

# **BUSINESS SUSTAINABILITY THROUGH LEAN AND GREEN PRACTICES: MANUFACTURING SMES IN SRI LANKA**

Edited By  
Kumudinei Dissanayake  
Rajishtha De Alwis Seneviratne



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# 1

## **Sustainable Development Goals (SDGs): Implementation, Achievements and Challenges Faced in Sri Lanka**

**Hasith Kandaudahewa and Nayani Melegoda**

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### **1.1. Introduction**

The United Nations was established after World War II, with the main objective of maintaining peace and security in the world. Sri Lanka, soon after independence in 1948 applied to obtain membership of the United Nations (UN). It was not successful in the first few attempts, until 1955 due to cold war politics of superpowers at the time. Sri Lanka persisted until it got the UN membership as country believes in sustainable peace and security in the world for development and peaceful co-existence. Maintaining peace and security, especially focusing on human security since independence, has been a mandate of successive governments of Sri Lanka up to date.

More than 30 years have passed since UN introduced Human Development as a result of global discussions on the connecting link between development and economic growth in a people-centred manner. People-centred relations (social constructivism in International Relations) are at the center of Multilateralism today. Human Development Index published yearly results from this UN initiative, where the people-centred approach focuses on improving the lives people lead rather than assuming that economic growth will lead automatically to greater opportunities for all people. In modern times international cooperation and Multilateralism focus on humans, animals, plants and the environment as the centre of all development initiatives.

Sri Lanka, a littoral state in the Indian Ocean region. The ocean around us is crucial to the country in economic development. Sri Lanka has 1,340 km of coastline while benefiting 12 nautical miles (nm) of the territorial sea. The territorial sea cover 21500 sqkm, approximately 1/3 of Sri Lankan total area, where the vast unexplored resources lie in the seabeds (Martenstyn, 2021). In addition to that, Sri Lanka has

the authority to explore the marine and other resources within the 24nm of the contiguous zone and 200nm Exclusive Economic Zone (EEZ) under the United Nations Convention on the Law of the Sea (1982). According to The International Trade Administration - US Department of Commerce (2021) report, around 30,000 sqkm in Mannar Basin in Northern area has over five million barrels of oil resources so far unexplored. Thus, these reserves of energy resources will undoubtedly facilitate Sri Lanka's future economic development.

Sri Lanka today has a population of 21.8 million, a Gross National Income per capita of Sri Lankan Rupees (LKR) 688, 719 while the unemployment rate is at 5.8% in 2020 according to key economic indicators of the Central Bank of Sri Lanka (Central Bank of Sri Lanka, 2021). According to the Human Development Report, Sri Lanka is categorised as a high human development country, achieving the world rank of 72 out of 189 countries (excluding other countries or territories) (The United Nations Development Programme, 2021). Sri Lanka is a country that underwent an internal war<sup>1</sup> for over three decades, ending in 2009. From mid - 1980's till the end of the war, a major proportion of the income generated was spent on establishing peace and security in the country (Ministry of Finance - Sri Lanka, 2010, 2011).

In the context of this book on *Business sustainability through lean and green practices in Manufacturing SMEs in Sri Lanka*, the main purpose of this chapter is to set the background to adopt sustainable development goals as much as possible for businesses in the country, which the world today is adopting. Further, the authors briefly introduce the reader of the backdrop of Sustainable Development Goals (SDGs), which Sri Lanka is striving to achieve by 2030. The forthcoming sections in this chapter outline evolution of Sustainable Development Goals (SDGs), the development initiatives of Sri Lanka prior to SDGs while focusing on pre and post-independence development agendas, universal Multilateralism and introduction of the SDGs. The last section will focus on the post-2015 scenario related to Sri Lanka, including the implementation, progress and challenges faced in the Sri Lankan post-2015 context.

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<sup>1</sup> The term Internal War conflict between the Government of Sri Lanka and the Liberation Tigers of Tamil Eelam between 1983-2009. See also (Rajapaksa, 2009a)



## **1.2. Evolution of Sustainable Development Goals**

The SDGs introduced through the United Nations (UN) mandated document called the *Agenda 2030* and was ratified by all UN members, including Sri Lanka, in September 2015 (The United Nations, 2015a). The document highlighted 17 goals which included a wide range of contemporary social, economic and political issues that need to be addressed by developing and developed states together by the year 2030. The primary responsibility to achieve those SDGs lies with nation-states, yet other non-state actors were invited to contribute to the global progress (The United Nations, 2015c). Even though Agenda 2030 does not implicate strong interlink between individual SDGs, in practical scenarios, advancing one goal, directly and indirectly, facilitates advancing another goal. Thus, a well-structured and progressive mechanism was needed to address those goals in the present context.

The term Sustainable Development (SD) is defined and discussed elsewhere in this edited book. It is worthy to note that Mensah (2019) emphasised that “Sustainable development has become the buzzword in development discourse, having been associated with different definitions, meanings and interpretations” (p. 5). Understanding the principle of SD, Mensah (2019), in his paper titled Sustainable development: Meaning, history, principles, pillars, and implications for human action: Literature review, stated that “In a nutshell, the underlying summative principle of SD is the systematic integration of environmental, social, and economic concerns into all aspects of decision-making across generations” (p. 14). Therefore, this publication is aimed at the small and medium enterprises being encouraged to achieve sustainability through lean and green practices thus contributing to country’s achievements of SDGs.

The UN and other agencies developed the SDGs through several decades of hard work (The United Nations, 2015a, 2015c). The foundation for contemporary SDGs laid during the Earth Summit in 1992, where countries agreed to implement Agenda 21. This development plan titled Agenda 21 was aimed at to secure a safer future for humankind while reducing the impact of greenhouse emissions around the world (The United Nations, 1992a). The developed countries voluntarily agreed to reduce their greenhouse emissions, yet developing countries questioned the strategy as they

identified those commitments hindering their ability to transform and develop the economies. However, this near-universal agreement gave the foundation to Kyoto Protocol and Paris Agreement, which gave a strong foundation for forming present-day SDGs.

The Kyoto Protocol, a legally binding treaty, was adopted in December 1997. The main objective of the Kyoto Protocol is to reduce the greenhouse emission of gases that contribute to global warming. Due to the complex legality, ratification took nearly eight years, and then by 2005, the protocol was adopted by 192 parties around the world (The United Nations, 1997). The Kyoto Protocol operationalised the United Nations Framework Convention on Climate Change, which aimed to reduce emissions caused by the six greenhouse gases by 2012 (The United Nations, 1992b, 1997). Implementing the Kyoto targets primarily was within the government, and they were required to submit periodical reports. However, several developing countries raised their concerns on the Kyoto protocol as they saw proposed policies as a threat to their development agenda.

In this backdrop of UN initiatives for sustainable development, the next was the introduction of the Millennium Development Goals (MDGs), which laid the cornerstone to the present-day SDGs. The MDG's were established through the UN Millennium Declaration at the UN Millennium Summit (The United Nations, 2000). The world leaders agreed to make a global commitment for the series of time-bound targets (Refer Figure 1.1). Even though Millennium Declaration did not specify the goals, it outlined the eight intended themes which should be accomplished by 2015. The MDGs addressed multidimensional issues, mainly represents three areas such as human capital, infrastructure and human rights, while eradication of extreme poverty remains a core aspiration. Furthermore, MDGs promoted the global partnership between developed and developing countries, and developed nations had obligations to meet those goals by 2015, such as increase the level and quality of foreign assistance, provide greater access to domestic markets and reduce the debt burden of their development partners (Feeny & Clarke, 2009). Similarly, compared to the developed nations, developing nations had broader obligations such as strengthening of own commitment to poverty reduction, combat corruption and good governance, and implement citizen-friendly policies (Feeny & Clarke, 2009).

Compared to earlier initiatives, implementation of MDGs made progressive outcomes by 2015 (The United Nations, 2015b). As the commitment to MDGs ended in 2015, state and non-state actors looked for a future plan to address the limitations of existing MDGs and ensure that post-MDGs development is sustained. As a result, in 2015, the UN adopted the SDGs, a much wider version of MDGs.

**Figure 1.1**

*Sustainable Development Goals*



*Source:* The United Nations (2015a) and the United Nations (2015c)

### **1.3. Sustainable Development Goals prior 2015**

Sri Lankan leaders introduced progressive reforms even before the independence, including free education and schools such as central colleges in 1940s onwards. Renowned Education Minister CWW Kannangara, presented the bill of Free Education to the State Council of Ceylon and various education reforms throughout the 1930s and 1940s. These education reforms aimed to eliminate the socio-economic barriers for education by providing free education from kindergarten to university (Sedere, 2016). The Kannangara reforms were established to pave the path for many youth irrespective their socio – economic backgrounds to obtain a good education and in return contribute to individual family’s advancement in socio – economic status and country’s development in the pre and post-independence era.

Since the country's independence, successive governments implemented development plans named by different titles. The earlier plans were called five-year development plans. Mostly, those plans aimed to develop the country infrastructure and resources by adhering to sustainable development. The first development plan was presented by the first Prime Minister of Ceylon (later Sri Lanka), DS Senanayake (1947-1952) called the Gal Oya project, a multipurpose project to colonise uninhabited areas. The project aimed to settle 250,000 people across the river basin while sustaining the hydro-power requirements of Ceylon at that time (Britannica Encyclopedia, 2017). Around 1952, a development plan presented to the House of Representatives of Ceylon by DA Rajapaksa. The plan mainly focused on promoting and building the infrastructure projects in the Southern tip of Ceylon (later Sri Lanka). The Southern-Regional Development Plan aimed to develop regional ports in Hambantota and Galle while developing other infrastructure facilities across the Southern Province (Rajapaksa, 2009b). The Regional Development Plan could be recognised as a second development project which was proposed the development outside Colombo, the commercial capital of Ceylon, the first being Gal Oya project.

The Mahaweli Development programme is considered one of the brilliant and most extensive multipurpose development plan that actively contributes to Sri Lanka's economy in the post independence development of the country (Mahaweli Authority of Sri Lanka, 2020). It is said that the project was mooted during Prime Minister Sirimavo Bandaranayake government, and financial assistance received through a UN special fund (Mahaweli Authority of Sri Lanka, 2020). It was meticulously planned and implemented by the successive government that took office in 1977. The Mahaweli programme aimed to improve domestic industrial and agricultural production, boost nationwide socio-economic conditions, ensure basic human rights such as ownership of residence and land, and finally stabilise foreign exchange balance (Asain Development Bank, 2015; Mahaweli Authority of Sri Lanka, 2020; Manikkuwahandi et al.,2019). In addition to the development of water resources and hydro-power across new and existing 360,000 hectares of [river-basin] land in a dry zone, the project implemented the human settlement across the Mahaweli river basin. Unlike the other development plans, despite party politics,

the United National Party government under President JR Jayawardena (1977-1989) augmented the Mahaweli programme to address the socio-economic difficulties faced by the farmers of Sri Lanka in the 1980s. By the end of 1987, 51,630 families had been settled under the accelerated Mahaweli programme (AMP) (Mahaweli Authority of Sri Lanka, 2018). Even though the internal war in Sri Lanka hindered the intended outcome of the Mahaweli programme, especially the socio-economic welfare scheme, presently 1.2 million hectares of cultivated land contributed national economy as well as domestic food requirements (Mahaweli Authority of Sri Lanka, 2018). According to the Mahaweli Authority of Sri Lanka (2018), nearly 17% of national electricity need, 1364.63 GWh hydro-power, provided through the project while accommodating 1.1 million population across the project development area. Therefore, from a sustainable development point of view, the Mahaweli programme could be considered a keystone project to address the socio-economic inequalities among farmers and others outside western, southern, northern provinces in Sri Lanka.

The first executive President of Sri Lanka, President JR Jayawardena, introduced open economic initiatives in Sri Lanka. During his period in office, several development initiatives similar to the notion of sustainable development was implemented. To reduce the congestion in Colombo, traffic, land and human, President JR Jayawardena proposed to shift administrative capital from Colombo to Sri Jayawardenapura Kotte. As a part of the plan, all administrative buildings, including Parliament and headquarters for several ministries, were shifted to the greater Colombo area while maximising the land utilisation.

During President Premadasa era (1989-1993), Sri Lanka continued program called “Gam Udawa”- a housing project that facilitated low-income families, which was initially launched under the Premiership of Premadasa (1978-1989). Not only that the project addressed aims of the International Year of Shelter for the Homeless in 1987 which was declared by the United Nations General Assembly (Ramachandran, 1988). While delivering basic human needs- house and place to live and work- the project aimed to colonise less-inhabited Sri Lanka areas. Under this project, the President Premadasa aimed to build 100,000 houses and commenced the 1,000,000 housing units’ project. Compared to the other programmes, Gam Udawa

successfully contributed to housing for the poor, poverty eradication and economic growth.

During President Chandrika Bandaranaike Kumaratunga era (1995-2005), Minister Indika Gunawardena, then Minister of Ports and Telecommunication, presented a Colombo Metropolitan Plan -1998. The project aimed to establish seven economic development centres around the Colombo city to enhance the economic and land utilisation process (Ministry of Ports Telecommunication - Sri Lanka, 1998). The project included developing skyscrapers to accommodate the growing housing needs in the city, improving water sanitisation, promote industry, innovation and infrastructure, and promote economic growth (Ministry of Ports Telecommunication - Sri Lanka, 1998). Even though the plan did not reach its peak, some development initiatives made progressive results.

Under the same presidency, Prime Minister Wickremasinghe (2002-2004) government proposed the Regaining Sri Lanka plan in 2002 (Government of Sri Lanka & Office of Prime Minister Sri Lanka, 2002; Wickremesinghe, 2002). The plan aimed to address several present-day SDGs, including poverty reduction, economic growth, industry, innovation, and infrastructure development. One of the key targets of achieving a 10% of economic growth ratio while promoting Colombo as the “Hub of Asia” (Wickremesinghe, 2002). Under empowering citizens, the plan proposed to increase private sector contribution for the youth employability and reduce social inequalities. However, due to the political conflicts between President Kumaratunga and Prime Minister Wickremasinghe, the plan could not be successfully implemented as the President chosed to go for an earlier parliamentary election.

During the President Mahinda Rajapaksa era (2005-2015), development and social welfare projects were launched in war-affected areas in Northern and Eastern provinces of Sri Lanka called *Negenahira Navodaya* (Eastern Revival) and *Uthuru Wasanthaya* (Northern Spring) (Rajapaksa, 2005; Rajapaksa, 2010; Rajapaksa, 2010a, 2010b). Under the direct guidance of Basil Rajapaksa, those projects targeted to reduce war-caused socio – economic inequalities, especially in economic, infrastructure, education and empowerment ( Rajapaksa, 2010a, 2010b,

2010d; Rajapaksa, 2015). For example, under the *Negenahira Navodaya* programme in 2010, 1743.69 sqkm lands were cleared from landmines and given to resettlement of internally displaced peoples, ensuring social well-being and human security (Ministry of Finance - Sri Lanka, 2010, pp. 37-41). Furthermore, development across the region aimed to increase the contribution to gross domestic production by 5.8% in 2010 (Ministry of Finance - Sri Lanka, 2010, pp. 37-41). Similarly, the *Uthuru Wasanthaya* programme contributed towards the resettlement of war-affected civilians. Many women and children, casualties of a long war in the country were benefited somewhat with these programmes. The Gross Domestic Production of resettling 28,472 displaced families of war by the end of 2010 is noteworthy (Ministry of Finance - Sri Lanka, 2010, pp. 24-25). A programme called *Gama Neguma* implemented to accomplish the MDGs, especially the eradication of poverty and hunger, gender equality and women empowerment and environmental sustainability by same government (Ministry of Finance - Sri Lanka, 2010; Rajapaksa, 2005, 2009a; Rajapaksa, 2010a, 2010b, 2010c, 2010d; Rajapaksa, 2014). The target was to develop 16,000 villages by the year 2016, the *Gama Neguma* programme allocated LKR 89,026 million from 2006 to 2012 and facilitated 42,615,535 beneficiaries through a deepening rural centric economy focused development programme (Ministry of Finance - Sri Lanka, 2010, pp. 8-10; 2013, pp. 341-342).

Overall, Sri Lanka is one of the countries in South Asia, which has achieved first world statistics on literacy and education, health, and equality of men and women. This is because the free education, free health system, since independence has paid dividends even before MDGs or SDGs were planned by the world community.

#### **1.4. Universal multilateralism: Introduction and implementation of Sustainable Development Goals**

Multilateralism is defined in depth by scholars of International Relations. Despite many academic definitions, in the context of the United Nations initiative on SDGs “a situation in which several different countries or organisations work together to achieve something or deal with a problem” (Cambridge Encyclopedia, 2020) can be adopted in the context of this chapter.

In particular, Multilateralism is based on founding principles such as consultation, inclusion and solidarity. Its operation is determined by collectively developed rules that ensure sustainable and effective cooperation.” Furthermore, present-day Multilateralism needs to be reshaped to take into account the number of factors, variety and diversity of stakeholders acting globally, the volume of international interactions and transactions taking place, and the interdependence and complexity of the engagements between people, organisations, communities, sectors and countries (Jacobs et al., 2020). Today the United Nations has a membership of 193 countries of the 195 countries of the world. The two non-UN members are the Holy See and the State of Palestine. Therefore, implementing an agenda for sustainable development was truly a universal multilateral exercise.

Since obtaining UN membership in 1955, Sri Lanka has fully embraced Multilateralism, whether its peace and security or development. Sri Lanka is a party to many international multilateral agreements (list is provided as an annexure). Sri Lanka also takes pride in introducing proposals such as the “Indian Ocean as a Zone of Peace” in 1971. Apart from being a UN member, Sri Lanka is also a founding member of the Non – Aligned Movement (NAM), South Asian Association for Regional Cooperation (SAARC), and the Commonwealth of Nations. Other than that, Sri Lanka is actively engaging multidimensional Multilateralism through regional and global platforms, either engaging or observing, such as BOAO Forum, Shanghai Cooperation Organisation and Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) (Refer to Figure 1.2).



**Figure 1.2**

*Overview of sri lanka at global multilateralism*



*Source: Compiled by authors (2021)*

On September 25, 2015, the world officially announced the 2030 Agenda for Sustainable Development – the transformative plan of action based on 17 Sustainable Development Goals – to address urgent global challenges over the next 15 years. The year 2020 marked the start of the Decade of Action to deliver the Sustainable Development Goals by 2030. The next section will briefly introduce the SDGs.

### **1.5. Introduction to SDGs**

**Goal 1 - No Poverty** – is to remain one of the greatest challenges facing the global community. Eradicating multidimensional poverty became an impossible task, yet the UN's attempts to find the global solution through the SDGs. According to The United Nations (2015c), 736 million of the global population earn less than USD 1.9 per day while they lack consumable food and beverages, access to water and sanitation, and stable residence. Even though the industrialisation in the Brazil, Russia, India, China and South Africa (BRICS) countries has lifted millions out of

poverty, rapid economic acceleration has reduced development opportunities for marginalised communities.

**Goal 2** – Zero hunger – remain as another key focus. According to The United Nations (2015c), in 2017, 821 million out of 7 billion population were estimated to undergo extreme hunger and malnutrition due to environmental changes and biodiversity loss. Through the proposed SDGs, the UN aimed to end all forms of hunger and malnutrition by 2030 (The United Nations, 2015c).

**The goal 3, 4 and 5** – Good Health and Well-Being, Quality Education, and Gender Equality – are another - three SDGs which aim to improve the quality of life, in all aspect. By eliminating/ reducing goals 1 and 2, the UN intended to address communicable and non-communicable diseases, such as HIV, diabetes and heart diseases. At the same time, they addressed those concerns by providing equal opportunities for all citizens without discrimination and intend to reduce the life expectancy gap between developed and developing countries. Without any discrimination, achieving inclusive and quality education is believed to be the most powerful and effective mechanism to address the SDGs. The goal aims to empower women with education and facilitate both genders to obtain free primary and secondary education by 2030. Ongoing armed conflicts and other forms of emergencies in developing countries, especially in Africa and the Middle East, were identified as primary challenges in fulfilling those obligations. By forming a strong foundation for gender equality, the SDGs are expected to empower women in education and health to sustain progressive economic growth and development. In addition to that, empowering women in economic activities, technology and developing free choice in sexual and reproductive health remains key areas that the UN expected member states to address (The United Nations, 2015c).

Clean Water and Sanitation and Affordable and Clean Energy – **goals 6 and 7** – were other key areas that SDGs aimed to address. Due to rapid industrialisation and development, many developing countries find it difficult to access clean water and renewable energy. Therefore, the UN expected to address the needs of 40% of the population who had difficulties accessing clean water while aiming to provide a solution for this by 2030 through successfully implementing SDGs. According to

The United Nations (2015c), in 2015, nearly 4.5 billion population lack safely managed sanitation while 2.3 billion people lack access to basic sanitation. Thus, promoting sustainable energy sources, despite the high dependence on fossil fuel, was timely to encourage growth and development.

**Goals 8, 9 and 10** – Decent Work and Economic Growth, Industry, Innovation, and Infrastructure, Reduced Inequalities – primarily intended to address issues in macro and micro levels. Employment, economic growth, innovation, and infrastructure help address several issues faced by individuals and states at micro-levels. The global economic crisis has downplayed the employment ratio and investments in technology and innovations. Then, those interlink issues caused a greater degree of economic instability at macro levels. As a result, many people and countries had to undergo economic hardships. Over the last decade, spatial economic issues have extended the gap between developed and developing states that the SDGs planned to reduce. The UN expected to reduce 11% of increased inequalities in developing countries (The United Nations, 2015c).

**Goals 11 and 12** are about Ensuring the sustainable consumption and production, and sustainable cities and communities. They are aimed to address the concerns arising from rapid population growth and urbanisation occurring in the 21<sup>st</sup> century. Population scientists predicted that by 2050, the world population would be increased to the level in which existing resources could not meet the demand. On the other hand, by 2050, two-thirds of the global population are expected to migrate into cities, thus sustainable solutions, creating career and business opportunities, safe and affordable housing, and building resilient societies and economies, are required to address the needs and requirements of those peoples.

**Goals 13, 14 and 15**, namely Climate Action, Life Below Water, and Life on Land, were focused on environmental aspects. As climate-related activities are causing a drastic impact on the global economy, loss of hundreds of billion dollars and the thousands of people worldwide, the UN dedicated three goals to secure flora and fauna in the world. Under goal 13, the UN aims to mobilise USD 100 billion annually by 2020 to address developing countries' requirements to adapt to climate change and invest in sustainable low-carbon development (The United Nations,

2015c). Other goals mainly aimed to ensure the life of humans and other species in the world, especially sustainable management of marine and territorial resources.

**The last two goals (16 and 17)** – Peace, Justice and Strong Institutions and Partnerships – mainly aims to promote peace and multidimensional Multilateralism. The eliminating of conflicts and promotion of peace and justice are essential strategies to make a progressive society. The aim is to reduce all forms of violence, work with all parties to end conflict and insecurity. The establishment of legal institutions was another example of sustaining the outcome of this SDG. On the other hand, through global partnership, the UN planned to enhance cooperation among developed and developing states while increasing global interconnectivity. Through that, improving access to technology and knowledge is vital North-North and South-South cooperation.

### **1.6. Sustainable Development Act and implementation of SDGs (post-2015)**

The United Nations summit for the adoption of the post-2015 development agenda was held from September 25-27, 2015, in New York and convened as a high-level plenary meeting of the General Assembly. President Sirisena participated in representing Sri Lanka. In his speech, President informed that while the Government of Sri Lanka (GoSL) fully supports the post-2015 sustainable development agenda and sustainable development goals, his government will act with determination as a pioneer of eco-sensitive civilisation emerging in the 21<sup>st</sup> century. Further, President Sirisena stated that Sri Lanka would achieve the SDG goals by 2030 (Sirisena, 2015). Even though, the United Nations introduced 17 SDGs and various targets under those goals, Sri Lanka only adopted selected targets.

The 2015 government in power enacted an Act of Parliament called *Sri Lanka Sustainable Development Act*, No. 19 of 2017 to ensure that Sri Lanka intends to design, develop and implement a national policy and strategy on sustainable development (Government of Sri Lanka, 2017). Further, the act aims to facilitate all agencies responsibly, follow up, monitor the progress, and set its national targets guided by the global level of ambition, but consider national interest and

circumstances. Furthermore, the act incorporates such 17 SDGs in national planning processes, policies and strategies in the relevant ongoing processes in the economic, social and environmental fields (Government of Sri Lanka, 2017). In addition to that, Sri Lanka closely collaborated with other non-states actors, especially the United Nations Sustainable Development Framework (UNSDF) when it comes to implementation and reviewing the progress of SDGs.

The strategy planned according to the act of parliament is that every ministry, department, provincial council, provincial ministry and department and the local authority should prepare the Sustainable Development Strategy. The scope of such ministry, department, provincial council, provincial ministry and department and local authority in accordance with the National Policy and Strategy on Sustainable Development within a period of one year from the date of approval under subsection (6) of section 11 by the Parliament. (12 subsection (1) Every ministry, department, provincial council, provincial ministry and department and local authority shall submit the progress report on the Sustainable Development Strategy prepared under subsection (1) within a period as may be required by the Minister (12 subsections 2). The act introduced the Sustainable Development Council, which has powers to formulate related national policies and guides new development projects (Government of Sri Lanka, 2017).

Authors note that the University of Colombo, Sri Lanka has encompassed SDG'S in all its teaching programmes and in the strategic and action plans setting an example of a higher education institute involved in producing experts and disseminating new knowledge on all of the SDG's to be achieved.

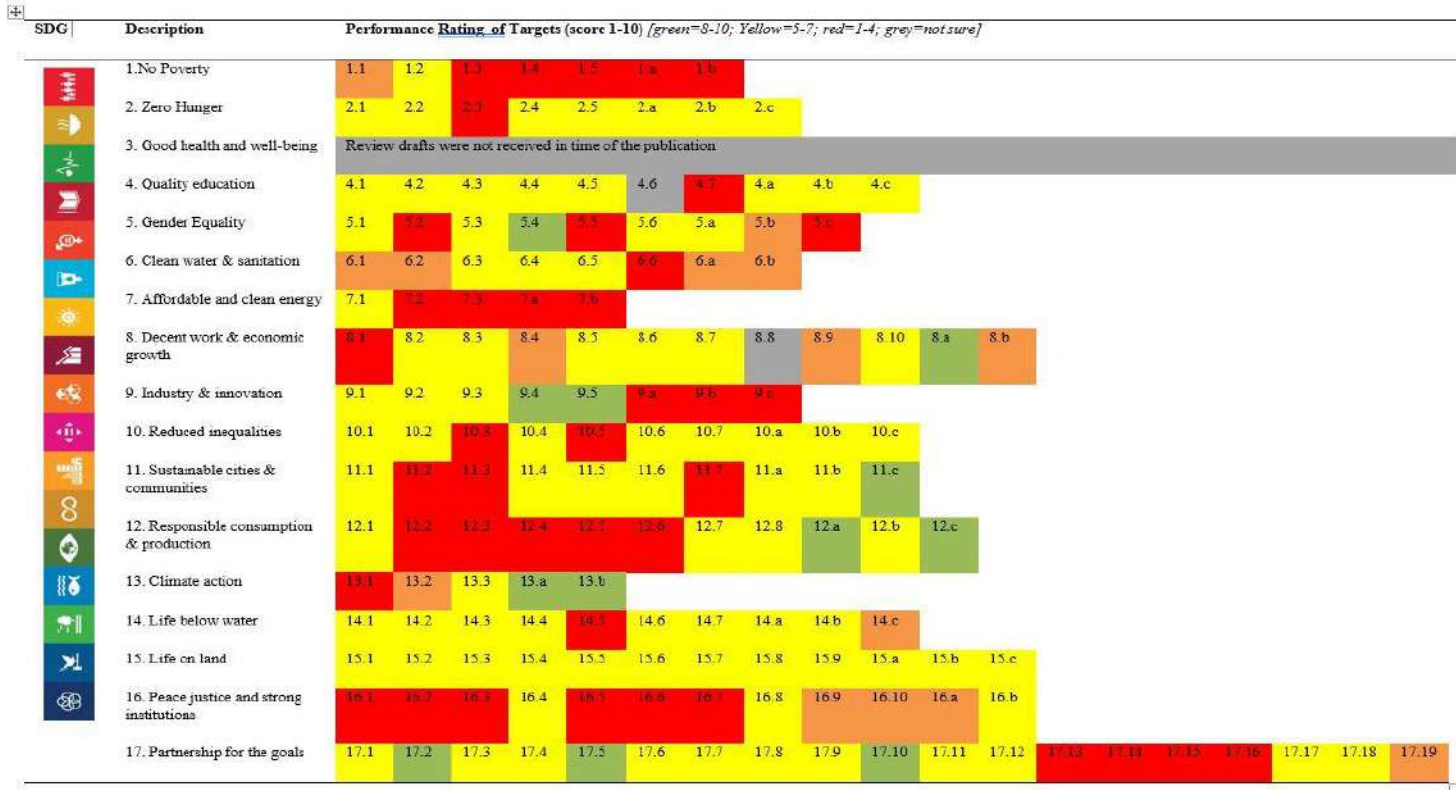
## **1.7. Overview of SDG achievements and challenges faced in Sri Lanka**

During President Sirisena –Wickremesinghe administration (2015-2019) legal framework for implementation of the SDGs, the Sri Lanka Sustainable Development Act, No. 19 of 2017, was presented to the Parliament (Government of Sri Lanka, 2017). In addition to that, several government policy manifestos, including *Vision 2025*, echoed the norms of SDGs (Wickremasinghe & Prime Minister Office Press, 2017). According to the Department of Census and Statistics (2018), Sri Lanka has set targets and 14 indicators, including the eradication of

extreme poverty and reducing half of the population who lived under poverty by then, to address goal 1. The Vision 2025 plan also highlighted the need for action to empower the citizens, including reducing the unemployment ratio and providing subsidies (Wickremesinghe & Prime Minister Office Press, 2017). Midterm assessment reports presented by the Presidential Expert Committee (2020) reveals that to achieve SDGs Sri Lanka needs to present a solution for the existing high degree of macroeconomic volatility and instability caused by structural imbalances (p. 3) (Refer to Figure 3).

**Figure 1.3**

*Achievements of SDGs in Sri Lanka*



Source: Presidential Expert Committee (2020)

The Vision 2025 presented a theme called ‘Agriculture and Sustainable Development’ as a solution to the several SDGs related matters, including end hunger, ensure healthy lives, gender equality, climate action, responsible consumption and production, life below water, and life on land and many more goals by 2030 (Wickremasinghe & Prime Minister Office Press, 2017). According to *Human Development Index Report* in 2019, Sri Lanka scored 0.938 in Gender Development Index while 5.8% of legislative opportunities given to the females (the lowest in the region) where as elsewhere Sri Lanka remain within the high human development category (The United Nations Development Programme, 2020). Furthermore, 89% of Sri Lanka population has access to drinking water, while 96% have access to sanitation facilities. Compared to the regional partners, Sri Lanka’s score in the *Human Development Reports* was remarkable and represented the highly developed category (The United Nations Development Programme, 2020). Overall, Sri Lanka’s position on addressing and fulfilling SDGs remains among the top stage compared to regional partners (Presidential Expert Committee, 2020) (Refer Figure 1.3).

‘Agriculture and Sustainable Development’ remained as a main theme for the Sri Lanka SDGs policy initiatives. To ensure the goals called 3 ,4, 5 and 6, reluctance of [rural] youth to engage in socio-economic activities identified as one of the key barriers (Presidential Expert Committee, 2020, p. 9). In order to address the issues arising from the youth sector, *Vision 2025* proposed public and private sector cooperation while increasing youth productivity and reducing unemployment (Central Bank of Sri Lanka, 2021; Wickremasinghe & Prime Minister Office Press, 2017). Furthermore, Sri Lanka introduced the long-term planning and management strategy to protect flora and fauna, goals 11, 12, 13, 14, and 15. *Vision 2025* highlighted a sustainable approach to manage climate change and human and non-human related goals under the same theme (Wickremasinghe & Prime Minister Office Press, 2017). Thus, the government has taken initiatives to ensure that Sri Lankans will actively contribute to the country’s growth process (Wickremasinghe & Prime Minister Office Press, 2017)(Refer Figure 1.3).

To ensure peace and justice in Sri Lanka, *Vision 2025* has proposed solid and stable institutions, including the National Peace Council. The aim of that institution is to



uphold, promote and protect human rights of all and the pluralistic nature of the population (Wickremasinghe & Prime Minister Office Press, 2017). The plan also proposed to ensure reconciliation and sustainable peace through managing sustainable economic development (Wickremasinghe & Prime Minister Office Press, 2017). Furthermore, to address the 12 targets and 23 indicators established by the UN, Sri Lanka has increased the effectiveness of ongoing educational, language and decentralisation policies and programmes (Winkel et al., 2019; Presidential Expert Committee, 2020; The United Nations, 2015a). In that sense, Sri Lanka has increased its HDI ranking by two positions within 2013-2018 (The United Nations Development Programme, 2020, p. 305). Thus, Sri Lanka has already taken progressive initiatives halfway to certify that they meet deadlines set by the UN in 2030 (Presidential Expert Committee, 2020).

One of the main challenges in achieving the SDGs on time is the present global pandemic of Covid 19. The pandemic that spread in Sri Lanka changed priorities of the government to ensure health security and safety as number one. Therefore, in the face of greater economic downturn, government has put all available funds for health care of its citizens and also providing subsidies for poorest of the poor who were economically hardhit. This has affected the state accountability for the SDGs in many ways; among them, engagement and facilitation remain a core aspect.

Due to the pandemic in the year 2020 and continuing to 2021, many states followed strong protectionism. While closing borders and economies, they also closed the chances of engagement. As a result, many developing countries, including Sri Lanka, left without sufficient international support to achieve the SDGs. Therefore, in future, developing countries may face issues with meeting those deadlines by 2030. For example, according to the Central Bank of Sri Lanka (2021) report, overall unemployment ratio has been reduced from 4.4% in 2016 to 4.2% in 2017 (p. 14). However, the Covid pandemic has increased the unemployment ratio from 4.8 in 2019 to 5.5 in 2020, which pose a more significant challenge for the implementation of SDGs (Central Bank of Sri Lanka, 2021, p. 14). However, the pandemic has created opportunities for Sri Lanka to enhance our multilateral relations. Even though the SDGs are universally binding agreements, the above factor could also challenge the progress to be made.

The centralised nature of policy implementation in Sri Lanka – top to bottom approach - could challenge addressing the SDGs. Even though plans and budgets were allocated, their applicability and utilisation may face issues during ground-level implementation.

## **1.8. Conclusion**

The Chapter gives an overview of the evolution of the SDGs and multilateralism of the nation state of Sri Lanka. It also briefly gives and outline of development initiatives of Sri Lanka from the time of decolonisation to 2015. The Chapter articulates that, even before the notion of SDGs came to exists, Sri Lanka has taken several progressive initiatives during its pre and post-independence era to address equality among its citizens by providing free health and education. Furthermore, despite the domestic and global challenges, Sri Lanka has taken various approaches to address the SDGs and achieve them by 2030.

## **References**

- Asain Development Bank. (2015). *Mahaweli Water Security Investment Programme*. MENA Report, Issue.
- Britannica Encyclopedia. (2017). Gal Oya Project. In *Britannica Encyclopedia*.  
<https://www.britannica.com/topic/Gal-Oya-project>
- Cambridge Encyclopedia. (2020). Multilateralism. In *Cambridge Encyclopedia*.  
<https://dictionary.cambridge.org/dictionary/english/multilateralism>
- Central Bank of Sri Lanka. (2021). *Annual Report 2020*. Central Bank of Sri Lanka.
- Department of Census and Statistics. (2018). *The Status of Sustainable Development Goals Indicators in Sri Lanka: 2017*. Department of Census and Statistics.
- Feeny, S., & Matthew, C. (2009). *The Millennium Development Goals and Beyond: International Assistance to the Asia-Pacific*. Palgrave Macmillan.
- Government of Sri Lanka. (2017). *Sri Lanka Sustainable Development Act - No. 19 of 2017*. Parliament of the Democratic Socialist Republic of Sri Lanka,.
- Government of Sri Lanka, & Office of Prime Minister Sri Lanka. (2002). *Regaining Sri Lanka: Vision and strategy for accelerated development*. Office of Prime Minister Sri Lanka.
- Jacobs, G., Kiniger-Passigli, D., & Likhotal, A. (2020). Redefining Multilateralism. *Cadmus*, 4(3), 5-19.
- Mahaweli Authority of Sri Lanka. (2018). *Mahaweli Development Programme Socio-Economic Statistics*. Mahaweli Authority of Sri Lanka.
- Mahaweli Authority of Sri Lanka. (2020). *Mahaweli Development Programme*. Mahaweli Authority of Sri Lanka. <http://mahaweli.gov.lk/>
- Manikkuwahandi, T. D. S., Hornberger, G. M., & Baroud, H. (2019). Decision analysis for expansion of Mahaweli multipurpose reservoir system in Sri Lanka. *Journal of water resources planning and management*, 145(9), 5019013. [https://doi.org/10.1061/\(ASCE\)WR.1943-5452.0001094](https://doi.org/10.1061/(ASCE)WR.1943-5452.0001094)

- Martenstyn, H.. (2021). *Sri Lanka's Amazing Maritime*. <https://www.slam.lk/>
- Mensah, J. (2019). Sustainable Development: Meaning, history, principles, pillars, and implications for human action: Literature Review. *Cogent Social Sciences*, 5(1). <https://doi.org/10.1080/23311886.2019.1653531>
- Ministry of Finance - Sri Lanka. (2010). *Annual Report 2010*. Ministry of Finance - Sri Lanka.
- Ministry of Finance - Sri Lanka. (2011). *Annual Report 2011*. Ministry of Finance - Sri Lanka.
- Ministry of Finance - Sri Lanka. (2013). *Annual Report 2013*. Ministry of Finance - Sri Lanka.
- Ministry of Ports Telecommunication - Sri Lanka. (1998). *Colombo Metropolitan Plan*. Ministry of Ports Telecommunication - Sri Lanka.
- Presidential Expert Committee. (2020). *Report on Sustainable Sri Lanka 2030 Vision and Strategic Path*. Presidential Expert Committee.
- Rajapaksa, B. (2010). *Basil Rajapaksa the Force Unseen* [Interview]. Business Today. [http://www.businesstoday.lk/cover\\_page.php?article=2272](http://www.businesstoday.lk/cover_page.php?article=2272)
- Rajapaksa, M. (2005). *Mahinda Chinthana 2005*. Sri Lanka Freedom Party Press.
- Rajapaksa, M. (2009a). *Address by HE President Mahinda Rajapaksa at the Victory Day Parade and National Tribute to the security forces following the defeat of terrorism*. President Media. [http://www.piru.gov.lk/news\\_update/CURRENT\\_affairs/ca200903/20090603new\\_era\\_in\\_foreign\\_relations.htm](http://www.piru.gov.lk/news_update/CURRENT_affairs/ca200903/20090603new_era_in_foreign_relations.htm)
- Rajapaksa, M. (2009b). *The man who tamed the Tamil Tigers*. Times Magazine. <http://content.time.com/time/world/article/0,8599,1910095,00.html>
- Rajapaksa, M. (2010a). *Address by HE President Mahinda Rajapaksa at the launch of forward vision of Mahinda Chinthana at BMICH*. President Media. [http://www.president.gov.lk/speech\\_New.php?id=83](http://www.president.gov.lk/speech_New.php?id=83)
- Rajapaksa, M. (2010b). *Mahinda Chinthana 2010*. Sri Lanka Freedom Party Press.

Rajapaksa, M. (2010c). *Post War New Sri Lanka*. Al Jazeera Media Network.  
<https://www.youtube.com/watch?v=b2Bo-pLVDIM>

Rajapaksa, M. (2010d). *President Mahinda Rajapaksa second term re-inauguration speech*. President Media. [http://www.president.gov.lk/sinhala/html/speeches/2005/swearing\\_in\\_ceremony.html](http://www.president.gov.lk/sinhala/html/speeches/2005/swearing_in_ceremony.html)

Rajapaksa, M. (2014). *Government Budget Speech-2015*. President Media Devison.

Rajapaksa, M. (2015). *Mahinda Chinthana 2015*. Sri Lanka Freedom Party Press.

Ramachandran, A. (1988). International year of shelter for the homeless: Activities and achievements. *Cities*, 5(2), 144-162. [https://doi.org/https://doi.org/10.1016/0264-2751\(88\)90004-2](https://doi.org/https://doi.org/10.1016/0264-2751(88)90004-2)

Sedere, M. U. (2016). *Educational reforms beyond Kannangara for the 21st century*. National Institute of Education.

Sirisena, M (2015). *Address by President Maithripala Sirisena of the Democratic Socialist Republic of Sri Lanka on the 70th session of the United Nations General Assembly*. President Media. [https://www.un.int/srilanka/statements\\_speeches/president-he-maithripala-sirisena-addresses-70th-session-on-united-nations-general](https://www.un.int/srilanka/statements_speeches/president-he-maithripala-sirisena-addresses-70th-session-on-united-nations-general)

The International Trade Administration - US Department of Commerce. (2021). *Sri Lanka - country commercial guide*. The International Trade Administration - U.S. Department of Commerce.

The United Nations. (1992a). *Agenda 21*. The United Nations Press.

The United Nations. (1992b). *The United Nations framework convention on climate change*. The United Nations.

The United Nations. (1997). *Kyoto protocol*. The United Nations Press.  
[https://unfccc.int/kyoto\\_protocol](https://unfccc.int/kyoto_protocol)

The United Nations. (2000). *Millennium Summit*. The United Nations Press.  
[https://www.un.org/en/events/pastevents/millennium\\_summit.shtml](https://www.un.org/en/events/pastevents/millennium_summit.shtml)

- The United Nations. (2015a). *Agenda 2030*. The United Nations Press.
- The United Nations. (2015b). *MDG gap task force report*. The United Nations.
- The United Nations. (2015c). *Sustainable Development Goals*. The United Nations Press. <https://sdgs.un.org/goals>
- The United Nations Development Programme. (2020). *Human Development Index 2019*.
- The United Nations Development Programme. (2021). *Human Development Index 2020*.
- Wickremesinghe, R. (2002). *Regaining Sri Lanka - Part II connecting to growth: Sri Lanka's poverty reduction strategy*. The Prime Minister Office of Sri Lanka.
- Wickremesinghe, R., & Prime Minister Office Press. (2017). *Vision 2025*. <http://oldportal.treasury.gov.lk/web/guest/vision-for-the-future-2005-2014>
- Winkel, G., Galloway, G., Colfer, C. J. P., de Jong, W., Katila, P., & Pacheco, P. (2019). SDG 10: Reduced inequalities – An environmental justice perspective on implications for forests and people. In P. Katila, C. J. P. Colfer, & W. de Jong, *Sustainable Development Goals: Their impacts on forests and people* (pp. 601-617). Cambridge University Press.