schemes of the Rubber Development Department.
(g) Three major coconut kernel products only.
(h) Extent covered by cultivation assistance schemes of the Coconut Cultivation Board (CCB).
(i) The extent newly planted is calculated based on the amount of coconut seedlings distributed by CCB at a conversion rate of 158 seedlings for one hectare.

Sources:
Sri Lanka Tea Board
Tea Small Holding Development Authority
Ministry of Plantation Industries
Department of Census and Statistics
Rubber Development Department
Coconut Cultivation Board
Coconut Development Authority
Plantations Companies
Sri Lanka Customs
Central Bank of Sri Lanka

Coconut prices at the Colombo Coconut Auctions (CCA) remained low during 2019 compared to the previous year, due to the increase in supply. The average auction price of coconut at the CCA declined to Rs. 27.55 per nut in 2019 from Rs. 45.55 per nut in 2018, while the average retail price of coconut in 2019 declined to Rs. 50.64 per nut by 27.4 per cent compared to the preceding year. The decline in prices was observed with respect to other coconut products as well. Accordingly, the average price of coconut oil decreased by 8.0 per cent to Rs. 260.16 per 750 ml bottle while the average local market price of desiccated coconut decreased to Rs. 251.03 per kilogramme in 2019 from Rs. 378.22 per kilogramme in 2018. Meanwhile, DC exporters were able to harness the full benefits of increased domestic production, as reflected by the 154.7 per cent growth in DC exports during 2019.

Minor Export Crops

The production of minor export crops recovered in 2019, despite the adverse weather conditions that prevailed during the year. According to the provisional estimates of the Department of Export Agriculture, the production of minor export crops increased by 6.0 per cent in 2019, compared to the decline of 12.3 per cent recorded in 2018. The production of clove, cocoa, arecanut, nutmeg and mace registered a growth in 2019, while the production of pepper, cinnamon, cardamom and citronella declined. Accordingly, clove production grew by 42.4 per cent to 4,786 metric tons. Further, production of cocoa grew by 32.7 per cent to 548 metric tons, and nutmeg and mace production grew by 22.5 per cent to 5,119 metric tons. Meanwhile, farmgate prices of pepper decreased by 11.6 per cent to Rs. 517.60 per kilogramme during the year continuing its declining trend, reflecting the low global demand in 2019. Mainly due to the prolonged drought during the flowering and fruiting seasons, the pepper harvest also declined by 1.8 per cent in comparison to the previous year. Moreover, the production of cinnamon marginally decreased by 0.2 per cent to 20,352 metric tons in 2019 from 20,398 metric tons in 2018. Further, the decline in prices also discouraged the farmers, resulting in a national dialogue on minor export crops. Meanwhile, the export volumes of clove, nutmeg and mace increased while export volumes of pepper, cardamom and coffee declined in 2019, resulting in a 1.7 per cent decline in total earnings from minor export crops. Erratic rain patterns remained a challenge for the minor export crops sector creating low yields and post harvest losses. The promotion of value addition in the minor export agriculture sector should be a strategic priority to address the challenges posed by rising costs of production and to capture higher share in the international market.

Other Field Crops

According to the provisional estimates of the Department of Census and Statistics, production of other field crops (OFCs) registered a decline owing to the impact of the adverse weather conditions and pest attacks during 2019. The production of OFCs, at 545,358 metric tons, declined by 10.1 per cent as a combined result of a 13.9 per cent decline in production during the 2018/19 Maha season and a marginal decline of 1.0 per cent in the 2019 Yala season. Maize production declined by 9.0 per cent to 245,647 metric tons in 2019, mainly due to heavy crop damages recorded in the 2018/19 Maha season caused by adverse weather and the Sena caterpillar (Fall Armyworm) infestation. Further, big onion production decreased by 35.7 per cent from 28,047 metric tons in 2018 to 18,022 metric tons in 2019. This was mainly due to the decline in average yield by around 4 per cent to 20 metric tons per hectare in 2019 and the considerable decline of 36.2 per cent in land extent cultivated. Meanwhile, the importation of big onion decreased by 2.5 per cent to 240,102 metric tons during 2019 owing to restrictions imposed by India on big onion exports, resulting in an escalation of big onion prices in the local market. However, potato production increased considerably during 2019 by 14.3 per cent to 101,642 metric tons compared to 88,897 metric tons produced in 2018. This can be attributed to the increase in the extent of land cultivated by 8.4 per cent to 5,610 hectares in 2019. In line with the increased domestic supply, the importation of potatoes also decreased by 10.5 per cent during the year. Further, the production of finger millet, black gram, gingerly, chillies, red onions, ground nuts, cowpea and green gram also decreased significantly, resulting in considerable price fluctuations in the latter part of the year, which emphasises the importance of enhancing commercial scale agriculture with proper cultivation plans to ensure domestic food security.

Vegetables

Supply of vegetables declined in 2019 owing to pest damages and extreme weather conditions. The total vegetable production declined considerably by 11.8 per cent to 1,497,733 metric tons in 2019, in comparison to 1,698,698 metric tons in 2018. This decline was mainly due to the lower production of vegetables in 2018/19 Maha season, which recorded a decline of 15.2 per cent over the previous Maha season, caused by the Fall Armyworm infestation and prolonged dry weather conditions in the early part of the year. Vegetable production during the 2018/19 Maha season was also affected by the decline in the extent of land used for vegetable cultivation, following increased paddy cultivation in the 2018/19 Maha season. Meanwhile, 2019 Yala production also declined by 7.1 per cent, as a result of heavy rainy weather conditions in the fourth quarter of the year. Responding to the reduced vegetable supply in the Maha season, both upcountry and low country vegetable prices increased in May 2019. The vegetable cultivation in the intermediate season also declined due to weather related setbacks. Accordingly, frequent price fluctuations were observed in the third quarter of the year though the vegetable supply from the Northern Province helped reduce price pressures in the vegetable market. However, towards the end of the year, vegetable prices increased once again following the seasonal price patterns, amplified by crop damages and interruptions of supplies caused by heavy rains. Further, 23,957 metric tons of vegetables with a value of US dollars 32.0 million were exported in 2019. Regular supply disruptions and price fluctuations highlight the necessity of policy measures to promote Good Agricultural Practices (GAP), enhance cold storage facilities, popularise improved technologies on crop cultivation and improve post harvest handling and processing, with the aim of increasing the efficiency of the sector.

Fruits

The production of fruits declined in 2019 owing to drought weather conditions. Fruit production recorded a decline of 3.1 per cent in 2019, against the notable growth of 28.8 per cent in the previous year. More specifically, mango, plantain and avocado production decreased considerably while orange, melon, papaw, passion fruit and pineapple production reported a growth. Sri Lanka imported 68,602 metric tons of fresh fruit, incurring a cost of US dollars 75.7 million during 2019. This is a 12.9 per cent decline in imported volume over the quantity imported in 2018. As in the preceding year, apples, oranges and grapes were the main varieties of fresh fruit imported. Meanwhile, Sri Lanka exported 38,896 metric tons of fresh fruit worth US dollars 41.1 million during 2019. Post harvest losses of the sector are estimated at around 30 - 40 per cent, which emphasise the importance of preserving fruit by means of agro-cold warehousing, canning and dehydration. Although a favourable export demand exists for local fruits, the inability to supply large quantities on a continuous basis remains a constraint. Maintaining forward and backward linkages with the stakeholders and further development of contract farming system are important to improve the fruit export market.

Sugar

Recovering from its slowdown witnessed in the previous year, sugar production increased by 2.3 per cent to 52,304 metric tons in 2019. Despite dry weather conditions and White Leaf disease outbreak, sugar factories were able to expand planting activities of the out growers, resulting in an increased level of production in 2019. The Gal Oya and Sevanagala factories contributed to the growth in production, while sugar production at the Pelwatta factory declined. The Gal Oya factory which reported 34.3 per cent contraction in production in 2018, rebounded with a growth of 33.3 per cent to 11,129 metric tons in 2019. The Sevanagala factory, recorded a growth of 8.9 per cent, from 14,709 metric tons in 2018 to 16,013 metric tons in 2019. Despite the increased availability of sugarcane for crushing at both Gal Oya and Sevanagala factories, the production increased mainly through improved sugar recovery rates[3] in 2019. The Pelwatta factory, which accounted for 48.1 per cent of total sugar production in 2019, reported a 10.3 per cent contraction to 25,162 metric tons in 2019, in comparison to 28,061 metric tons in 2018. The decline in production can be partially attributed to the limited availability of sugarcane for crushing, caused by the reduced quantity of private cane purchased. During 2019, the total extent of sugarcane cultivation (including ratoons) managed by factories increased by 9.6 per cent to 12,300 hectares. Meanwhile, the average sugar recovery rate for all sugar factories increased from 7.1 per cent in 2018 to 7.2 per cent in 2019. Further, the combined volume of sugarcane harvested in all factories increased by 5.8 per cent to 600,130 metric tons during 2019, owing to the improved average yield as well as the extent harvested. However, the supply of sugarcane to the factories by private cultivators reported a considerable decrease of 6.1 per cent to 171,174 metric tons in 2019. Recognising the vast potential of increasing sugar production through sugarcane cultivation of out growers, all sugar factories accorded a high priority to the expansion of existing out grower schemes. Meanwhile, imports of sugar decreased by 13.7 per cent to 556,270 metric tons in 2019 from 644,675 metric tons in 2018. Domestic sugar production was sufficient to meet around eight per cent of the total sugar demand[4] of the country in 2019, in comparison to nine per cent in 2018.

Livestock

The total national milk production declined in 2019, mainly due to the domestic outbreak of foot and mouth disease during the second half of the year. Milk production decreased by 6.3 per cent to 448 million litres in 2019 in comparison to the growth of 20.5 per cent recorded in the previous year. Cow milk production declined by 4.5 per cent to 374 million litres, while buffalo milk production declined by 14.4 per cent to 73.6 million litres. Moreover, the number of neat milking cows declined by 1.8 per cent to 323,490 while the number of buffalo milking cows declined by 2.6 per cent to 91,790. Meanwhile, milk production at the National Livestock Development Board (NLDB) decreased to 13.1 million litres in 2019 from 14.7 million litres in 2018, while the milk collection at MILCO (Pvt) Ltd. decreased by 27.5 per cent to 66.0 million litres. The national average cost of production of milk increased by 7.2 per cent to Rs. 51.11 per litre in 2019 from Rs. 47.67 per litre recorded in the preceding year. However, the average farm gate price increased only by 4.6 per cent to Rs. 69.96 per litre, resulting

3 Sugar Recovery Rate $= \frac{\text{Sugar Production}}{\text{Quantity of Cone Crushed}} \times 100$

4 Sugar demand = Per capita sugar consumption as per HIES -2016 x mid-year population

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Table 2.6
Livestock Sector Statistics

Sub-Sector	2018 (a)	2019 (b)	Change (%) 2017/18 (a)	Change (%) 2018/19 (b)
1. National Herd (No.) (million)	1.4	1.4	10.5	-2.5
Neat Cattle	1.1	1.1	11.0	-2.2
Buffalo	0.3	0.3	8.9	-3.4
2. National Milk Production (million litres)	477.4	447.6	20.5	-6.3
Cow Milk	391.5	374.0	19.5	-4.5
Buffalo Milk	85.9	73.6	25.3	-14.4
3. Milk Products (million litres) (c)	45.1	46.5	5.8	3.1
4. Producer Price - Cow Milk (Rs./litre)	66.88	69.96	0.8	4.6
5. National Egg Production (No.) (million)	1,972.2	2,084.2	-4.9	5.7
6. National Poultry Meat Production (mt '000)	214.2	225.0	6.6	5.0

(a) Revised
(b) Provisional
(c) Includes products of National Livestock Development Board and MILCO (Pvt) Ltd. only.

Sources: Ministry of Mahaweli, Agriculture, Irrigation and Rural Development
Department of Census and Statistics
Department of Animal Production and Health
National Livestock Development Board
MILCO (Pvt) Ltd.

in a lower profit margin for farmers. Meanwhile, the import of milk powder, at US dollars 293.5 million, reported a decline of 5.3 per cent to 93,749 metric tons. Since the domestic production of milk is sufficient only to meet around 38 per cent of the national requirement, it is vital to encourage domestic production further, while addressing the remaining bottlenecks in domestic production processes. In addition, small scale milk processing should be encouraged as the output of such producers is important, probably when the price of powdered milk increases in the international market. Meanwhile, the poultry sector showed an improved performance in 2019. Chicken production increased by 5.0 per cent to 225,000 metric tons in 2019. The number of broiler parents production increased by 9.4 per cent in 2019 over the previous year, while imports of broiler parents declined by 25.3 per cent to 286,707 in 2019, compared to 383,930 imports reported in 2018. Meanwhile, the import of layer parents also increased to 94,811, mainly due to the high market demand. The cost of production of chicken (dressed) also increased to Rs. 314.30 per kilogramme in 2019 from Rs. 265.85 per kilogramme in 2018. Further, egg production increased by 5.7 per cent to 2,084 million, while the cost of production increased to Rs. 13.70 per egg in 2019 from Rs. 12.80 per egg in 2018 for a large-scale egg producer. The import of poultry meat declined in 2019 while the export of eggs increased compared to the previous year, displaying the potential for the expansion of the poultry industry. The production of pork and mutton increased by 7.8 per cent and 15.3 per cent, respectively, to 11,240 metric tons and 1,880 metric tons, respectively. Meanwhile, beef production declined by 5.5 per cent to 29,990 metric tons.

Fisheries

According to the Ministry of Fisheries and Aquatic Resources, fish production in 2019 declined by 4.0 per cent. The decline in fish production was partly due to the decline in marine fish production, which consists of the coastal and lagoon and deep sea fish production and accounts for around 82 per cent of the total fish production. The contraction in marine output was primarily driven by the deep sea category, which declined by 9.2 per cent to 172,910 metric tons, owing to disturbances to fishing activities due to frequent cyclonic conditions in the Indian Ocean. Accordingly, several multi day fishing trips were cancelled based on weather warnings. Moreover, output in the coastal and lagoon sub sector also declined by 2.6 per cent to 242,580 metric tons. Meanwhile, output of the inland fisheries and aquaculture sector, which accounted for around 18 per cent of total production, increased by 3.0 per cent, mainly due to the stocking of fingerlings in reservoirs despite adverse weather conditions and the implementation of management regulations. During the year, around 89 million fingerlings were stocked in water bodies. Meanwhile, the production in aquaculture sub category also increased during the period under review. Nevertheless, the shrimp farm category witnessed a considerable decline of 21.8 per cent to 6,400 metric tons mainly due to the white spot syndrome disease reported in many shrimp farms. Meanwhile, according to the

Table 2.7
Fish Production

mt '000

Sub-Sector	2018	2019 (a)	Change (%) 2017/18	Change (%) 2018/19 (a)
Marine	439	415	-1.7	-5.4
Coastal and Lagoon	249	243	-5.3	-2.6
Off-shore	190	173	3.8	-9.2
Inland Fisheries	88	90	10.7	3.0
Capture	71	73	17.3	3.1
Aquaculture	8	11	-7.9	26.1
Shrimp Farms	8	6	-23.2	-21.8
Total	527	506	0.1	-4.0

(a) Provisional
Source: Ministry of Fisheries and Aquatic Resources

Ministry of Fisheries and Aquatic Resources, total fish imports increased by 13.2 per cent to 95,637 metric tons. During the year under review, dried or salted fish imports increased by 16.8 per cent to 37,590 metric tons, while canned fish imports also increased considerably by 31.1 per cent to 36,806 metric tons. In response to a drop in production, prices of large fish varieties increased by 6.8 per cent and small fish varieties increased by 20.2 per cent during the year. Meanwhile, fish exports witnessed an increase of 11.5 per cent to Rs. 53,483 million in terms of value, while registering a growth of 2.8 per cent in terms of volume to 28,771 metric tons during 2019. In the meantime, earnings from exports of ornamental fish were Rs. 2,913 million during the period under review. Sri Lanka needs to improve the handling and packing of ornamental fish in order to increase its export market share. In this regard, regional connectivity needs to be improved further to reduce the time taken for domestic transportation of ornamental fish to ports, while supporting the local packaging manufacturers.

Agriculture Policies and Institutional Support

Several policy measures were implemented in 2019 with a view to increasing output in the agriculture sector. During the year, agriculture policy mainly focused on enhancing food security, ensuring environmental sustainability and developing climate resilient agriculture. Accordingly, the paddy production programme under the National Food Production Programme was carried out with the aim of increasing the average yield while implementing several measures to produce high quality paddy seeds and popularising new technologies and machinery among farmers. Meanwhile, the paddy purchase programme by the Paddy Marketing Board (PMB) continued during 2019 with the PMB purchasing larger quantities of paddy than in 2018 to stabilise prices amidst healthy levels of paddy supplies in the market. Further, the fertiliser subsidy programme also continued in 2019. However, estimates on the stock of paddy purchased by the PMB and the quantity of fertiliser issued in 2019 were not available at the time of publication of this report.

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Table 2.8
Food Balance Sheet of Major Food Commodities

Item	Unit	2010 Production	2010 Imports	2010 Per Capita Availability (kg per Year)	2018 Production	2018 Imports	2018 Per Capita Availability (kg per Year)	2019 (a) Production	2019 (a) Imports	2019 (a) Per Capita Availability (kg per Year)
Rice (b)	mt '000	3,011	126	152	2,751	249	138	3,214	24	149
Maize	mt '000	162	16	9	270	133	19	246	118	17
Wheat	mt '000	-	1,051	51	-	1,297	60	-	1,159	53
Big Onion	mt '000	59	158	10	28	246	13	19	240	12
Sugar	mt '000	31	548	28	51	645	32	52	556	28
Potatoes	mt '000	52	130	9	89	159	11	102	142	11
Fresh Fish	mt '000	385	14	19	527	19	25	506	19	24
Cow Milk	mn litres	192	-	9	386	-	18	374	-	17
Coconut Oil	mt '000	65	3	3	11	12	1	45	5	2

(a) Provisional
(b) 1 mt of paddy = 0.7 mt of rice

Sources: Department of Census and Statistics
Sri Lanka Customs

The PMB needs to be further strengthened through modernising and expanding its storage capacity to enhance its contribution to stabilise the supply at times of market price fluctuations. Further, a carefully designed public stock management system which will effectively determine the size of stocks that need to be purchased together with the composition of the stock, purchasing locations and financing mechanism for purchases, should be adopted to ensure remunerative prices for farmers while minimising losses incurred by the PMB. In this context, it is also important to promote public–private partnerships (PPP) aimed at improving storage and distribution facilities.

The strategies that were undertaken by the government for the development of the tea sector continued in 2019 aiming at improving sectoral productivity as well as the value addition and competitiveness of tea produced in Sri Lanka. Accordingly, the government initiated preliminary discussions with stakeholders with the view of preparing a six-year strategic plan for the tea sector. Meanwhile, the Sri Lanka Tea Board (SLTB) continued its global tea promotion and marketing activities in 2019. Under a special subsidy scheme, the SLTB facilitated the participation of Sri Lankan tea exporting companies in 27 international trade fairs at a cost of Rs. 111.6 million, in 2019. The registration and renewal of the Ceylon Tea Lion Logo in Sri Lanka and other countries were continued by the SLTB, and as at end 2019, Lion Logo had been registered in 103 countries around the world. Moreover, SLTB signed 41 agreements with 18 selected private sector companies for the brand promotion subsidy scheme project for the year 2018/2019. In order to improve the standard of leaves, the SLTB continuously directed tea factories to maintain the minimum quality of green tea leaf (60 per cent immature undamaged leaf) under their 'B Leaf 60' programme, while imposing the Hazard Analysis Critical Control Points (HACCP) quality certification as a mandatory requirement for export processing warehouses. In addition, the government took measures to amend tea regulations in 2019. Accordingly, the Tea Research Board Act was amended in June 2019, and actions are being taken to amend the regulations including the Sri Lanka Tea Board Act, Tea Control Act and Tea Small Holding Development Act. Moreover, the SLTB continued its subsidy programmes in 2019 in relation to tea planting. Accordingly, an extent of 172.7 hectares of tea lands was replanted under the tea replanting subsidy scheme at a cost of Rs.25.4 million. Further, an infilling programme, a planting operation to replace dead plants with robust plants, which will provide a uniform cover leading to a higher yield, was also carried out by increasing the infilling subsidy per plant from Rs. 25 to Rs. 100. Under the tea factory modernisation scheme, a total of Rs. 17.1 million was granted to 22 tea factories. Meanwhile, a sum of Rs. 0.19 million was granted to 20 factories under the model tea land scheme. Further, Good Manufacturing Practices (GMP) were promoted to maintain quality standards at tea factories and warehouses. The tea sector of the country is plagued with low productivity, high cost of production, labour issues, low level of value addition in exports, poor plucking practices and price fluctuations in the global market. Further, various malpractices of the tea growers and tea producers resulted in the production of low quality tea with a high percentage of refuse tea at the auction. The low quality of certain tea products affects the entire value chain of tea exports and reduces the competitiveness of Sri Lanka in the global tea market. Therefore, maintenance of quality and safety at all stages of production, promotion of value added products and adoption of technology are required to revive the tea sector from its current subdued state while enhancing the country's competitiveness against other tea producing countries.

Measures to promote the rubber industry continued with the aim of increasing rubber production to 200,000 metric tons by the year 2040. Productivity improvement and expansion of rubber cultivation to non-traditional areas were the main strategies implemented in 2019.The Rubber Research Institute (RRI) continued its activities by addressing the requirements of the growers and rubber related product manufacturing industries. Accordingly, the RRI developed demonstrative models to educate stakeholders on GAP while promoting low frequency harvesting systems to reduce the cost of production. Smallholders were assisted to increase land productivity with troubleshooting activities and productivity improvement options. It is important to further popularise intercropping in rubber lands while introducing new climate resistance high yield rubber varieties to strengthen the rubber industry.

Several policy measures were introduced to further strengthen the coconut sector in 2019. A new system was initiated to register coconut lands through a mobile application. Meanwhile, the Coconut Research Institute (CRI) continued its research and development activities towards the development of the coconut sector. Accordingly, productivity improvement through adaptation to climate change was given a high priority. The Coconut Cultivation Board (CCB) continued its extension services during the period, and a special programme for improving coconut production through village based extension programmes was carried out to enhance the knowledge on adopting best practices in coconut cultivation. Moreover, the Coconut Development Authority (CDA) supported the small scale and the informal coconut sectors by providing accessories, machines and tools, awareness on business and financial management, and conducting technology transfer programmes.

In 2019, the Department of Export Agriculture (DEA) conducted several programmes to improve the minor export agriculture sector in the country. Accordingly, the DEA took several measures to increase the market share for organic spices and beverage crops at the world market by encouraging organic cultivation, and promoting GAP and GMP to assure the quality of Minor Export Crop (MEC) products. The DEA also took steps to enhance the usage of appropriate technology by supporting processing facilities. As a mechanism of promoting organic agriculture in MEC lands, investment assistance was provided to growers to convert their cultivations into organic agriculture while the cost of organic certification was borne by the DEA. Additionally, 50 per cent investment assistance was provided by the DEA to encourage the establishment of micro irrigation systems to mitigate climatic hazards and to build fences around the MEC lands to prevent crop damages by animals. Further, the DEA also provided investment assistance for processing machinery and processing centres to improve the quality of the production process and enhance the final product.

In line with the national agricultural policy, the government undertook several measures to increase agricultural productivity, ensure sustainable agricultural development and national food and nutrition security, popularise improved technologies for agriculture, and develop agro based industries. Several measures were taken to combat the Fall Armyworm pest outbreak and an integrated pest management package was developed by considering information on their biology/bionomics and behaviour. Further, with the objective of enhancing food production in the country, a general extension programme was conducted covering paddy, other field crops, vegetables and fruits sector. Accordingly, several awareness programmes were conducted to educate farmers and extension officers on early detection of pests and control measures. Further, to improve OFC production such as maize, big onion, green gram and cowpea, certified seeds and drip irrigation were popularised among farmers while promoting GAP among stakeholders. Accordingly, three new maize varieties with high average yield were released for general cultivation. Further, certified seed paddy, OFCs and vegetable seed production continued in government seed farms and under contract growing programme. Meanwhile, several measures were taken to promote the exporting of GAP certified products. In this regard, farmer training and officer training programmes were conducted to enhance awareness among farmers and officers on GAP.

The government took further measures to enhance domestic production of sugar. Accordingly, measures related to the establishment of new sugar factories and expansion of sugarcane growing lands were continued during the year. Sugarcane has been named a major plantation crop by the Cabinet of Ministers, and hence sugarcane has also become entitled to receive incentives and subsidies relevant to plantation crops. Further, sugarcane cultivation was expanded in the Kilinochchi District, mainly focusing on jaggery and syrup production. Meanwhile, in order to ensure the sustainability of the local sugar industry, the Sugarcane Research Institute (SRI) carried out several programmes including the adoption of pest and disease management programmes by surveying their incidence in commercial plantations. Hence, a special programme was undertaken by the SRI in collaboration with the Department of Agriculture to manage the impact of the Fall Armyworm out break on sugarcane. Further, the development and the adoption of new recommendations such as the application of organic fertiliser, growing resistant varieties in disease-prone areas and introduction of new weedicide formulations for effective control of weeds were also carried out. In addition, the transfer of sugarcane technologies to farmers and industries was also undertaken throughout the year.

The Department of Animal Production and Health implemented several development programmes including the livestock breeding project to upgrade cattle population in Sri Lanka. Institutional support was further strengthened to promote the domestic dairy sector. Seven veterinary offices were newly established and the construction work related to a veterinary office at Hali Ela in the Badulla District commenced during the period under review. Meanwhile, 229,418 artificial inseminations were continued in cattle and buffaloes in 2019 through divisional veterinary offices. Under the ‘heifer calf rearing project’, 16,042 heifer calves were registered in 2019. Further, vaccination and disease investigation programmes continued during the year. Accordingly, 761,938 animals were immunised against foot and mouth disease while the Mastitis control programme was continued throughout the year.

The government took several policy measures to encourage compliance with fishing practices and to strengthen the sustainability, social responsibility and economic equitability in the fisheries sector. Actions were taken to control and prevent drug peddling and human smuggling in accordance with the international standards applicable for deep sea fishing while eliminating illegal, unreported, and unregulated (IUU) fishing. In order to strengthen fishing activities, the government took measures to construct and upgrade several harbours and anchorages while promoting the ‘Green Fishery Harbour’ concept. Further, several steps were taken in collaboration with the National Aquaculture Development

Authority (NAQDA), to increase inland fish and aquaculture production, such as increasing stocks of fish fingerlings and fresh-water prawn post larvae, proper management of water bodies with community participation and establishment of community based mini-hatcheries during the year. In this regard, the NAQDA stocked 65.91 million fresh-water larvae and 88.50 million fingerlings in water bodies. Moreover, the NAQDA continued its sea cucumber production, sea bass production, crab production, aquatic plants production and marine ornamental fish breeding projects with the participation of farmers and exporters, targeting the export market while enhancing foreign income earnings of the country. Further, several schemes including the 'Wewak Samaga Gamak' programme, the fisheries village housing and livelihood development programme and lagoon development programme continued during the year to strengthen socio-economic conditions of the fisheries community.

Industry

The value added of Industry activities grew by 2.7 per cent in 2019 compared to the growth of 1.2 per cent recorded in 2018, mainly benefiting from the recovery in construction, and mining and quarrying activities which jointly accounts for a significant share of Industry activities. In the meantime, manufacturing activities recorded a slower growth in 2019. Other Industry activities, namely, electricity and gas related activities, sewerage, waste treatment and disposal activities, and water collection, treatment and supply activities continued their positive developments during the year. The Demand and Production sub-indices of the BOS related to the Industry segment also expanded on average, reflecting the growth in Industry activities during the year.

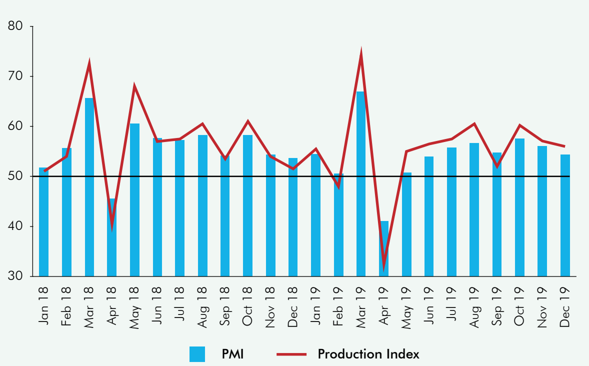
Mining and Quarrying

Mining and quarrying activities grew by 2.8 per cent in 2019, in value added terms, recovering from the contraction of 5.2 per cent in 2018 with the revival of construction activities which has backward linkages to mining and quarrying activities. Mining and quarrying activities consist of both gem mining as well as other mining activities. With regard to gem mining activities, the gem, diamond and jewellery exports volume index increased by 14.4 per cent in 2019, compared to the decline of 13.7 per cent in 2018, reflecting a revival in gem mining activities during the year. With regard to other mining activities, the recovery in construction activities has stimulated the sand mining activities. However, the completion of the land reclamation works of the Colombo Port City development project by January 2019 led to a slowdown in sand mining activities during the year in comparison to 2018. The mineral exports volume index declined at a slower pace of 1.1 per cent in 2019, compared to the decline of 5.9 per cent recorded in 2018. However, production of phosphate recorded only a marginal growth compared to the previous year reflecting the lower demand for fertiliser following the slowdown in Agriculture activities. In the meantime, graphite production recorded a decline during the year.

Manufacturing

The value added of manufacturing activities grew at a slower pace of 1.9 per cent in 2019, compared to the growth of 3.6 per cent recorded in 2018, owing to headwinds that emanated from the domestic front. The Easter Sunday attacks adversely affected the growth in manufacturing activities, particularly during the second quarter of the year and the impact faded away during the following quarters. The considerable contraction recorded in manufacturing of rubber and plastic products, wood, products of wood and cork except furniture, basic metals and fabricated metal products, and manufacturing of paper products, printing and reproduction of media products during the year largely led to a slowdown in overall manufacturing activities in 2019. However, food, beverages and tobacco products and, textile, wearing apparel and leather related products, which are the two largest sub-activities related to manufacturing, positively contributed to the overall growth in manufacturing activities. Further, manufacturing of coke and refined petroleum products, chemical products and basic pharmaceutical products, and manufacturing of machinery and equipment also recorded a favourable growth in 2019. Considering the manufacturing related indicators, the Index of Industrial Production (IIP) compiled by the DCS indicated an increase of 1.3 per cent in 2019 in comparison to the increase of 0.8 per cent recorded in 2018. Meanwhile, the Purchasing Managers' Index (PMI) for manufacturing activities, compiled by the CBSL, on a monthly basis, also indicated an overall expansion in manufacturing activities during the year. Noticeably, the manufacturing PMI recorded the historically lowest value in April 2019 reflecting the immediate impact of Easter Sunday attacks and recovered afterwards in May registering an expansion indicating a rebound in manufacturing activities.

Figure 2.6
Purchasing Managers' Index - Manufacturing (a)



(a) PMI is based on a perception survey which captures monthly developments compared to the previous month. This is a diffusion index ranging from 0-100 where an index value above the neutral level of 50 denotes an expansion, while a value below 50 denotes a contraction in the respective activity in general.

Source : Central Bank of Sri Lanka

Index of Industrial Production

The manufacturing sector registered a marginal expansion in 2019 with increased production in major sub sectors. As per the Index of Industrial Production (IIP), the manufacturing sector, which accounts for around 60 per cent of the total industry sector, witnessed a limited growth of 1.3 per cent in 2019 owing to numerous challenges such as the Easter Sunday attacks, volatile oil prices and unfavourable weather conditions. The main drivers of growth in manufacturing industries were the manufacturing of beverages, wearing apparel, wood products except furniture, paper and paper products, coke and refined petroleum products, chemicals and chemical products, other non-metallic mineral products and electrical equipment. Other sub sectors, including the manufacturing of food products, tobacco products, textiles, leather and related products, printing and reproduction of recorded media, basic pharmaceutical products, rubber and plastic products, basic metals, fabricated metal products, machinery and equipment as well as furniture witnessed a contraction during the reference period.

Partly affected by the Easter Sunday attacks, the food products sub sector, the largest sub sector in the IIP, slowed down in 2019 compared to the expansion witnessed in the previous year. The food products sub sector registered a marginal

Figure 2.7
Index of Industrial Production (IIP) (2015=100)

Source : Department of Census and Statistics

contraction of 0.4 per cent in 2019 in comparison to a growth of 1.0 per cent in 2018. The subdued performance of the food products sub sector was due to the weak performance in the manufacturing of canned fish, milk powder, bread, chicken, biscuits and salt. The deceleration in the food products sub sector was mainly due to the decreased domestic demand caused by the Easter Sunday attacks that had a spillover impact on the food manufacturing sector, high cost of production and relatively high international food prices. In line with the increased global milk powder prices, domestic prices of imported milk powder products were increased in September. However, reflecting the reduction of the Value Added Tax and the Nation Building Tax by the government, the prices of imported milk powder products were reduced in December 2019. Nevertheless, in order to overcome the challenges in the food industry and to enhance the manufacture of food items, the food industry needs to introduce value added products for all market segments in line with consumer preferences and changing lifestyles while strengthening distribution networks, particularly in rural areas. Further, brand building targeting foreign markets and timely market information are also important to transform the domestic food industry to be more competitive in the global market.

The manufacture of wearing apparel activities showed a subdued performance amidst slower growth in major traditional export markets while the manufacture of textile activities recorded a marginal contraction. The manufacture of the wearing apparel sub sector, which accounts for around one fifth of the IIP, registered a moderate growth of 1.9 per cent in 2019 in comparison to a growth of 3.9 per cent in the previous year. Meanwhile, the manufacturing of textile products, which showed an expansion of 3.6 per cent in 2018, reported a decline of 1.7 per cent in 2019. The decreased production of finished fabric and coir mattresses largely contributed to the contraction in textiles production in 2019. Although the export oriented garment and textile industry has made a significant contribution to the Sri Lankan economy in terms of generating employment and creating opportunities for local entrepreneurs, escalating labour costs and excessive dependence on GSP+ concessions have reduced the competitiveness of the industry and increased vulnerability of the sector to shocks in global markets. Therefore, it is crucial to take necessary steps to make the industry more competitive in the global market,

Table 2.9
Index of Industrial Production (IIP) 2015=100

Division	2018	2019 (b)	Change (%) 2017/18	Change (%) 2018/19 (b)
1. Manufacture of Food Products (35.2%)	106.1	105.6	1.0	-0.4
2. Manufacture of Beverages (3.8%)	99.8	103.4	9.1	3.6
3. Manufacture of Tobacco Products (1.7%)	92.7	81.0	-12.9	-12.6
4. Manufacture of Textiles (3.3%)	110.2	108.3	3.6	-1.7
5. Manufacture of Wearing Apparel (19.8%)	115.1	117.2	3.9	1.9
6. Manufacture of Leather and Related Products (0.3%)	117.0	116.7	4.5	-0.2
7. Manufacture of Wood and Products of Wood and Cork, Except Furniture; Manufacture of Articles of Straw and Plaiting Material (0.2%)	98.6	101.9	5.3	3.3
8. Manufacture of Paper and Paper Products (1.7%)	86.8	96.7	-19.9	11.4
9. Printing and Reproduction of Recorded Media (1.4%)	106.5	102.9	-0.4	-3.4
10. Manufacture of Coke and Refined Petroleum Products (7.4%)	97.5	106.8	3.4	9.6
11. Manufacture of Chemicals and Chemical Products (4.1%)	92.7	102.2	-4.1	10.3
12. Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations (0.1%)	100.1	98.2	-9.9	-2.0
13. Manufacture of Rubber and Plastic Products (5.7%)	112.0	106.4	3.7	-5.0
14. Manufacture of Other Non-metallic Mineral Products (7.8%)	108.9	117.8	-2.4	8.2
15. Manufacture of Basic Metals (2.4%)	128.3	124.2	6.2	-3.2
16. Manufacture of Fabricated Metal Products (Except Machinery and Equipment) (1.3%)	125.4	110.7	8.3	-11.7
17. Manufacture of Electrical Equipment (2.0%)	81.8	86.9	-18.1	6.3
18. Manufacture of Machinery and Equipment n.e.c. (0.7%)	102.0	99.3	-9.2	-2.6
19. Manufacture of Furniture (0.8%)	90.6	90.3	-13.9	-0.4
20. Other Manufacturing (0.3%)	95.1	66.0	-3.4	-30.7
Index of Industrial Production	**106.7**	**108.1**	**0.8**	**1.3**

(a) Weights applicable for each division are in parenthesis
(b) Provisional

Source: Department of Census and Statistics

2

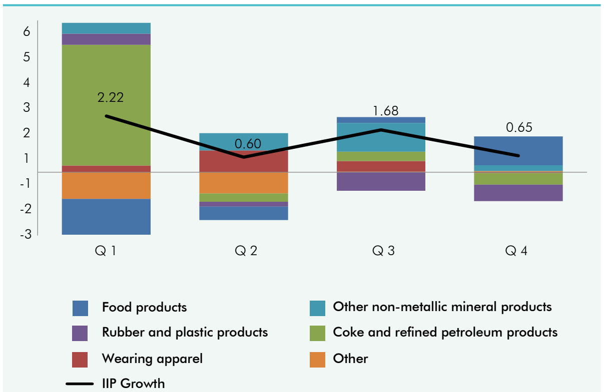
through the diversification of export markets and increased value addition, while facilitating to diversify beyond the apparel industry.

The manufacture of coke and refined petroleum products witnessed an expansion in 2019. Supported by the increased production of petrol, auto diesel, furnace oil and bitumen, the manufacture of coke and refined petroleum products sub sector witnessed a growth of 9.6 per cent in 2019 compared to a growth of 3.4 per cent in the preceding year. The petroleum refinery of the Ceylon Petroleum Corporation (CPC) was shut down for more than one and a half months during the first quarter of 2018 for maintenance purposes, but the refinery process continued without any disruption in 2019. Accordingly, the total refined petroleum products generated by the CPC recorded an increase of 11.9 per cent to 1.8 million metric tons in 2019, from 1.6 million metric tons in 2018. Depending on crude oil and refined petroleum price levels in the global market, it may be more economical to refine crude oil domestically than importing refined petroleum products in certain periods. Presently, around 70 per cent of the refined requirement of Sri Lanka is imported, and hence there is a timely need to modernise the Sapugaskanda oil refinery by upgrading the existing machinery. It is expected that the new crude oil refinery projects proposed to be established in the Port of Hambantota would support increasing the petroleum refining capacity of the country in the medium term while curbing foreign exchange outflows on account of petroleum imports to a certain extent.

The manufacture of the other non-metallic mineral products sub sector showed signs of recovery in 2019. This sub sector registered a growth of 8.2 per cent in 2019 compared to a contraction of 2.4 per cent recorded in the previous year. The increased production of cement, glass bottles, floor tiles and porcelain tableware in response to the higher demand from state infrastructure development projects and the expansion in commercial construction largely contributed to the favourable developments in this sub sector. The domestic cement production, which plays a major role in this sub sector, witnessed an increase of 19.5 per cent while the import of cement recorded a contraction of 7.6 per cent during 2019. The growth in the production of cement was mainly supported by capacity enhancements of cement manufacturers.

The manufacture of rubber and plastic products and leather and related products, which accounts for around 6 per cent of the overall IIP, recorded a contraction in 2019. While reduced production of rubber tyres contributed to the slowdown in the manufacture of the rubber and plastic products sub sector, the contraction in leather and related product categories was mainly due to a decline in the production of school shoes and shoes for men. Currently, the USA and China are the major markets for Sri Lanka's rubber and leather product exports. With subdued demand from China and the USA due to the slowdown in their economies,

Figure 2.8
Contribution to Year-on-year Change by Major Divisions of IIP in 2019



Source : Department of Census and Statistics

as well as the increased imported supply of such products domestically, the demand for domestic rubber and leather based products declined in 2019.

The manufacture of the chemicals and chemical products sub sector exhibited a favourable growth of 10.3 per cent in 2019 as against a contraction of 4.1 per cent witnessed in 2018. Fertiliser, ply bags, sanitary napkins and boxes of matches are some of the major items that drove the production growth in the chemicals and chemical products sub sector in 2019.

The manufacture of beverages sub sector showed a moderate expansion in 2019 supported by the increased production of beer and non-alcoholic beverage products such as soft drinks. Accordingly, the beverages sub sector recorded a growth of 3.6 per cent in 2019, in comparison to a growth of 9.1 per cent recorded in 2018. The increased production of beer was largely driven by external demand, resulting in an export growth of 57.2 per cent for beer in 2019. However, lower domestic demand from local households and the tourism sector owing to the Easter Sunday attacks significantly affected domestic sales and the demand for liquor in 2019. The excise tax applicable on locally manufactured liquor as well as imported liquor based on their alcohol content was increased in March and December 2019, which partly resulted in a decline in domestic demand, and thereby overall liquor production, particularly in terms of distilling, rectifying and blending of spirits. Meanwhile, demand for soft drink items increased owing to drought and warm weather conditions that prevailed in most parts of the country during the period under review.

The manufacture of wood products except furniture, electrical equipment, and paper and paper products sub sectors witnessed an expansion in 2019. Largely due to the increased production of railway sleepers, the manufacture of wood products except for furniture registered a marginal expansion of 3.3 per cent in 2019 compared to an expansion of 5.3 per cent recorded in 2018. Meanwhile, the increased production of electric panel boards, aluminium insulated wire, bare wire and washing machine related components resulted in an expansion in the manufacture of electrical equipment sub sector (6.3 per cent). Supported by the increased production of corrugated paper, paper bags, CR books and exercise books, the manufacture of paper and paper products recorded a growth of 11.4 per cent during the period under review compared to a contraction of 19.9 per cent recorded in the previous year.

The manufacture of tobacco products, basic metals, fabricated metal products, furniture and the manufacture of printing and reproduction of recorded media sub sectors reported contractions in 2019. In response to lower demand for tobacco products caused by price hikes, legal restrictions, increased taxes on tobacco products as well as growing health awareness among the public, the manufacture of tobacco products contracted in 2019 for the second consecutive year, reporting an annual decline of 12.6 per cent. The decreased production of cigarettes largely contributed to the slowdown in the manufacturing of tobacco products sub sector in 2019. In the meantime, the production of basic metals registered a contraction of 3.2 per cent during the period under review, mainly due to the decreased production of aluminium bars. Further, the manufacture of furniture sub sector recorded a marginal contraction of 0.4 per cent compared to a contraction of 13.9 per cent recorded in the previous year owing to the lower level of production of wooden furniture, plastic chairs, rubber mattresses and coir mattresses. In addition, the manufacture of fabricated metal products sub sector also witnessed a contraction of 11.7 per cent in 2019 compared to an expansion of 8.3 per cent in 2018, due to lower production of steel, oil water and cement bowsers, fuel storage tanks, steel furniture, lead oxide and aluminium products. In the meantime, the manufacture of printing and reproduction of recorded media reported a contraction of 3.4 per cent in 2019 following the marginal contraction of 0.4 per cent in 2018. The reduced production of newspapers, school stationery, printing books, and cartons largely contributed to the slowdown in printing and reproduction of recorded media.

Industrial Policies and Institutional Support

The government took several policy measures to promote innovation and thereby improve the country's competitive advantage in an increasingly challenging market environment. With the participation of the line ministries, state organisations, universities, tri-forces, police, private sector and other relevant stakeholders, two *Shilpasena* Expositions were conducted in 2019. The *Shilpasena* Exposition, which was designed to add science and technology to the Sri Lankan mindset, provided opportunities for inventors to showcase and market their inventions and innovations. The government also initiated programmes to popularise Science, Technology, Engineering, and Mathematics (STEM) education and modern technologies among various segments of the society while creating a linkage for research commercialisation. Further, the government continued its efforts to formulate a national mineral policy that would create a favourable environment for mineral based industries while providing value addition to mineral resources. Meanwhile, the National Science and Technology Commission (NASTEC) was in the process of updating the existing national science and technology policy while incorporating aspects of innovation and commercialisation. In 2019, the Sri Lanka Institute of Nanotechnology (SLINTEC) evaluated over 100 research projects and continued to implement several revenue generating projects. The Technology Transfer (*Vidatha*) Programme that seeks to transfer scientific knowledge and research innovations of scientists to the Micro, Small and Medium Enterprises (MSMEs) at the grassroot level through an islandwide network of *Vidatha* Resource Centres continued in 2019 as well. During the year under review, 3,028 *Vidatha* programmes were conducted, from which approximately 118,400 MSMEs benefitted. Meanwhile, the *Vidatha Haritha Kada Mandiya* programme that provides opportunities to the *Vidatha* entrepreneurs to improve their product quality also continued in 2019. The government facilitated the *Vidatha* entrepreneurs by conducting several exhibitions in Batticaloa, Ampara, Mullaitivu, Moneragala, Gampaha and Jaffna districts in parallel to the *Shilpasena* Exposition as a marketplace to promote the products of small entrepreneurs. In 2019, with a view to expanding technology applications in the country, 35 science and technology special projects covering rural communities in 15 districts were conducted. In the meantime, the National Institute of Fundamental Studies (NIFS) continued to develop microbial bio-fertiliser to reduce the use of imported chemical fertiliser. In cooperation with the Department of Agriculture, the NIFS applied bio-fertiliser to 15,000 acres of rice cultivation in 2019 and expect to expand the bio-fertiliser applications to 50,000 acres in 2020. Meanwhile, the Cabinet of Ministers approved the provision of long term loan facilities for companies that will start mechatronics based product development and designing and certifying of mechatronics products under the

'*Enterprise Sri Lanka*' loan scheme. The government, together with the Coordinating Secretariat for Science, Technology and Innovation (COSTI) and the National Engineering and Research and Development Centre (NERDC), was in the process of implementing a project on *Mechatronics enabled Economic Development Initiative* aiming to grow the domestic economy with high-tech exports while reducing imports by designing smart machines for local and global manufacturers.

Several line ministries continued to implement numerous initiatives to support the domestic manufacturing sector while assisting the formulation of relevant policies. The government is in the process of establishing business service centres catering to MSMEs at the district level. Such business service centres will facilitate technology transfer, skills development, quality and productivity improvement and research and development activities. An Inter-Ministerial Task Force has been established for industrial and entrepreneur development with the objective of minimising delays and problems in the decision making process in relation to the manufacturing industry. In 2019, the approval of the Cabinet of Ministers was granted to initiate the formulation of a National Industrial Policy (NIP). The NIP will be prepared in line with the objectives outlined in the *National Policy Framework of Sri Lanka for 2020-2025: Vistas of Prosperity and Splendour* as well as the Sustainable Development Goals. The NIP is expected to create a conducive environment for the industrial sector while facilitating industries operating at higher tiers to graduate to the Industry 4.0 level, the trend towards manufacturing automation and information exchange throughout the manufacturing process, by moving beyond computer automation to cyber-physical machines.

Various public institutions and industry chambers continued to implement numerous initiatives to promote the domestic industrial sector. In 2019, the National Chamber of Commerce of Sri Lanka (NCCSL) continued its endeavours to educate and uplift the Small and Medium Enterprises (SMEs) sector by conducting several training programmes in various parts of the country with a view to assist SMEs to develop their business skills and knowledge. The NCCSL, with the assistance of the government, conducted an *International Healthcare Exhibition* in July 2019 with the aim of providing opportunities to promote indigenous and western medicinal products and services. The Sri Lanka Chamber of Small and Medium Industries (SLCSMI) prepared a strategic plan to address the concerns of SMEs and conducted several workshops under the Enterprise Sri Lanka programme to create awareness among SME entrepreneurs. The SLCSMI took part in various trade fairs, exhibitions, international trade delegation meetings while creating networks with prospective buyers and sellers in a common platform. Meanwhile, the Ceylon Chamber of Commerce (CCC) continued to facilitate numerous trade delegations, training programmes and trade forums to promote trade and investment. The Industrial Technology Institute (ITI), among other initiatives, offered services in food technology areas, especially on the preparation of food to retain high nutritional value with low added sucrose, to upgrade selected MSMEs mainly in the Jaffna, Killinochchi and Vavuniya districts in 2019. In the meantime, the Industrial Development Board (IDB) continued its activities to modernise and upgrade infrastructure facilities in eleven industrial estates during the period under review. During the year, 554 new firms were established under the IDB, of which, more than 40 per cent of firms were in the category of food, beverages and tobacco products. Further, seventeen new enterprises were established with a total investment of Rs. 448 million in eight industrial estates, creating 336 new direct employment opportunities. With the evolving employment opportunities in the field of gem cutting, jewellery designing and manufacturing, the National Gem and Jewellery Authority (NGJA) conducted several special industrial training programmes for stakeholders while addressing the labour shortage in the industry. It is expected that the removal of Nation Building Tax (NBT) imposed on imports of gemstones by a person registered with the NGJA for the purpose of re-exporting after cutting and polishing such gems, would encourage the value addition in the gem and jewellery industry. Formulation and consistent implementation of a national policy for the industrial sector development, in coordination with various government institutions and trade chambers, are vital to boost growth in the industry sector.

The Board of Investment (BOI) and the Export Development Board (EDB) took several measures to attract investment from both domestic and foreign sources while actively promoting export oriented domestic manufacturing industries. Several initiatives were taken to improve service delivery in the IT industry by addressing regulatory deficiencies and inter-agency coordination issues while minimising the lead time that increases transaction costs to the investors. As at end 2019, thirteen Memoranda of Understanding (MoUs) were signed between the BOI and respective line agencies to provide a framework for granting approvals within a stipulated time period and fast track the approval processes. The BOI continued to take various measures to encourage local market oriented projects to increase their export quantities. In this regard, the BOI took steps to encourage companies that were previously focusing on the domestic market to enter the export market by granting customs duty exemptions. There are around 5,000 employment vacancies available in projects operating within BOI zones, but the companies find it difficult to fill these vacancies due to the lack of suitable applicants. Therefore, the BOI, in collaboration with line ministries, conducted several job fairs and career fair programmes countrywide to create awareness on employment opportunities available in BOI projects. In order to encourage the investment required for the domestic information technology industry, a zero Corporate Income Tax (CIT) rate was granted with effect from 1 January 2020 for gains and profits earned by any company that provides information technology and enabling services. It is expected that the reduction in the CIT rate would encourage reputed global IT companies to invest in Sri Lanka. Meanwhile, the BOI signed several agreements with a number of private companies to set up factories in Sri Lanka to manufacture various industrial products, including tyres and aluminium food containers, while providing a range of services to meet the increasing demand emerging from international markets. The EDB conducted several programmes to identify and encourage new export oriented SMEs by providing trade facilities and conducting a number of education programmes on packaging, labelling, export pricing and costing at regional levels. In order to attract multinational companies on electronics and electrical equipment to Sri Lanka with the aim of linking the domestic electrical and electronics manufacturing industry with global supply chains, the Cabinet of Ministers, in 2019, granted approval to implement the *Multinational Corporation Outreach* programme by the EDB and BOI. The programme envisages establishing 3 to 5 multinational electronics and electrical manufacturing companies in Sri Lanka by 2022. The programme expects to attract FDIs to the domestic electrical equipment industry while creating employment opportunities.

Several loan schemes were introduced with the aim to support SMEs in the industry sector in 2019. High interest rates and a lack of collateral are major issues that hinder the growth of SMEs in the country. In order to overcome these issues, the government introduced a loan scheme with concessionary interest rates for SMEs and provided credit guarantees to mitigate the collateral issue. Under the loan scheme of *Jaya Isuru* and *Small and Medium Enterprise Line of Credit programme* (*SMELoC)*, Rs. 26.5 billion was granted to SMEs. Accordingly, 964 loans were granted under the *SMELoC* in 2019 by disbursing Rs. 7.4 billion. As industrial activities were severely affected by the Easter Sunday attacks, the Ministry of Finance, Economic and Policy Development introduced two loan schemes, namely the *Working Capital Loan* and *Sancharaka Poddo*, to support SMEs in the industry sector. Further, under the Enterprise Sri Lanka programme, 44,841 loans were granted, disbursing Rs. 84.9 billion by the end 2019.

Electricity, Water and Waste Treatment

Electricity, water and waste treatment activities grew by 4.9 per cent in 2019 compared to its growth of 6.0 per cent in 2018, in value added terms, largely supported by the performance in the electricity category. Accordingly, electricity, gas, steam and air conditioning supply activities expanded by 4.0 per cent in 2019, which grew by 5.9 per cent in 2018. Considering the electricity generation data, the total electricity generation recorded a growth of 3.3 per cent in 2019 compared to its growth of 4.8 per cent in 2018. Considering the total generation mix during the year, hydropower generation declined by 24.9 per cent in 2019, largely due to low rainfall in the catchment areas, particularly during the first half of the year, in comparison to the substantial growth of 59.4 per cent recorded in 2018. Accordingly, fuel oil and coal based power generation increased during the year by 38.2 per cent and 12.5 per cent, respectively, which contracted by 28.1 per cent and 6.7 per cent, respectively, in 2018. Considering the other sub economic activities within the category, the value added of water collection, treatment and supply activities grew by 5.5 per cent in 2019, compared to its growth of 5.8 per cent in 2018. In this regard, the units of water distributed by the National Water Supply and Drainage Board (NWS&DB) increased by 5.0 per cent in 2019 reflecting the expansion in water supply activities, compared to 4.8 per cent growth recorded in 2018. Further, the total number of consumer accounts of NWS&DB also increased by 4.7 per cent in 2019 in comparison to its growth of 4.9 per cent recorded in the previous year. Meanwhile, the value added of sewerage, waste treatment and disposal activities grew by 7.3 per cent in 2019 compared to the growth of 6.7 per cent recorded in 2018.

Construction

Construction activities rebounded during the year, growing by 4.0 per cent in value added terms, against the contraction of 2.5 per cent, in 2018 with the accelerated completion of large scale construction projects. Extension of the Southern Expressway and the Outer Circular Highway, and the rapid progress of the Central Expressway project ahead of the presidential election, as well as the construction work related to condominium development projects largely contributed to the expansion in construction activities during the year. The rebound in construction activities was reflected by the increase in total cement availability of the country by 2.1 per cent in 2019, recovering from its contraction of 6.3 per cent in 2018. Accordingly, local production of cement grew at a higher rate of 19.5 per cent

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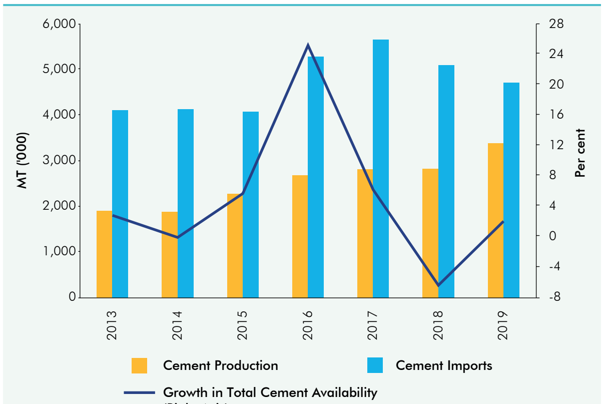
Figure 2.9
Cement Availability



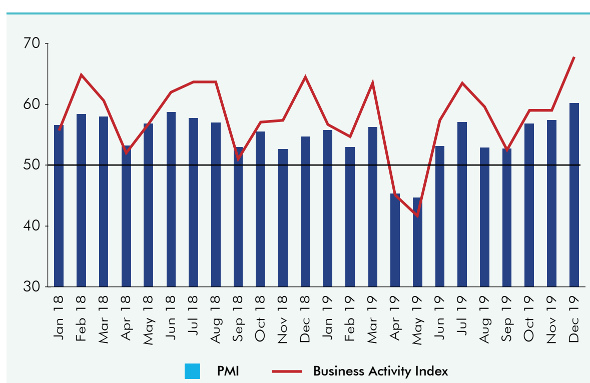
Source : Central Bank of Sri Lanka

in 2019 compared to a marginal growth of 0.8 per cent recorded in 2018, while cement imports continued to contract by 7.6 per cent in 2019 over the contraction of 9.9 per cent recorded in 2018. Further, the building material imports volume index increased by 1.5 per cent during the year against the decline of 3.7 per cent witnessed in 2018, indicating the positive developments taken place in construction activities during the year. Meanwhile, credit to the private sector granted by Licensed Commercial Banks (LCBs) for construction activities grew by 5.6 per cent as at end December 2019 compared to the growth of 14.1 per cent recorded as at end December 2018. Moreover, credit granted for personal housing construction activities by LCBs grew by 5.4 per cent as at end December 2019 compared to the growth of 13.1 per cent recorded as at end December 2018. However, as per the economic insights unveiled by the business surveys conducted by CBSL, the long delay in payments for the government related projects which created severe financial constraints for construction firms was highlighted as a barrier for sustaining the growth momentum in the construction industry. The respondents mentioned that the majority of the firms struggled to survive throughout the year due to the financial constraints.

Services

Reflecting the adverse impact from the Easter Sunday attacks, Services activities slowed down to 2.3 per cent in value added terms in 2019, recording the lowest growth in nearly five years, down from 4.6 per cent in 2018. The impact of the attacks mainly extended to tourism related services including accommodation, transportation, wholesale and retail trade activities, and other personal services. Accordingly, accommodation, food and beverage service activities contracted during the year dampening the overall growth of services, while wholesale and retail trade activities, other personal services and transportation activities which were the major contributors to the overall growth of the services, grew at a slower pace compared to the previous year. Meanwhile, financial services, real estate, public administration, telecommunication, insurance, education, professional services, human health and IT programming consultancy and related services expanded during the year. The PMI for Services activities, compiled by the CBSL on a monthly basis, indicated the lowest index value in May 2019 since the beginning of survey reflecting the adverse impact stemmed from the Easter Sunday attacks on Services activities. However,

Figure 2.10
Purchasing Managers' Index - Services (a)



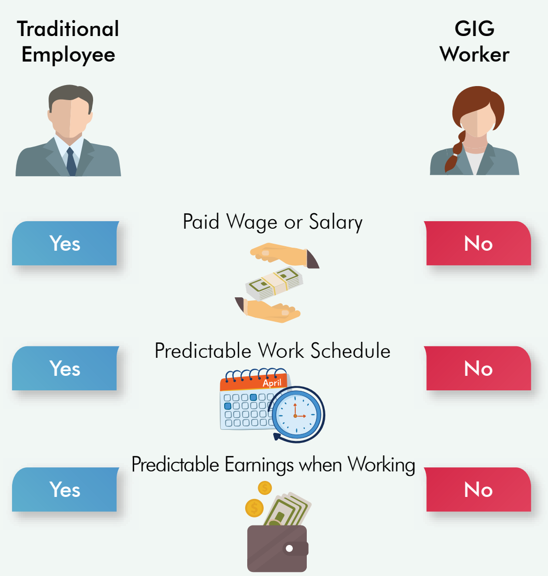
(a) PMI is based on a perception survey which captures monthly developments compared to the previous month. This is a diffusion index ranging from 0-100 where an index value above the neutral level of 50 denotes an expansion, while a value below 50 denotes a contraction in the respective activity in general.

Source : Central Bank of Sri Lanka

BOX 5
The Emergence of the Gig Economy and Its Challenges

The gig economy[1] broadly refers to an economy where freelancers or independent contractors ("gig workers") widely exist in the labour market as opposed to traditional work arrangements between the employer and employee (Figure B 5.1). The most common examples of gig activities include ride-sharing[2] and peer-to-peer (P2P) accommodation[3], which can be virtually extended to any service offering P2P and global online freelancing platforms. However, the gig economy not only influences economic growth worldwide by opening new avenues for workers, but also poses challenges in terms of regulatory environment and gauging data of macroeconomic scale such as growth and employment.

Figure B 5.1
Gig vs Traditional Work Arrangements



The gig economy has resulted in a reshaping of the existing services delivery channels through the adoption of digital technology by providing flexibility and minimising information asymmetry between clients and workers. Clients make their payroll flexible by hiring gig workers wherever necessary instead of maintaining their own staff. Workers also prefer gig contracts due to the flexibility it provides in terms of working hours with no limitations on earnings while also providing a better work-life balance (Figure B 5.2). Further, digital platforms, particularly, mobile apps that effectively match workers and clients almost instantly, allow workers to undertake an optimal number of tasks and offer services at most competitive rates. Moreover, digital platforms facilitate workers who are currently employed in regular jobs to seek for an additional stream of income on a part-time basis.

Despite its increasing popularity, the gig economy does not only provide opportunities but also poses challenges with regard to regulatory environment, collection of government revenue and particularly compiling official statistics.

The existing regulations that aim to protect worker rights and welfare, which mainly target persons employed at an organisational set-up, are under criticism and require to be revisited in light of the gig economy, as gig workers may not be sufficiently covered through such arrangements. Similarly, gig platforms, which are operating worldwide despite being based in a particular country, are difficult to be controlled by the host country's regulatory environment and taxation system in the absence of local business registration. In contrast, local platforms are under regulatory scrutiny and are liable for local taxes. Such differences in the applicability of regulation will not ensure a level playing field for local operators.

The emergence of the gig economy has created many challenges on the conventional way of measuring economic activities and estimating labour force statistics. Gig workers are not properly accounted for in the labour market statistics as the surveys provide only limited information on the additional engagements in jobs in gig nature (Bean, 2016). Even if such data are collected through surveys, work arrangements of a gig nature could create duplication (or multiplication) errors when the engagements in gig work are in addition to the primary employment[4].

The compilers of National Accounts are also under severe criticism on the grounds that economic activities might be underestimated due to inadequate coverage of the gig economy. From the production side, underestimation of national accounts could occur due to the lack of data on the magnitude of gig economic activities. The extra income generated by improved utilisation of resources under the gig economy might not be fully accounted for in the official estimates. For example, renting a room of a house for a tourist or hiring a vehicle through digital platforms adds value to the economy, yet there is no proper source to quantify the value added from such activities. Further, using deflators in determining the real value added is a common practice in national income accounting. Statisticians use price indices as deflators to derive real values from nominal values. However,

1 Gig economy is also referred to as "platform economy" or "sharing economy" or "on-demand economy"

2 To provide access to a vehicle, such as a car or a truck, on need basis

3 An individual offers accommodation facilities, such as a room or entire house/apartment, to another person

4 As cited by Zainudeen (2019), Katz and Krueger (2019) have estimated in 2015 that the growth of U.S. gig employment between 2005-2015 was 5%, which was later revised to 1-2%. One of the reasons for overestimation earlier was the lack of recognition of multiple employment in surveys.

Figure B 5.2
Reasons for Working in the GIG Economy

prices offered at gig economy platforms are significantly lower than the prices elsewhere and might not be properly reflected in official price indices (Bean, 2016). This will lead to an overestimation of price indices. In such instances, the value added to economic activity, estimated in real terms using such price deflators, would be underestimated. Moreover, sharing services in a gig economy pose challenges for the expenditure classification of national accounts, as well. For example, purchasing a car for personal use is considered as a household consumption expenditure, whereas a car purchased for renting purposes is considered as an investment. However, when a car is purchased for personal use but is utilised for an income-generating activity such as ride-sharing, it is difficult to estimate in practice the respective proportions related to investment and consumption. This leads to an underestimation of investment expenditure (Bean, 2016).

Statisticians and policymakers should continuously experiment for better sources of data and indicators that capture the impact and contribution of the gig economy since traditional sources and methods in use are ill-equipped to accurately estimate economic activities within the gig economy. In addressing this issue, advanced countries like Canada have succeeded in capturing gig income data to a certain extent using 'self-employees' tax returns' (Jeon et al., 2019). Further, a well-structured household survey that covers multiple employment income might also be able to capture income earned through gig work to a greater extent. Moreover, digital platforms that facilitate gig workers could be a vital source of data, particularly when a few platforms dominate the market.

In Sri Lanka, some of the gig economy activities, such as platform-based ride-sharing services and accommodation services have emerged in recent years. A significant number of persons living in the Western province and other urban and semi-urban areas already use mobile apps to hire a taxi or a truck instead of waiting by the roadside. Further, the gig economy would gradually reach the rural community as well, where there could be a significant potential to use gig activity in areas such as farm machinery sharing. Considering the importance of capturing gig activities in official statistics, authorities dealing with official statistics in Sri Lanka are currently working on alternative methods to estimate the gig economy. However, the unavailability of reliable data remains a major obstacle in understanding the significance of the gig economy and its impact on the Sri Lankan economy. Although gig economic activity of developing countries like Sri Lanka would be significantly lower than that of developed countries, it is certainly worth monitoring the gig economy as it is one of the fastest-growing areas in this digitalised world.

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3 Schwellnus, C., Geva, C., Pak, M. and Veiel, R. (2019) Gig economy platforms: boon or bane? [online] Available at: https://pdfs.semanticscholar.org/2f82/18abf1aa01928992196673facadec331f187.pdf?_ga=2.167602622.1268294441.1585380972-1588165493.1585380972

4 Zainudeen, A. (2019) Problems with quantifying the gig economy.[online] Available at: https://lirneasia.net/2019/02/problems-with-quantifying-the-gig-economy/

the Services PMI indicated an expansion from June onwards after the historical setback, indicating the gradual revival of Services activities. Yet, the Demand sub index of BOS related to the Services segment, remained in the negative territory during the last three quarters of the year, demonstrating the sluggish performance in Services activities following the Easter Sunday attacks.

Wholesale and Retail Trade

The value added of wholesale and retail trade activities expanded by 3.0 per cent in 2019, yet at a slower pace, compared to the growth of 4.7 per cent in 2018 with the slowdown in overall demand of the economy and import trade activities, as well as the sluggish growth in domestic agriculture activities linked to trade activities. The Easter Sunday attacks adversely affected the overall demand of the economy, particularly during the second quarter of the year. Further, policies introduced to curtail imports affected import trade activities. Considering the movement of trade indices, the total imports volume index declined by 5.8 per cent in 2019, from the increase of 1.8 per cent in 2018. Within the imports volume index, the consumer and intermediate goods imports volume declined during the year while investment goods imports volume registered a recovery. Accordingly, the consumer goods imports volume index, which increased by 9.6 per cent in 2018, decreased by 20.7 per cent in 2019 mainly due to the significant decline in vehicle imports and the setback in food and drinks imports. Further, the intermediate goods import volume index decreased by 3.8 per cent in 2019 as opposed to the increase of 2.3 per cent in 2018. However, the investment goods import volume index recorded an increase of 1.6 per cent in 2019 recovering from the decline of 0.3 per cent in 2018. Meanwhile, the total exports volume index increased by 7.1 per cent in 2019, compared to the marginal increase of 0.5 per cent in 2018, largely supported by the surge in industrial exports coupled with the recovery in agricultural exports.

Transportation and Storage

Transportation of goods and passengers, including warehousing activities grew at a slower rate of 1.4 per cent in 2019 compared to the growth of 2.1 per cent in 2018, in value added terms, due to the decline in the mobility of local community with certain security measures taken aftermath of the Easter Sunday attacks, as well as the spill-over effects of the setback in the tourism related activities. Most of the transportation related indicators witnessed a subdued performance throughout the year, reflecting the moderation in transportation services. Accordingly, passenger kilometres operated by transportation service providers recorded a decline in 2019 in comparison to the growth recorded in 2018. Considering land transportation, the total passenger kilometres operated by the Sri Lanka Transport Board and the private sector bus operators declined by 3.4 per cent in 2019, from the growth of 6.7 per cent in 2018. Further, the passenger kilometres operated by the Sri Lanka Railways also recorded a decline of 5.2 per cent in 2019 as opposed to the growth of 2.9 per cent in 2018. In terms of air transportation activities, the total passenger kilometres flown by SriLankan Airlines contracted by 4.1 per cent in 2019 mainly affected by the setback in tourist arrivals, in contrast to its growth of 14.2 per cent in 2018. Further, the freight ton kilometres flown by SriLankan Airlines also contracted by 6.7 per cent in 2019, which grew by 7.1 per cent in 2018. In the meantime, water transportation related activities also indicated a slowdown during the

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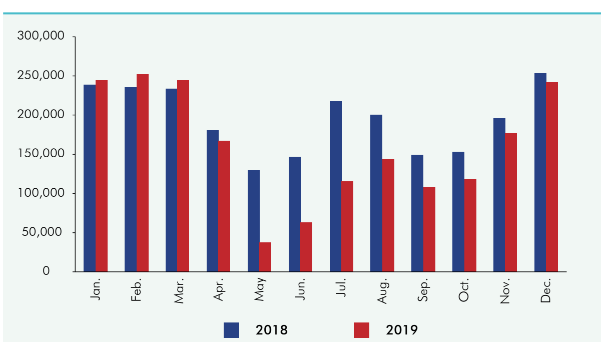
year. Accordingly, container traffic (Twenty Foot Equivalent Units - TEUs) and cargo handled by Sri Lankan ports grew only at slower rates of 2.6 per cent and 1.9 per cent respectively, in 2019, compared to the respective high growth rates of 13.5 per cent and 11.8 per cent recorded in 2018. Meanwhile, the value added of postal and courier activities grew by 5.9 per cent in 2019, compared to the growth of 1.4 per cent recorded in 2018.

Accommodation and Food Service Activities

The value added of accommodation and food service activities recorded a contraction of 4.6 per cent in 2019, as opposed to its growth of 5.7 per cent recorded in 2018, with the significant drop in tourist arrivals aftermath of the Easter Sunday attacks. The number of tourist arrivals in 2019 declined by 18.0 per cent against the growth of 10.3 per cent in 2018. Following a similar trend, the earnings from tourism also fell by 17.7 per cent in 2019 from the growth of 11.6 per cent in 2018, reflecting the setback in the tourism industry. However, benefitting from the tourism promotion campaigns and other effective measures taken after the Easter Sunday attacks, tourist arrivals gradually recovered since June 2019 on a month on month basis. Further, private consumption expenditure on restaurants and hotels, as shown in Gross Domestic Expenditure slowed down in 2019, indicating the sluggish demand for accommodation and restaurant facilities. Meanwhile, the room occupancy rate in graded hotel establishments approved by the Sri Lanka Tourism Development Authority (SLTDA) decreased substantially to 57.1 per cent in 2019 compared to 72.8 per cent recorded in 2018.

Figure 2. 11
Monthly Tourist Arrivals



Source : Sri Lanka Tourism Development Authority

Information and Communication

Expansion in telecommunication services, as well as IT programming consultancy and related activities, spurred the growth in information and communication activities, in value added terms, at a rate of 15.7 per cent in 2019 compared to the growth of 9.6 per cent in 2018. Accordingly, telecommunication services grew at a higher rate of 17.2 per cent in 2019 compared to the growth of 10.4 per cent in 2018. The indicators related to telecommunication services denoted a wide expansion during the year, reflecting the rising demand for these services in the economy. Accordingly, both cellular subscribers, as well as fixed access wire line connections increased while fixed access wireless connections witnessed a decline during the year. Further, the growing demand for internet connectivity was also headed to a substantial increase in internet services of the country during the year. Meanwhile, IT programming consultancy and related activities grew at a higher rate of 13.1 per cent in 2019, signalling the growing demand for IT based services in the economy, further increasing from the growth of 11.1 per cent in 2018. In the meantime, programming and broadcasting activities, and audio video productions activities grew by 4.8 per cent in 2019 recovering from the contraction of 10.2 per cent recorded in 2018.

Financial, Insurance and Real Estate Activities including Ownership of Dwellings

The value added of financial, insurance and real estate activities including ownership of dwellings activities expanded at a slower pace of 2.5 per cent in 2019 compared to the growth of 9.6 per cent in 2018, largely driven by the considerably slower growth in financial service activities. Accordingly, financial service activities and auxiliary financial services grew only by 2.0 per cent in 2019 compared to the higher growth of 13.4 per cent recorded in 2018. The financial services related indicators also denoted a gradual slowdown throughout the year. Accordingly, the gross loans and advances in the banking sector grew at a relatively slower pace of 5.6 per cent in 2019 compared to the significant growth of 19.6 per cent recorded in 2018. Meanwhile, the gross loans and advances in non-bank financial institutions recorded a decline of 0.9 per cent during the year from its growth of 8.7 per cent recorded in 2018. This slower expansion of loans and advances was also reflected by the demand for bank credit sub index of BOS conducted by CBSL, which on average indicated a slower increase in 2019 compared to 2018. Further, the deposit base of banks and non-bank financial institutions grew by 7.9 per cent and 5.6 per cent respectively, in 2019, compared to respective growth rates of 14.8 per cent and 4.4 per cent recorded in 2018. Meanwhile, the value added of real estate activities, including ownership of dwellings, grew by 2.4 per cent in 2019 in comparison to the growth of 3.9 per cent in 2018. In the meantime, value added of insurance, reinsurance and pension funds related activities grew by a slower pace of 5.8 per cent in 2019 compared to the growth of 17.3 per cent in 2018. Considering the insurance industry related indicators, both the premiums earned and the claims incurred by the insurance industry recorded a growth in 2019.

Professional Services and Other Personal Service Activities

Professional services and other personal service activities grew by 2.2 per cent in 2019, in value added terms, with the relatively slower growth in other personal services as well as the professional services compared to the previous year. Accordingly, other personal services grew by 2.1 per cent in 2019 compared to the growth of 2.7 per cent recorded in 2018. The overall slowdown in the economy might have affected the demand for such personal services. In the meantime, professional, scientific, technical, administration and support service activities grew at a slower pace of 2.4 per cent in 2019 in comparison to the 4.3 per cent growth recorded in 2018.

Public Administration, Defence, Education, Human Health and Social Work Activities

With the recovery of public administration and defence services, the value added of public administration, defence, education, human health and social work activities expanded by 2.3 per cent in 2019 from 1.2 per cent in 2018. Accordingly, public administration, defence and compulsory social security activities grew by 2.1 per cent in 2019 against the contraction of 0.6 per cent recorded in 2018. Further, human health activities, residential care and social work activities grew by 1.9 per cent in 2019 in comparison to the growth of 3.0 per cent recorded in 2018. In the meantime, education services recorded a growth of 3.1 per cent in 2019, contributing positively to the overall growth of the segment, though at a slower rate, compared to the growth of 4.0 per cent recorded in 2018.

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2.5 Expenditure

Gross Domestic Expenditure (GDE) which consists of consumption and investment expenditure of the economy, at current prices, grew at a moderate pace of 3.3 per cent amounting to Rs. 15,935.6 billion in 2019, compared to its growth of 8.0 per cent in 2018. This slowdown was mainly attributable to the considerable decline of 5.9 per cent recorded in the investment expenditure during the year against the growth of 3.8 per cent in 2018. However, consumption expenditure at current prices grew by 6.9 per cent in 2019 compared to that of 9.7 per cent in 2018, contributing positively to the growth in GDE. With regard to the external demand at current prices, the export of goods and services recorded a growth of 5.5 per cent in 2019, in comparison to the growth of 13.2 per cent recorded in 2018, while import of goods and services recorded only a marginal growth of 0.9 per cent in 2019, compared to the growth of 12.4 per cent in 2018. The substantial slowdown in import of goods and services in comparison to the growth in export of goods and services led the net external demand to record an improvement of 13.4 per cent at current prices in 2019, compared to the decline of 10.3 per cent recorded in 2018. Reflecting the above developments, GDP at current prices, which is the aggregate of GDE and net external demand, amounted to Rs. 15,016.1 billion in 2019, recording a growth of 4.5 per cent, compared to the growth of 7.8 per cent in 2018. Considering the developments in expenditure in constant prices, consumption expenditure recorded a growth of 3.5 per cent in 2019, compared to the growth of 2.9 per cent recorded in 2018. Nevertheless, investment expenditure at constant prices, which grew by 4.3 per cent in 2018, contracted by 9.5 per cent in 2019, leading to a decline in GDE by 0.7 per cent against the growth of 3.3 per cent in 2018. At constant prices, export of goods and services grew by 7.1 per cent in 2019, compared to the marginal growth of 0.5 per cent recorded in 2018, while import of goods and services recorded a contraction of 5.8 per cent in 2019, against its growth of 1.8 per cent in 2018. Accordingly, net external demand at constant prices also improved significantly by 23.2 per cent in 2019, compared to the deterioration of 3.5 per cent recorded in 2018.

Table 2.10
Aggregate Demand (a)

Item	Current Market Prices (Rs.mn)			Constant (2010) Prices (Rs.mn)		
	2017 (b)	2018 (b)(c)	2019 (c)	2017 (b)	2018 (b)(c)	2019(c)
A. Domestic Demand						
Consumption	10,079,907	11,055,624	11,822,861	7,224,405	7,433,998	7,692,548
(% Change)	5.8	9.7	6.9	2.7	2.9	3.5
Gross Domestic Capital Formation	4,210,997	4,372,357	4,112,690	3,366,348	3,509,874	3,175,883
(% Change)	26.0	3.8	-5.9	6.7	4.3	-9.5
Total Domestic Demand	**14,290,904**	**15,427,981**	**15,935,551**	**10,590,753**	**10,943,872**	**10,868,431**
(% Change)	**11.0**	**8.0**	**3.3**	**3.9**	**3.3**	**-0.7**
B. External Demand						
Export of Goods and Services	2,909,720	3,292,414	3,472,337	1,714,147	1,722,275	1,844,791
(% Change)	14.6	13.2	5.5	7.6	0.5	7.1
Import of Goods and Services	3,872,521	4,354,292	4,391,746	2,945,752	2,997,547	2,823,843
(% Change)	13.4	12.4	0.9	7.1	1.8	-5.8
Net External Demand	**-962,801**	**-1,061,878**	**-919,410**	**-1,231,605**	**-1,275,272**	**-979,052**
(% Change)	**-10.1**	**-10.3**	**13.4**	**-6.5**	**-3.5**	**23.2**
C. Total Demand	**13,328,103**	**14,366,103**	**15,016,142**	**9,359,147**	**9,668,600**	**9,889,379**
(% Change)	**11.1**	**7.8**	**4.5**	**3.6**	**3.3**	**2.3**

(a) Based on the GDP estimates (base year 2010)
(b) Revised
(c) Provisional

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

Consequently, GDP at constant prices grew by 2.3 per cent in 2019 in comparison to the growth of 3.3 per cent in 2018.

Consumption

Benefiting from the upsurge in private and government expenditure, consumption expenditure, which is the largest expenditure component of GDP expanded by 6.9 per cent at current prices, in 2019 accounting for 78.7 per cent of GDP. However, private consumption, especially related to transportation, clothing and, restaurants and hotels was affected by the Easter Sunday attacks due to declined mobility and low tourist arrivals. Accordingly, private consumption expenditure (PCE) recorded a growth of 6.8 per cent, accounting for 88.0 per cent of the total consumption expenditure in 2019, compared to its growth of 9.0 per cent in 2018. Meanwhile, government consumption expenditure at current prices grew by 8.1 per cent in 2019 compared to the growth of 15.2 per cent recorded in 2018. This growth was largely driven by the expansion in individual consumption expenditure of the government which grew by 28.0 per cent while the collective consumption expenditure of the government recorded only a marginal growth of 0.2 per cent in 2019.

Private Consumption Expenditure (PCE)

PCE on foods and non-alcoholic beverages at current prices, grew at a slower rate of 2.3 per cent in 2019, compared to the growth of 8.5 per cent in 2018. Indicating this slowdown, the import of food and beverages declined further in 2019 compared to the previous year, both in value and volume terms. Accordingly, the import rupee value index and the volume index for food and beverages declined by 1.7 per cent and 7.0 per cent, respectively, in 2019, which declined by 7.5 per cent and 11.8 per cent, respectively, in the previous year. Further, the domestic agriculture production recorded a slowdown causing a moderation in food related manufacturing activities, which might have partially contributed to the slight increase in annual average food inflation by 0.7 per cent in 2019 compared to its decline of 0.2 per cent in 2018, as reflected by the National Consumer Price Index (NCPI, 2013 = 100). The combined outcome of these developments has resulted the slower growth in PCE on food and non-alcoholic beverages at current prices in 2019 compared to the previous year.

The clothing and footwear related PCE at current prices grew by 4.5 per cent in 2019, compared to the growth of 9.0 per cent in 2018. Considering the import indices related to this category, the import of clothing and accessories in both rupee value and volume terms decreased by 2.0 per cent and 16.9 per cent, respectively in 2019, which declined respectively by 10.6 per cent and 21.3 per cent in 2018. The manufacturing of textiles, wearing apparel and leather related products grew at a higher rate in 2019, compared to the previous year indicating the expansion in domestic supply. However, the annual average prices of clothing and footwear category of NCPI increased by 4.7 per cent in 2019 compared to 4.0 per cent increase in 2018.

PCE on housing, water, electricity, gas and other fuels, at current prices, grew at a higher rate of 7.9 per cent in 2019, compared to the growth of 7.5 per cent recorded in 2018. Although there were no tariff revisions for water and electricity during 2019, the significant increase in housing rent and fuel prices, both diesel and petrol prices, during the year compared to 2018, mainly contributed to the increase in

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Table 2.11
Composition of Private Consumption Expenditure at Current Market Prices (a)

Category	As a Percevetage of Total PCE (%)			Growth (%)	
	2017 (b)	2018 (b)(c)	2019 (c)	2018 (b)(c)	2019 (c)
1. Food and Non-alcoholic Beverages	29.5	29.4	28.1	8.5	2.3
2. Alcoholic Beverages, Tobacco and Narcotics	3.4	3.5	3.4	12.5	4.6
3. Clothing and Footwear	4.1	4.1	4.0	9.0	4.5
4. Housing, Water, Electricity, Gas and Other Fuels	10.4	10.3	10.4	7.5	7.9
5. Furnishings, Household Equipment and Routine Household Maintenance	1.1	1.1	1.0	10.5	3.2
6. Health	2.6	2.7	2.8	10.9	12.1
7. Transport	23.2	23.9	24.2	12.5	8.0
8. Communication	1.0	0.9	0.9	-4.2	3.2
9. Recreation and Culture	1.7	1.7	1.7	10.6	4.8
10. Education	1.2	1.2	1.3	9.8	9.8
11. Restaurants and Hotels	4.2	4.3	4.0	10.0	0.2
12. Miscellaneous Goods and Services	21.5	21.4	21.5	8.9	6.9
13. Direct Purchases Abroad by Residents	2.8	2.9	2.9	10.7	9.0
14. Less: Direct Purchases in Domestic Market by Non-residents	6.7	7.4	6.2	18.9	-9.4
Total Private Consumption Expenditure	**100.0**	**100.0**	**100.0**	**9.0**	**6.8**

(a) Based on the GDP estimates (base year 2010)
(b) Revised
(c) Provisional

Source: Department of Census and Statistics

household expenditure of this category. Further, the electricity sales to the domestic sector increased by 4.8 per cent in 2019, reflecting the increase in electricity consumption, compared to the growth of 3.9 per cent recorded in 2018. At the same time, the distribution of water units to the domestic sector grew by 5.6 per cent in 2019 compared to the growth of 4.6 per cent recorded in the previous year. However, the price of domestic liquid petroleum gas reduced during the year. Meanwhile, the annual average prices of housing, water, electricity, gas and other fuels category of NCPI went up by 8.0 per cent in 2019, compared to 1.3 per cent increase in 2018, largely due to the significant increase in housing rent, reflecting increased price pressure in this category.

Transport activities related PCE at current prices grew at a relatively slower pace of 8.0 per cent in 2019, compared to the growth of 12.5 per cent recorded in 2018. This edging down of PCE on transport activities could be partly attributable to the unchanged passenger transport fares on bus services and railway service during the year. Further, the import of vehicles declined in both rupee value and volume terms in 2019 compared to the substantial growth recorded in 2018, reflecting the slowdown in PCE on transport activities during the year. Meanwhile, the annual average prices related to transport category in NCPI increased by 4.0 per cent in 2019, compared to 8.4 per cent increase in 2018, reflecting the relative slowdown in price pressure in transportation related expenditure.

PCE on health activities at current prices grew by 12.1 per cent in 2019, compared to the growth of 10.9 per cent recorded in 2018, while PCE on education activities increased by 9.8 per cent in 2019, at the same rate as in 2018. Considering the price pressure, the health category related annual average prices of NCPI increased by 7.3 per cent in 2019, compared to the 7.6 per cent increase in 2018. In the meantime, the annual average prices in NCPI related to the education category increased by 8.0 per cent in 2019 in comparison to 6.0 per cent increase in 2018. However, the share of health and education related expenditure in overall PCE still remains low due to the dominance of the public sector in providing health and education services for free of charge. This dominance was reflected by the higher contribution to the value added of health and education services from the General Government sector under the institutional sector classification.

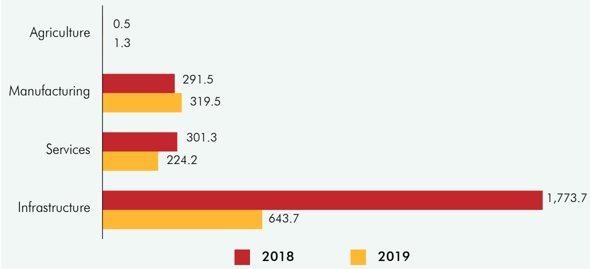
Government Consumption Expenditure (GCE)

GCE at current prices, which comprises of collective final consumption expenditure (66.4 per cent of GCE) and individual final consumption expenditure (33.6 per cent of GCE) of the government, expanded by 8.1 per cent in 2019 compared to the growth of 15.2 per cent recorded in 2018, amidst the continuation of fiscal consolidation measures. The collective final consumption expenditure, which consists of government expenditure on services such as defence, social protection, general public services, economic affairs and public order and safety, expanded marginally by 0.2 per cent in 2019 compared to the higher growth of 20.1 per cent in 2018. This was mainly attributable to the decrease in government expenditure on general public services, which recorded a contraction of 27.4 per cent in 2019 compared to a higher growth of 112.3 per cent recorded in 2018. Meanwhile, the individual final consumption expenditure of the government, which mainly consists of government expenditure on health and education services, recorded a substantial growth of 28.0 per cent in 2019, compared to its growth of 4.6 per cent in 2018.

Investment

Despite a favourable growth in gross fixed capital formation, the investment expenditure at current prices contracted by 5.9 per cent in 2019, compared to the growth of 3.8 per cent recorded in 2018. The contraction in investment expenditure was mainly driven by the significant decline in changes in inventories and acquisition less disposals of valuables. Considering the growth in gross fixed capital formation, investment on construction activities, which is the largest category of the investment expenditure, recorded a substantial growth in 2019 compared to the previous year. This expansion was also observed in the movements of trade indices which denoted a recovery in the importation of investment goods, including building materials. Further, a continuous growth can be observed in credit granted by LCBs to the private sector for construction activities. Meanwhile, investment on machinery and equipment and weapon systems, transport equipment, information and communication technology (ICT) equipment, and intellectual property products also recorded a growth during the year. However, investments on cultivated biological resources recorded a decline in 2019 compared to the previous year. As reflected by the business surveys conducted by the CBSL, the decline in investment expenditure could be partly attributable to the political and policy uncertainty that prevailed in the country which delayed investment decisions. Further, the investment index of BOS, on average, edged down in 2019 compared to 2018 indicating the slowdown in private investment activities. Considering the government financial statistics, public investment expenditure recorded a marginal growth in 2019 against the contraction recorded in 2018.

Figure 2.12
Foreign Direct Investment of BOI Enterprises (a) (US$ million)



(a) including loans

Source: Board of Investment of Sri Lanka

Foreign Direct Investment (FDI), including loans to projects approved by the Board of Investment (BOI), decreased by 49.8 per cent to US dollars 1,188.7 million[5] in 2019, compared to US dollars 2,366.9 million recorded in 2018. The FDI inflow in 2018 included foreign investment in relation to the divestiture of the Hambantota Port. Therefore, relative to 2018, the contraction in FDI inflows in 2019 was mainly caused by a reduction in FDI inflows to infrastructure projects and services sectors, which recorded a drop of 63.7 per cent and 25.6 per cent, respectively. However, FDI inflows pertaining to the manufacturing sector, which accounted for more than one fourth of total FDI inflows during the period under review, registered a growth of 9.6 per cent to US dollars 319.5 million. In the meantime, FDI inflows to the agriculture sector continued to be at marginal levels in 2019 as well.

5 The FDI figure corresponds to receipts, including loans, to companies registered with the BOI and may differ from the estimates presented in Chapter 5, mainly due to the inclusion of FDI inflows to non-BOI companies in the latter.

The total value of projects approved by the BOI in 2019 under Sections 16 and 17 of the BOI Act is estimated at Rs. 4,732.7 billion. Estimated investment inflows to projects approved in the food, beverages and tobacco, textile, wearing apparel and leather products, services, chemicals, petroleum, coal and rubber and plastic products, non-metallic mineral products, and other manufactured products sectors registered an increase during the period under review, compared to the previous year. However, the investment value of project approvals in fabricated metal products, machinery and transport equipment recorded a decline in 2019, compared to 2018. The estimated investment value of projects contracted

Table 2.12
Investment and Employment in Enterprises Registered under Board of Investment of Sri Lanka (BOI) and Ministry of Industries and Supply Chain Management

	No. of Projects		Estimated Investment (Rs. million)						Employment (No.)	
	2018 (a)	2019 (b)	2018 (a)			2019 (b)			2018 (a)	2019 (b)
			Foreign	Local	Total	Foreign	Local	Total		
BOI (Under Act No. 4 of 1978)										
Projects Approved	146	152	176,034	210,597	386,631	4,586,853	145,878	4,732,731	27,769	32,076
Under Section 17 (c)	130	142	174,417	207,512	381,929	4,583,054	145,647	4,728,701	27,261	31,770
Under Section 16	16	10	1,618	3,084	4,702	3,800	230	4,030	508	306
Projects Contracted Under Section 17 (c)	95	104	75,260	146,345	221,604	747,282	117,889	865,170	24,181	17,841
Realised Investment Under Section 17 (d)(e)	1,860	1,909	2,073,905	1,297,696	3,371,601	2,281,863	1,470,123	3,751,986	507,313	n.a
Projects in Commercial Operations (d)	2,325	2,214	399,266	524,458	923,724	435,577	556,920	992,496	359,474	351,821
Under Section 17 (c)	1,708	1,665	372,930	514,774	887,704	409,556	547,892	957,449	327,606	322,427
Under Section 16	617	549	26,336	9,684	36,020	26,020	9,027	35,048	31,868	29,394
Ministry of Industries and Supply Chain Management										
Companies Registered (d)	2,674	2,876	-	-	206,565	-	-	n.a.	314,230	n.a.

(a) Revised
(b) Provisional
(c) Includes expanded projects
(d) Cumulative as at end of year
(e) Cumulative actual investment values are given
Note: Projects approved and contracted under Sec.17 of the BOI Act are exempted from customs and exchange control regulations subject to the fulfilment of the investment threshold or any other specified requirements.

Sources: Board of Investment of Sri Lanka
Ministry of Industries and Supply Chain Management

under Section 17 during 2019 was Rs.865.2 billion compared to Rs.221.6 billion recorded in the previous period. Estimated investment in projects that commenced commercial operations under Sections 16 and 17 of the BOI Act amounted to Rs.992.5 billion as at end 2019, reflecting an increase of 7.4 per cent over the previous period. The cumulative realised investment of the BOI by end 2019 was Rs.3,752.0 billion compared to Rs.3,371.6 billion recorded by end 2018.

Table 2.13
Total Resources and Their Uses at Current Market Prices (a) (b)

Item	Percentage Share %		Growth %	
	2018 (c)	2019	2018 (c)	2019
A. Resources				
Gross Domestic Product	76.7	77.4	7.8	4.5
Import of Goods and Services	23.3	22.6	12.4	0.9
Total	**100.0**	**100.0**	**8.8**	**3.7**
B. Utilisation				
Consumption	59.1	60.9	9.7	6.9
Gross Fixed Capital Formation	19.6	21.0	4.4	10.8
Changes in Inventories and Acquisition less Disposals of Valuables	3.7	0.2	0.9	-93.9
Export of Goods and Services	17.6	17.9	13.2	5.5
Total	**100.0**	**100.0**	**8.8**	**3.7**

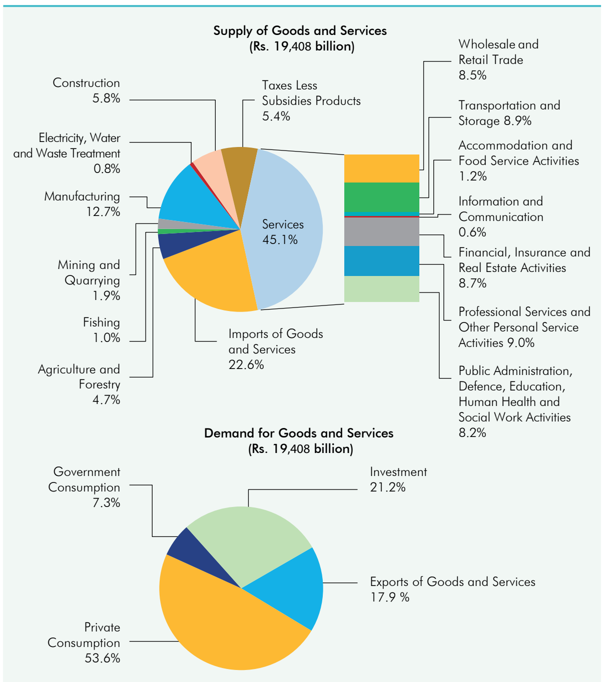
(a) Based on the GDP estimates (base year 2010)
(b) Provisional
(c) Revised

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

Availability and Utilisation of Resources

The total available resources of the economy at current prices, including both domestic and external resources, expanded only by 3.7 per cent amounting to Rs. 19,407.9 billion in 2019, in comparison to the 8.8 per cent growth recorded in 2018. Both GDP and imports at current prices grew at a slower pace in 2019 compared to the previous year, reducing the resource availability of the country. Meanwhile, the resource availability at constant prices expanded marginally by 0.4 per cent in 2019 compared to the 2.9 per cent growth recorded in 2018, on account of the contraction recorded in imports together with the slower expansion in GDP at constant prices during the year.

Figure 2.13
The Economy in 2019 (at Current Market Prices) (a)



(a)) Based on the GDP estimates (base year 2010)

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

The available resources of the economy were utilised for consumption and investment purposes and exports during the year. Most of the resources were utilised for consumption purposes, which accounted for 60.9 per cent of the total resource utilisation at current prices in 2019, compared to its share of 59.1 per cent recorded in 2018. In the meantime, the share of resources utilised for exports increased to 17.9 per cent in 2019, from 17.6 per cent recorded in 2018. However, the share of resources utilised for investment purposes decreased to 21.2 per cent in 2019, compared to 23.4 per cent recorded in 2018.

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Table 2.14
Consumption, Investment and Savings at Current Market Prices (a) (b)

Item	Rs. million		Growth (%)		As a per cent of GDP (%)	
	2018 (c)	2019	2018 (c)	2019	2018 (c)	2019
1. Gross Domestic Product at Market Price	14,366,103	15,016,142	7.8	4.5	100.0	100.0
2. Consumption Expenditure	11,055,624	11,822,861	9.7	6.9	77.0	78.7
Private	9,744,969	10,405,872	9.0	6.8	67.8	69.3
Government	1,310,655	1,416,989	15.2	8.1	9.1	9.4
3. Investment	4,372,357	4,112,690	3.8	-5.9	30.4	27.4
4. Domestic Savings	3,310,479	3,193,281	1.9	-3.5	23.0	21.3
Private	3,480,219	3,603,537	4.1	3.5	24.2	24.0
Government	-169,740	-410,256	-76.5	-141.7	-1.2	-2.7
5. Domestic Savings - Investment Gap	-1,061,878	-919,410	-10.3	13.4	-7.4	-6.1
6. Net Primary Income from Rest of the World (d)	-389,601	-432,250	-10.4	-10.9	-2.7	-2.9
7. Net Current Transfers from Rest of the World	999,504	1,030,690	3.6	3.1	7.0	6.9
8. National Savings	3,920,382	3,791,721	1.6	-3.3	27.3	25.3

(a) Based on the GDP estimates (base year 2010)
(b) Provisional
(c) Revised
(d) The difference with the BOP estimates is due to the time lag in compilation.

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

Savings

Domestic savings of the economy at current prices recorded a contraction of 3.5 per cent amounting to Rs. 3,193.3 billion in 2019, compared to the growth of 1.9 per cent recorded in 2018. This could be partly attributable to the slower growth in private savings which grew by 3.5 per cent in 2019, compared to its growth of 4.1 per cent in 2018. Further, the substantial increase in government recurrent expenditure surpassed the slower increase in government revenue, resulting in a higher increase in government dis-savings in 2019 compared to the previous year, thereby dampening the growth in domestic savings. Accordingly, domestic savings as a percentage of GDP decreased to 21.3 per cent in 2019, compared to its share of 23.0 per cent in 2018.

National savings at current prices contracted by 3.3 per cent amounting to Rs. 3,791.7 billion in 2019, compared to the growth of 1.6 per cent recorded in 2018. This setback was largely attributable to the contraction witnessed in both domestic savings and net primary income from the rest of the world in rupee terms. However, net current transfers from the rest of the world in rupee terms, recorded an expansion during the year, driven by the increase in workers' remittances. According to these developments, national savings as a percentage of GDP decreased to 25.3 per cent in 2019, from 27.3 per cent in 2018. However, due to the higher contraction in investment expenditure, the national savings-investment gap narrowed to 2.1 per cent of GDP in 2019, from 3.1 per cent of GDP in 2018.

2.6 Income

The aggregate of income components which is equal to the total gross value added of the economy grew by 6.1 per cent in 2019 at current prices, compared to the growth of 8.9 per cent in 2018. Gross Operating Surplus (GOS) which is the largest income generating component of the economy grew by 7.2 per cent in 2019, compared to the growth of 6.1 per cent in 2018, accounting for 63.1 per cent of GDP. This growth was mainly attributable to the expansion in Net Operating Surplus (NOS), the largest sub item within GOS, which grew by 9.2 per cent in 2019, compared to the growth of 5.4 per cent in 2018. Considering the other two sub items of GOS, consumption of fixed capital grew by 4.4 per cent in 2019 in comparison to the growth of 5.7 per cent recorded in 2018 while mixed income recorded a contraction of 4.3 per cent in 2019, from the growth of 11.5 per cent in 2018. Meanwhile, Compensation of Employees (CE) which accounted for 29.5 per cent of GDP in 2019 recorded a slower growth of 3.5 per cent during the year compared to a higher growth of 15.3 per cent in 2018. However, the other income component, the taxes less subsidies on production recorded a substantial growth of 43.4 per cent in 2019, compared to the marginal growth of 0.7 per cent recorded in 2018, accounting for 0.4 per cent of GDP.

According to the institutional sector classification of income generation, the HH and NPISH sector provided the highest contribution to the total gross value added of the economy at current prices. When considering the sectoral contribution to GOS, the HH and NPISH sector represented 57.7 per cent of GOS, recording a growth of 5.1 per cent in 2019. This was followed by the NFC sector, which accounted for 35.4 per cent of GOS and grew by 6.6 per cent in 2019. With regards to CE, the NFC sector accounted for 34.6 per cent of CE and grew by 9.9 per cent in 2019. Further, the HH and NPISH, and GG sectors accounted for 30.6 per cent and 28.2 per cent of CE, respectively, in 2019 and recorded growth rates of 4.5 per cent and 5.6 per cent, respectively. Moreover, the FC sector contributed for 6.7 per cent of CE and registered a contraction of 28.0 per cent in 2019. The major contributor to taxes less subsidies on production was the NFC sector which accounted for 91.1 per cent of this component and recorded a considerable growth of 43.4 per cent in 2019.

Table 2.15
Income Components by Institutional Sector at Current Market Prices (a) (b)

Item	Percentage Share (%)							
	2018 (c)				2019			
	Non-Financial Corporations (NFC)	Financial Corporations (FC)	General Government (GG)	Households and Non-Profit Institutions Serving Households (HH and NPISH)	Non-Financial Corporations (NFC)	Financial Corporations (FC)	General Government (GG)	Households and Non-Profit Institutions Serving Households (HH and NPISH)
Compensation of Employees	**32.6**	**9.6**	**27.6**	**30.2**	**34.6**	**6.7**	**28.2**	**30.6**
Gross Operating Surplus	**35.7**	**3.4**	**2.1**	**58.8**	**35.4**	**5.0**	**1.9**	**57.7**
Net Operating Surplus	39.4	3.9	0.7	55.9	38.6	5.8	0.6	54.9
Mixed Income	-	-	-	100.0	-	-	-	100.0
Consumption of Fixed Capital	41.9	2.9	13.1	42.1	41.6	3.1	12.7	42.6
Other Taxes less Subsidies on Production	**91.1**	**8.6**	**-**	**0.3**	**91.1**	**8.6**	**-**	**0.3**
Gross Value Added at Basic Price	**34.8**	**5.4**	**10.4**	**49.3**	**35.4**	**5.5**	**10.2**	**48.8**

(a) Based on the GDP estimates (base year 2010)
(b) Provisional
(c) Revised

Source: Department of Census and Statistics