

Preparedness Level of Achieving Educational Related Sustainable Development Goal (SDG4): Evidence from Sri Lanka

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Abstract

The government of Sri Lanka has made several efforts toward achieving the Sustainable Development Goals. The country has been implementing free education since the 1940s enabling access to education for all from Grade 1 to University education. The free education system in Sri Lanka has contributed to the country's high Human Development Index (HDI), positioning Sri Lanka at 72 out of 189 countries in 2020 with a 92.4 % adult literacy rate in 2020 (UNDP, 2023). However, it is problematic that the government could achieve SDG 04 by 2030. However, the preparedness for achieving education-related Sustainable Development Goals (SDGs) in Sri Lanka has not been empirically examined. The main objective of this study is to explore the preparedness level for achieving SDG-04, identify challenges and difficulties in achieving SDG 4 by 2030, and propose policy measures to improve the preparedness level to achieve SDG-04 in Sri Lanka by 2030. Using qualitative research methods, this study selected purposively fifteen (15) responsible organizations. In-depth interviews were conducted with one responsible officer representing each organization. Thematic analysis was used to analyze the data. Preparedness was identified regarding awareness, resource availability, training regarding SDG goals, and collaboration with other related organizations. The study revealed that relevant officers are aware of the 2030 Agenda and the selected organizations have included the SDGs in their action plan. Especially, the officers' awareness of SDG 04 and its indicators, resources availability, training regarding SDG goals, and collaboration with the other related organizations are not at a

satisfactory level. Lack of training opportunities on SDGs, prioritization of objectives, lack of monitoring, evaluation of the implementation of SDG 04, lack of authority, lack of staff, and lack of information sharing on SDGs were identified as the main problems and difficulties faced by these organizations in implementing SDGs programs that may hinder in achieving SDG 04 by 2030. If the current programs are being implemented efficiently, there may be a possibility of achieving the SDG 04 by 2030. Finally, this study proposes policy measures to enhance the preparedness level and address the issues in achieving SDG 04 in Sri Lanka. As there is a dearth of research examining the preparedness level in achieving SDG 04, particularly in Sri Lanka, thus, this study tries to fill this research gap.

Keywords: Sustainable Development Goals (SDG), SDG 04, Preparedness Level, Sri Lanka

1. Introduction

The 2030 agenda for sustainable development with 17 development goals was declared by 195 leaders in 2015 as a universal call for fighting poverty, protecting the planet, and improving the lives of everybody everywhere (UNDESA, 2016). In addition to that UNDESA, (2016) stated that all UN Member States have made various efforts to adopt and integrate the agenda into their national-level plans to achieve the Goals within 15 years. Sri Lanka too has made several efforts towards achieving the Sustainable Development Goals including SDG4 which focuses on education aiming to “Ensure inclusive, equitable, quality education and promote lifelong learning opportunities for all”.

SDG 4 is related to education which is to ‘Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all’ by 2030. Since education is the foundation of any country's social, cultural, spiritual, and economic development, many countries prioritize it in their national development policies. The Sri Lankan government recognizes the right to an education as a fundamental human right, and since 1947, government schools have provided free education to all students from Grade 1 of the government schools to the first-degree level at state universities. As a result, compared to other nations with comparable GDP status, Sri Lanka has a high literacy rate, greater primary and secondary enrolment rates, and higher survival/retention rates (Annual Performance Report - Ministry of Education, 2020).

Although Sri Lanka has carried out many footsteps to achieve SDG, it is very important to find out whether Sri Lanka is ready to achieve those goals, especially in education, goal four of the Sustainable Development Goals (SDG4) outlines ensuring

access to quality education as a global goal. This study examines the level of preparedness in achieving sustainable development Goal 4 in Sri Lanka.

1.1 Background of the Study and Problem Identification

Education for Sustainable Development (ESD) seeks to promote sustainable living for future generations, (UNESCO, 2021). But today, more than 262 million children and youth are out of school and six out of ten are not acquiring basic literacy and numeracy after several years in school and 750 million adults are illiterate, fueling poverty and marginalization (UNESCO- Education, 2030, 2021).

Many developing countries still lack basic infrastructure and facilities to provide effective learning environments; as an example, Sub-Saharan Africa faces the biggest challenges, where less than half of the schools have access to electricity, internet, computers, and basic drinking water and rural and urban differentials. About 85 percent of the countries reported higher out-of-school rates for primary and secondary schools in rural areas compared to urban areas (High-level Political Forum on SD, 2019). Resource constraints challenge meeting SDG 4, as only one-third of countries spend between 15 and 20 percent of total government spending on education, as recommended in the Education 2030 Framework for Action (High-level political forum on SD, 2019).

Despite important progress in the Asia-Pacific, most countries in the region are off-track to achieving Sustainable Development Goal 4 (SDG4) targets on education (UNESCO & UNICEF, 2021). Violence in education is still widespread in some countries (such as Afghanistan, India, and Myanmar), a severe shortage of qualified teachers (such as in Lao, Maldives, and Tajikistan), and significant gender disparities in education remain within the region (UNESCO & UNICEF, 2021).

South Asia still lags far behind in terms of literacy rates, and it is in a learning crisis (Asadullah et al., 2020). Data on female literacy shows that the learning profile of India, Bangladesh, Pakistan, and Nepal has not improved over time (ibid, 2020).

Sri Lanka has been implementing free education since the 1940s enabling access to education for all from Grade 1 to university education. The free education system in Sri Lanka has contributed to the country's high Human Development Index (HDI), positioning Sri Lanka at 72 out of 189 countries in 2020 with a 92.4 % adult literacy rate in 2020 (UNDP, 2023).

There are 10,155 government schools, with 4,063,685 children and 249,494 teachers in Sri Lanka (Annual School Census of Sri Lanka, 2020). In addition, 90 government-approved private schools, 30 special education schools, and 816 Pirivenas are functioning with the support of the government, and around 300 'International Schools' are registered under the company law but are not regulated by the Ministry of Education (Annual School Census of Sri Lanka, 2020).

Even though Sri Lanka has been practicing free education from Grade 1 to the university level since the late 1940s, it is doubtful whether the government will be able to achieve every aspect of SDG 04 by 2030.

The government of Sri Lanka has taken initial steps to implement the SDG Agenda, however, several implementation challenges remain. Specifically, some of the SDG implementation challenges for Sri Lanka are ensuring the alignment of national policies with the SDGs, institutional coherence, financing, partnerships, and multi-stakeholder participation, as well as data deficits (Tilakaratna et al., 2017). In addition, more investments are required to achieve SDG 04. National expenditure on education remains less than 2 percent of GDP (Annual Performance Report - Ministry of Education, 2020).

Even though there are 88 institutions relevant to implementing SDG 04 in Sri Lanka, it seems that no respective authority has yet incorporated SDG 04 targets and indicators in their strategic plans (Sri Lanka Stakeholder SDG Platform, 2018). Therefore, better governance in the education sector has become problematic.

Beyond the compulsory age of 14, a decline in school attendance is seen in every district. Nearly 36,000 students of compulsory age are dropping out of the formal education system at various levels (Ministry of Education, 2018). Furthermore, 15 percent of the over 300,000 students who enter school each year drop out before they sit for their G.C.E. Ordinary level examination, and only 60 percent pass that examination and qualify for G.C.E. Advanced level. Among them, only 19 percent of students are eligible to enter university (Ministry of Education, 2018). The majority of students have left school without learning the basics of mathematics, language, science, and digital literacy (Nithlavarnan et al., 2017), and due to the poor quality of education youth are increasingly leaving the sector but are ill-equipped when competing in the paid labor market (UN Sri Lanka, 2018).

After independence, although various policies have succeeded in providing universal access to free education, there have been regional and other disparities in the quality of education services to ensure equitable access to education.

Geographical spread, terrain issues, school capacity, and the proportion of rural students in the district also show spatial disparities in access and they have led to differences in enrolment rates (Ministry of Education, 2018). There are several districts where more than 2/3rds of the existing schools do not even have Advanced Levels on offer (Sarma, 2018). In areas such as Monaragala, Anuradhapura, and Puttalam, children from rural areas find it difficult to access schools due to the large geographical spread of the district, where the distance to secondary-level schools increases (ibid, 2018). Ministry of Education has categorized the school by geographical and socio-economic status. Accordingly, there are 2031 difficult

schools and 1325 very difficult schools, particularly in war-affected areas in the country (Ministry of Education, 2018).

Ministry of Education (2020) revealed that even though the government has taken several initiatives to improve access and participation in education, still there are gaps which need to be filled to succeed. These gaps are learning difficulties, illness and disabilities, lack of facilities for differently abled students, child labor and household commitments, parents' ignorance, cultural variations among different ethnic groups, teacher deficiencies in rural schools, less attractive curriculum and delivery methods, gaps between curriculum and labor market expectations, less attractive teaching and learning methodology, less attention paid for improving socio-emotional skills of students based on their ages, examination-oriented education and highly competitive examinations, and teacher motivation on the less development of their professional capacities" (Ministry of Education, 2020). In improving the quality of education, it is important to enhance the quality of the teachers as well. Around 85 percent of teachers in the primary and lower-secondary levels have received at least the minimum organized teacher training, while around 24 percent of upper-secondary level teachers fail to meet this qualification (Tilakaratna & Sooriyamudali, 2019). There is a huge knowledge gap between education officials and teachers on SDG 04 (Sri Lanka Stakeholder SDG Platform, 2018). Another issue is that the curriculums are focused on preparing students for university admission, not providing a foundation for success. Furthermore, the curriculum does not take into account different types of learners and special needs (Sri Lanka Stakeholder SDG Platform, 2018).

As per Nithlavarnan et al., (2017), compared with other countries, Sri Lanka is far behind in focusing on the Education for Sustainable Development initiatives and is challenged with the task of embedding at national, school, and subject levels. 'Sri Lanka has the highest literacy rate in South Asia, yet it is unable to develop the fundamentals to create a sustainable and progressive education system' (Mahibalan, 2022). Even though Sri Lanka has a free education system, achieving SDG 04 poses a problematic situation.

COVID-19 has caused a crisis in education worldwide as well as in Sri Lanka. When schools closed due to the COVID-19 pandemic, students from privileged backgrounds had access to alternative learning options, but poor students faced many difficulties (Sandeepani et al., 2021). On average, less than 50 percent of students were reached online (Abayasekara & Silva, 2021). Only 48 percent of households with school-aged children owned a smartphone or computer and only 34 percent had an internet connection, primarily via mobile phones (ibid, 2021). Although equal rights are guaranteed to all students through free education, the COVID-19 pandemic crisis seems to have led to inequality in the education system (Sandeepani et al., 2021).

There is evidence that Sri Lanka has taken various initiatives to achieve SDG 04, but it is still a challenging situation where it is questionable whether the desired goals could be achieved at a satisfactory level by 2030. Although several studies have been conducted on SDG 4 at the international level, only a few research have been conducted in Sri Lanka. However, the preparedness to achieve education-related Sustainable Development Goals (SDGs) in Sri Lanka has not been empirically examined and this study intends to fill that respective research gap.

The main purpose of this study is to examine the preparedness to achieve SDG 04, identify challenges and difficulties in achieving them, propose policy measures to enhance the preparedness levels and address the problems and difficulties in achieving SDG-04 in Sri Lanka by 2030.

2. Literature Review

This section reviews related literature on Sustainable Development Goals (SDGs), preparedness, and best practices of SDG 04 at the national and international level.

2.1 Sustainable Development Goals (SDGs)

The 2030 Agenda for Sustainable Development is framed by 5 key objectives:

(1) People - to end poverty and hunger; (2) Planet - to protect the planet from degradation (3) Prosperity - to ensure that all human beings can enjoy prosperous and fulfilling lives (4) Peace - to foster peaceful, just and inclusive societies and (5) Partnership - to mobilize the means required to implement this Agenda through a revitalized global partnership for sustainable development (UNESCO, 2017).

The 17 Sustainable Development Goals are defined in a list of 169 SDG Targets. Progress towards these Targets has been agreed to be tracked by 232 unique Indicators (UNDP, 2015). The SDGs were born at the United Nations Conference on Sustainable Development in Rio de Janeiro in 2012. The SDGs replace the Millennium Development Goals (MDGs), which started a global effort in 2000 to tackle the indignity of poverty and the SDGs are also an urgent call to shift the world onto a more sustainable path (UNDP, 2015).

2.2 Preparedness

The term 'preparedness' refers to the ability of governments, professional response organizations, communities, and individuals to anticipate and respond effectively to the impact of likely, imminent, or current hazards, events, or conditions (UN-OCHA, 2021).

The preparation for the implementation of the SDGs involves, three major stages Identify Priorities for Implementation, Developing a National Strategy, and Institutional Arrangement. (National Audit Office – Republic of Mauritius, 2019). Some of the barriers to preparedness for SDG 04 are lack of financial support, lack of resources, complex bureaucracy, and rigid structures, the lack of commitment, engagement, awareness, interest, and involvement, lack of training, and lack of coordination (Adhikari & Shah, 2021). Long-term planning, responsibilities, coordination, integration and coherence, vertical integration, stakeholder engagement, budget, and monitoring and evaluation are the factors of preparedness of governments to implement the SDGs (Blanc, 2018).

2.3 Preparedness of SDG 04 in the World

Universities all over the nation have incorporated the Sustainable Development Goals (SDGs) into their curricula, study, and community engagement since 2015 (Alaoui, 2021). The SDGs are now second nature to many college students as a result of regional advocacy efforts, new curricula, partnerships, and the deliberate efforts of teachers and staff, and through the framework, universities are engaging students and staff to find creative solutions for building more inclusive, resilient communities while also working in partnership with local governments and businesses to help achieve the SDGs starting in their communities (ibid, 2021).

‘In South-East countries are also very remarkable as each country has its preparedness programs for achieving SDG 04. The differences in the application of each country are based on the different contexts faced by its respective government, the purpose is to obtain effective output and improve the education quality (Ghazali, 2021).

2.4 Best Practices

Some countries have initiated several programs and practices related to SDG 04 key areas which are summarized in the following table.

Table 01: Best Practices of SDG 04 in the World

Country	Actions were taken to achieve SDG 04	Related SDG
		04 key area
UNICEF	The Learning Passport is an Online, Mobile, and Offline 'education model' for all levels of education, tailored to the needs of out-of-school students, teachers, and parents to receive the necessary training and tools.	Inclusiveness

The United Kingdom	Game Changer Innovation Program - Durham University in the UK has launched a Game Changer program using ‘design thinking’ to find solutions to the SDGs and it enables students to be global citizens and leaders to deliver SDGs.	Life-long learning opportunities
Denmark	SDG-focused university - In 2019, the University of Southern Denmark (SDU) declared itself an ‘SDG-focused university’. Since 2020, SDU has been actively working for the integration of 'SDG education' into the study programs offered by the university.	Quality education
Indonesia	SINERGI Project - Inclusive Approach to Open More Access - The SINERGI Project identified a need for improved multi-stakeholder coordination to access educational and employment opportunities and identified that training centers and companies needed to assess their teaching methods and working environments to support social inclusion.	Inclusiveness, equitable and lifelong learning opportunities
Finland	Studies for Sustainable Future - The University of Eastern Finland (UEF) seeks to integrate the Elements of SD into teaching materials and methods to educate students in thesis supervision by the university's curriculum guidelines. The integration aims to ensure that every student is comprehensively educated about SD.	Quality education
Germany	Virtual Academy for Sustainability - The Virtual Academy for Sustainability (VAS) of the University of Bremen aims to support Higher Education Institutions in implementing Sustainable Development Goals through online courses.	Inclusiveness

India	<p>Mukhyamantri Balika Cycle Yojana – Bihar- A program in Bihar state provided a bicycle to every girl entering grade 9 or 10, and the National Mahila Shakti Kendra initiative supported village-level Women Empowerment Centers to reduce their dropout rates.</p> <p>‘Each One Teach One Method’ – Mizoram- a systematic effort which was made to identify illiterates in far-flung villages. Once these villages are spotted, then some volunteers are labeled as animators and are appointed, and simultaneously village adult education committees are formed to oversee the entire project.</p> <p>Saakshar Bharat – Sustaining and Enhancing Efforts in Adult Education. This program has facilitated opportunities for continuing education by extending educational options to adults who have dropped out of or have never entered the formal education system.</p>	<p>Inclusiveness and equitable</p> <p>Inclusiveness and equitable</p> <p>Inclusiveness, equitable and life-long learning opportunities</p>
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Source: Based on www.learningpassport.org (2023); UN Department of Economic and Social Affairs (2022); Colella et al. (2022); Pandey, (2018)

3. Methodology

This study is based on qualitative research methods using both primary and secondary data. Nearly, 88 institutions engage in achieving quality education in Sri Lanka (Ministry of Education, 2020). Among these organizations, 15 responsible organizations were selected that were included in the Agency Framework for implementing SDGs that were developed by the Sustainable Development Council in Sri Lanka. Preparedness level was examined in terms of several criteria, namely, Awareness level of SDG, Training regarding SDG goals, Resource availability, and Collaboration with other related organizations which is based on the discussions of National Audit Office – Republic of Mauritius, 2019; Adhikari & Shah, 2021; Blanc, 2018. Accordingly, the interview guidelines were prepared. In-depth interviews were conducted to identify the awareness level of responsible organizations on SDGs, the financial and physical resources available to implement the SDGs, and challenges

and difficulties in achieving SDGs. One responsible officer who is at the top level of the organization was interviewed from each organization. Inductive thematic analysis was used to analyze the data

4. Analysis and Discussion

This section examines the preparedness level for achieving SDG-04 and identifies problems and difficulties in achieving SDG 4 in Sri Lanka by 2030.

4.1 Initiated Programs and Practices in Achieving SDG 04

The government of Sri Lanka has initiated several steps to initiate the policy and organizational structure to address SDG4 in line with the SDGs. The following table presents these efforts:

Table 02: Organizations and Acts Established by the Government of Sri Lanka to Implement the SDG Agenda

Relevant Organizations and Act	Role
Ministry of Sustainable Development, Wildlife and Regional Development	This Ministry was established in 2015 as a line ministry that is responsible for Sustainable Development and enactment of the Sustainable Development Act, No.19 of 2017. The Ministry coordinated and facilitated their implementation until the establishment of the Sustainable Development Council.
Sustainable Development Act No. 19 of 2017 and National Policy and Strategy on Sustainable Development	This Act was enforced in October 2017 to provide the legal framework to implement the SDGs with improved institutional and policy coherence. After that, the National Policy and Strategy was developed by the Sustainable Development Council.

Presidential Expert Committee (PEC) for Sustainable Development	This Committee was established in 2017 (PEC) and a chairman was appointed to prepare a report on the Sustainable Sri Lanka 2030 Vision and Strategic Path.
Parliament Select Committee	This Committee was appointed in January 2017 to facilitate the implementation of SDGs to coordinate the activities of the Parliament with the respective Ministries and provide expert advice.

Source: sustainable sri lanaka 2030 vision and strategic path, (2019)

Table 03 summarizes programs and practices initiated by selected organizations in addressing SDG 04.

Table 03. Programs and Practices Initiated in Achieving SDG 04

Organization	Inclusive	Initiated programs to achieve Equitable	Key areas Quality education	Lifelong learning opportunities
Tertiary and Vocational Education Commission	<ul style="list-style-type: none"> • Developing standards and curricula for disadvantaged and disabled groups. • Enrolling physically challenged students in vocational education courses. 	<ul style="list-style-type: none"> • Provide flexible learning modes and adjustments for candidates who cannot fully engage. 	<ul style="list-style-type: none"> • Endorses the quality of the documents and certificates. • Develop their curricula with the support of the industry. • Monitor the quality of the training programs • Conduct Common knowledge assessments for some occupations. 	<ul style="list-style-type: none"> • Train the assertors to evaluate disabled candidates.
National Institute of Education	<ul style="list-style-type: none"> • Establishing a department to direct school leavers to 	<ul style="list-style-type: none"> • Upload all syllabuses on their website. • Arrange self-learning modules for 	-	<ul style="list-style-type: none"> • New reforms for providing lifelong

	technical education.	every student.	learning opportunities
Children Secretariat	-	<ul style="list-style-type: none"> • Preparation of draft policy for equitable pre-primary education in collaboration with the National Education Commission. • Provide funds for Daycare centers. 	<ul style="list-style-type: none"> • Engaging provincial councils and other organizations to provide preschool teachers with training. • Facility improvement project for developing the infrastructures in the preschool. • Model village programme <ul style="list-style-type: none"> • Conduct Teacher training, curriculum training, and activity-based learning circles
Ministry of Environment	<ul style="list-style-type: none"> • Community awareness programs • SDG web site, FB page 	-	<ul style="list-style-type: none"> • Advising schools to conduct practical environmental programs <ul style="list-style-type: none"> • Conduct teacher training programs. • Conduct training programs for technical and vocational training students
National Education Commission	<ul style="list-style-type: none"> • Policy proposals to ensure access to education, sanitation, resources, and technical facilities. 	-	<ul style="list-style-type: none"> • Identifying responsible policy planning organizations for quality education

<p>Department of Technical & Vocational Education Training</p>	<ul style="list-style-type: none"> • 39 training centers offer vocational courses in three languages. • Provide a scholarship for students (traveling pass, bursaries) • Provide allowance to students to motivate their attendance 	<ul style="list-style-type: none"> • Conduct vocational training courses, especially for young women. • Conduct workshops 	<ul style="list-style-type: none"> • Provide courses to help students prepare for the job market. • Training programs for instructors 	
<p>Vocational Training Authority of Sri Lanka</p>	<ul style="list-style-type: none"> • Special courses for Disabled people • Conducting technical courses for Jail inmates • Conducting awareness programs for schoolchildren • Uploading technical courses to YouTube 	<ul style="list-style-type: none"> • Recruiting candidates for technical courses without considering gender. 	<ul style="list-style-type: none"> • Conducting training programs for instructors 	
<p>Department of National Planning</p>	<ul style="list-style-type: none"> • A budget proposal for online education programs (Gurugedara, e-Thaksalawa) 	<ul style="list-style-type: none"> • Budget proposals for school uniform distribution, textbook distribution 	<ul style="list-style-type: none"> • A vocational education stream for higher education • Territory education has been made compulsory. 	<ul style="list-style-type: none"> • Budget proposals for teacher training programs

	<ul style="list-style-type: none"> • Proposal for increasing the university intake from 2020. • Special projects for technical education, STEM education (ADB-funded projects) 	<ul style="list-style-type: none"> • Introduce new strategies and programs for STEM education • Special plans and programs for education reforms 		
Ministry of Education	<ul style="list-style-type: none"> • Thirteen years guaranteed education program in schools. • Mandate Schools to conduct based projects and provide funds for that. 	<ul style="list-style-type: none"> • Planning remedies to help students with low proficiency. • Increment for vocationally trained students. • Formulate a policy for pre-primary education 	<ul style="list-style-type: none"> • Conduct formative tests to get feedback from students and identify their needs • Data collection programs • Programs related to vocational educational access. • Make a tool for collecting data on the proficiency level of grade 3 students Planning a parental guide 	<ul style="list-style-type: none"> • Training programs for teachers

Source: Field data, (2022, 2023)

5. Future Programs/Activities

In addition to the above-mentioned implemented programs, these responsible organizations have planned several programs/activities to achieve SDG 04.

Table 04: Future Programs/Activities

Organization	Future programs
National Institute of Education	<ul style="list-style-type: none"> • A plan to establish a IAB school in every Divisional Secretariat • Change the exam-driven system and introduce a school-based performance system including project-based learning, inquiry-based learning, and problem-based learning methods
Children Secretariat	<ul style="list-style-type: none"> • Establish a database system to evaluate the standards regarding the pre-education.
Ministry of Environment	<ul style="list-style-type: none"> • An educational module for introduction to universities along with a five-year action plan • Future - Television programs • Training programs for trainers
National Education Commission	<ul style="list-style-type: none"> • Strengthen their regulating process in the future. • Strengthening of the research areas
Department of Technical & Vocational Education Training	<ul style="list-style-type: none"> • A plan to provide training courses and develop access facilities for minor disability people
Vocational Training Authority of Sri Lanka	<ul style="list-style-type: none"> • Introducing new technical courses identified by their research department
Department of National Planning	<ul style="list-style-type: none"> • Education reform proposal with activity-based learning, early childhood education, rural sector education, and vocational education for school children
Ministry of Education	<ul style="list-style-type: none"> • A plan to conduct National assessment programs all over the country for Grade 3, Grade 6, and Grade 8 students. • Mid-decade assessment program in 2023

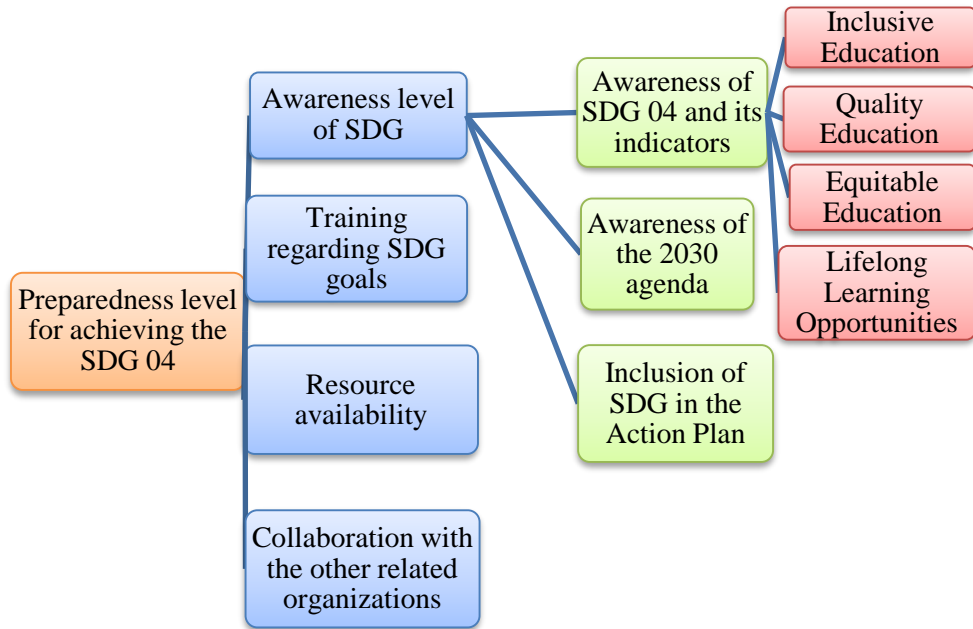
Source: Field data, (2022, 2023)

These selected organizations have already taken some activities to achieve SDG4. However, a comprehensive study with empirical data is required to assess the effectiveness of the program

5.1 Preparedness Level of Achieving SDG-04 Education in Sri Lanka by 2030

Several criteria namely, awareness, resource availability, training and collaboration, and coordination were used to examine the preparedness level (National Audit Office – Republic of Mauritius, 2019; Adhikari & Shah, 2021; Blanc, 2018). Based on the following framework, the interview guidelines were designed. A thematic analysis was conducted to identify the preparedness level of the selected responsible organizations and the subsequent section presents the step-by-step process of the thematic analysis.

Figure 01: Analytical Framework for Examining Preparedness Level in Achieving the SDG 4.



Source: Based on Literature review

Based on the Thematic analysis, four themes were identified namely, inadequate level of awareness of SDG, lack of proper training regarding SDG goals, lack of resource availability, and lack of collaboration with the other related organizations.

Under the inadequate level of awareness of SDG, the adequate level of awareness of the 2030 agenda, lack of awareness of SDG 04 and its indicators, and adequate level of inclusion of SDG in the action plan were considered.

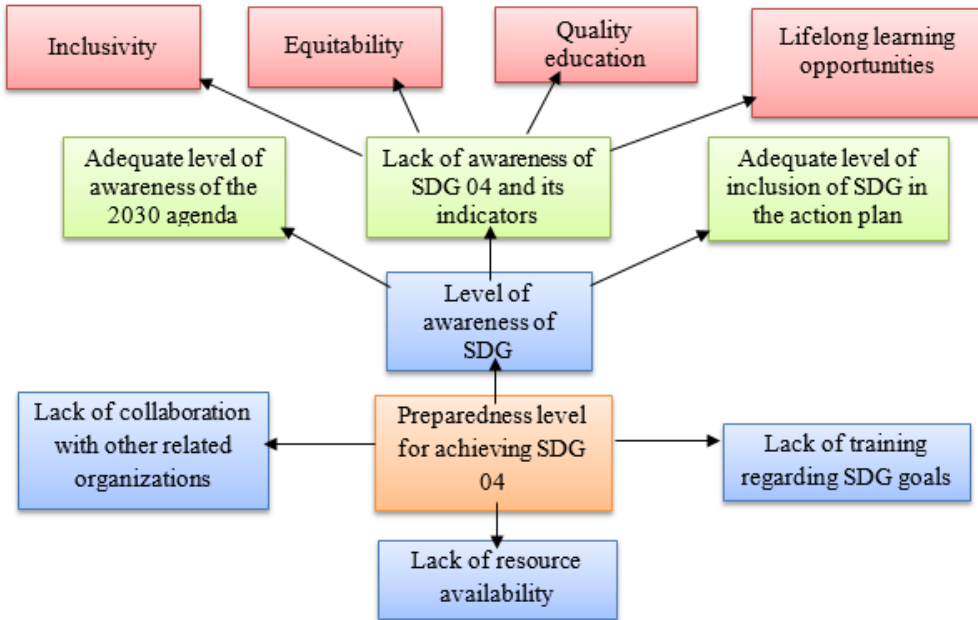
Table 05: Searching for Codes and Themes

<p>Codes:</p> <ul style="list-style-type: none"> • Aware of the responsibility for formulating and implementing SDGs. • Included activities relating to the SDGs in annual action plans and policy decisions. • Include SDG 04 targets and indicators in their action. • Lack of opportunity for everyone • Lack of equal education • Lack of receiving and access to equal education opportunities <p>Theme: Inadequate level of awareness of SDG</p>	<p>Codes:</p> <ul style="list-style-type: none"> • Lack of in-depth training • Conduct some workshops. • Lack of effective training programs • Lack of quality of the documents and certificates, Quality of training programs • Make the student a "knowledge seeker." • Lack of identifying the capabilities of students and providing facilities for improving them • Lack of upgrading the skills <p>Theme: Lack of proper Training regarding SDG goals</p>	<p>Codes:</p> <ul style="list-style-type: none"> • Need funds from NGOs. • Receive money from the consolidated fund. • Not receiving direct funds • Lack of financial resources • Insufficient salaries • Lack of investments • Outdated physical resources. • Lack of information and communication devices <p>Theme: Lack of Resource availability</p>
<hr/> <p>Codes:</p> <ul style="list-style-type: none"> • Direct or indirect connection • Communication gaps <p>Theme: Lack of collaboration with the other related organizations</p> <hr/>		

Source: Field data

Based on the data analysis, the preparedness level of SDG 04 is presented in Figure 02.

Figure 02: Preparedness Level of SDG 04



Source: Field data

The above-mentioned themes are described in brief in the proceeding section.

5.2 Inadequate Level of Awareness of SDG

The awareness of the 2030 Agenda and the inclusion of the SDGs in the action plan are at a satisfactory level. However, the awareness of SDG 04 and its indicators is not at a satisfactory level because most of the respondents do not have a clear idea about the key areas of SDG 04, including inclusiveness, equity, quality education, and lifelong learning opportunities.

5.3 Adequate Level of Awareness of the 2030 Agenda

All these responsible organizations have an awareness of the SDGs and are responsible for the formulation and implementation of the SDGs in Sri Lanka. The awareness of the SDG 2030 agenda through various ways such as documents on SDGs, agreements and circulars, and training programs. Some organizations have

already focused on the SDGs in alignment with the existing government policy framework.

5.4 Adequate Level of Inclusion of SDG in the Action Plan

After endorsing the 2030 Agenda for Sustainable Development, the Government of Sri Lanka has taken several initiatives to facilitate its implementation. The selected organizations have included several activities related to the SDGs in their action plans. For example, the Tertiary and Vocational Education Commission published a document in 2018 titled 'National Policy on Technical and Vocational Education' as its development plan (includes 09 sections). This tried to address SDG 04. Similarly, the Children's Secretariat approved the policy for the development of the pre-primary education sector in 2004. It was subsequently revised in 2016 to include the SDGs. Plans and programs covered by this policy are included in their annual plan. However, until 2017, the government had not made adequate effort in formulating a plan for SDGs. Sri Lanka had not taken sufficient steps to formulate the national policy and strategy on sustainable development, and alignment of targets with the Public Investment Programme (PIP) including education (Ministry of Sustainable Development, Wildlife and Regional Development, 2018).

5.5 Lack of Awareness of SDG 04 and Its Indicators

The awareness of SDG 04 and its indicators (Inclusive, Equitable, Quality Education, and Lifelong Learning Opportunities) was not adequate since most of the respondents did not have a clear idea about these key areas of SDG 04.

5.6 Lack of Training Regarding SDG Goals

Most of the officers in these selected organizations have not received any training programs on SDGs. Several officers had undergone some training; however, the effectiveness of these training programs was marginal, and also these officials were shown very enthusiasm to have necessary training on SDGs.

A few organizations have received training on how to achieve SDGs and those training programs were conducted by the Secretariat of Sustainable Development in Sri Lanka, they have joined with the Sustainable Development Council for some review programs.

The SDG Learning, training, and Practice depend on the commitment of partners to the SDGs and their willingness to share their knowledge with experts all over the world (Division for Sustainable Development Goals – UN (2022)).

5.7 Lack of Resource Availability

SDG4 is less than 80% aligned with the Public Investment Programs (PIPs) public finance projects and programs (Ministry of Sustainable Development, Wildlife and Regional Development, 2018). However, the government's spending on education as a percentage of GDP has declined from 1.99% in 2016 to 1.85% in 2021 (Sustainable Development Council Sri Lanka, 2022).

5.8 Lack of Financial Resources

Several organizations have received funds from the treasury and other sources such as NGOs, World Bank, etc. However, they are still facing difficulties with financial resources due to the prevailing economic crisis in the country. In that context, these organizations were unable to implement their programs relating to the SDGs as scheduled. Some institutes attached to the vocational education sector provide practical courses for students. Due to financial problems, they were unable to pay their instructors and even some instructors have not been paid properly.

Among these responsible institutions, several institutions conduct surveys related to SDG 04. They research to ensure access to quality education and to know the issues and problems when implementing educational policies. However, due to a lack of financial resources, those organizations were unable to conduct surveys related to the SDGs.

5.9 Lack of Physical Resources

Most of the responsible organizations face difficulties with outdated and lack of physical resources like buildings and technical equipment. Often vocational institutes face this problem because they have training centers and need adequate buildings to run their activities. Sometimes, disabled candidates attend their courses, and they require special facilities (e.g. sanitary facilities and accessibility facilities). Some organizations do not have enough internet facilities and ICT equipment in their workplace.

Resource availability in terms of financial resources and physical resources is not adequate.

5.10 Lack of Collaboration with the Other Related Organizations

Education is a broad scope. Hence, no single organization can implement and achieve SDG 04 alone and all responsible organizations must work collaboratively. At the

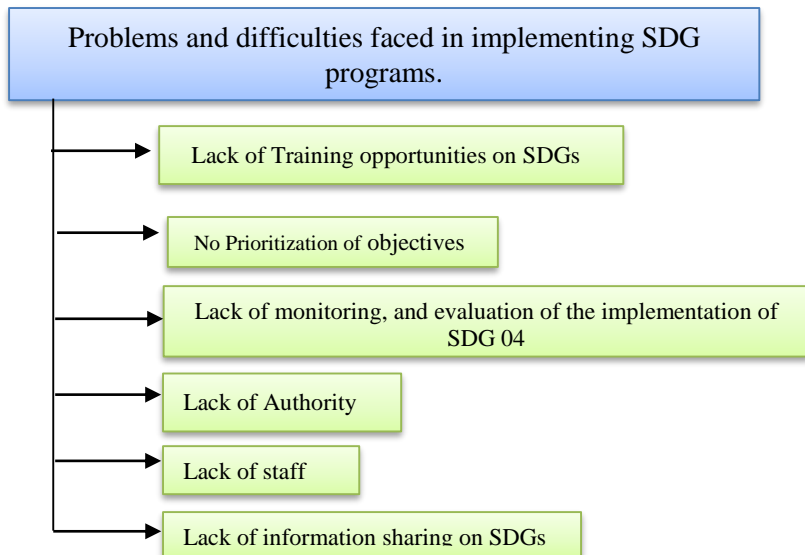
implementation of SDGs, there should be proper coordination among the responsible institutions that are required for the success of the programs of SDGs. ‘Interconnected practices are essential for policymaking, planning, and implementation in the education field’ (Sustainable Sri Lanka 2030 Vision and Strategic Path, 2019).

There were communication gaps between several institutions, thus, proper coordination among these organizations is essential that help share best practices. The division of the education portfolio into different sub-sectors and the lack of communication between the respective authorities have resulted in inconsistent and contradictory policies and practices across the education sector (Sustainable Sri Lanka 2030 Vision and Strategic Path, 2019). Collaboration among related organizations was not at a satisfactory level.

6. Problems and Difficulties Faced in Implementing SDG Programs

Identified problems and difficulties faced in implementing SDG programs are shown in Figure 03.

Figure 03: Problems and Difficulties Faced in Implementing SDGs Programs



Source: Field data

6.1 Lack of Training Opportunities on SDGs

Responsible institutions need better training opportunities regarding the SDGs. Only a few institutions have received training opportunities including foreign training, but most of the institutions have not received any training, and some of the training programs were not very effective. The officials lack training on how to gain awareness, and design, implement, monitor, and evaluate the SDG policies and programs.

6.2 No Prioritization of Objectives

Although responsible institutions have made some initiatives to adopt the SDGs, it is required to prioritize these goals considering the existing goals of the organizations. As the implementation of SDG 04 is only a part of their action plan, these organizations need to focus on the existing vision and objectives, and because of that, SDG 04 has received less attention. Sometimes the organizational objectives overlap with the SDG objectives which negatively affects the performance of their organizational performance.

6.3 Lack of Monitoring and Evaluation of the Implementation of SDG 04

Some selected institutions conduct surveys to identify problems and issues of implementing, monitoring, and evaluating SDG programs. Due to the lack of financial resources, and other constraints, these organizations face difficulties in conducting their surveys/feedback properly. If they get adequate funding, they could identify problems in implementing, monitoring, and evaluating SDG programs leading to the success of the implementation of SDGs.

6.4 Lack of Authority

Sometimes SDG 04 cannot be properly implemented due to inadequate authority. Several educational institutions in Sri Lanka are being regulated by different authorities. For example, public schools are regulated by the central government or the provincial council, and international schools are regulated under the Companies Act. Therefore, responsible institutions face several problems such as issues of collection of data and information, regulation, policy formulation, implementation, monitoring, and evaluation of implementing SDG 04 due to the lack of authority from one authorized institute.

The main authorized body for SDG implementation in Sri Lanka is the Sustainable Development Council and its responsibilities are to coordinate, facilitate, monitor, evaluate, and report the implementation of SDGs in Sri Lanka. Due to several reasons (high labor turnover, lack of expert people in the council), this organization has failed to perform its functions properly. The Sustainable Development Council as the main authorizing body should regulate all the responsible institutions of SDG 04 for the proper implementation of SDG 04. However, their roles, the capacity of the officers, and the powers of the organization are not adequate.

6.5 Lack of Staff

Most of the selected responsible institutions do not have adequate staff to implement SDG 04-related activities thus, implementation of SDG 04 has become difficult. Some vocational education institutions face various difficulties due to financial constraints. Hence, their instructors frequently leave their jobs and as a result, these organizations recruit visiting staff to conduct their programs. The Sustainable Development Council faces difficulties in carrying out its roles and responsibilities in implementing SDGs.

6.6 Lack of Information Sharing on SDGs

There is no proper mechanism to share relevant and useful information and data such as policy formulation, implementation, monitoring feedback, and evaluation.

The Second Voluntary National Review Sri Lanka Report (2022) noted that there are limitations in collection, validation, and access to data and face challenges in policy formulation and interventions. This report also revealed that education systems need to monitor beyond their administrative data and be able to implement policies targeting all children, and also it requires comparing Education Management Information System (EMIS) data to national population-level data.

7. Policy Implications

Policy measures are discussed to address the problems and to enhance the preparedness level to achieve SDG 04 in 2030.

7.1 Conduct Effective Training Programs

Proper training programs need to be conducted in implementing SDG plans. These training programs could be organized locally and internationally in collaboration with

related organizations to gain knowledge on how to successfully implement the SDGs and get awareness about the best practices from other countries. These training programs need to be evaluated to ensure the effectiveness of them. Those officers should receive relevant training based on the world's best practices of SDGs.

7.2 Conduct Monitoring and Evaluation Programs

To identify issues and problems during the implementation and after the implementation of SDG 04, monitoring and evaluation programs need to be conducted. Further, adequate financial resources and other facilities should be provided to responsible institutions to conduct these surveys, evaluation studies, and feedback programs.

7.3 Recruitment of New Staff

Vocational education institutions in particular face human resource management issues as there are lack of instructors in the technical subjects. Thus, fresh graduates from technical faculties can be recruited to vocational education institutions with a proper salary scale.

7.4 Establish a better Mechanism for Data Sharing

Proper data-sharing mechanisms related to SDG4 among responsible organizations are essential since each of these organizations has gathered useful information and data such as data and information related to their plans, programs, best practices, education policy formulation, implementation, monitoring, and evaluation and that information can be important to other responsible agencies for conducting g their activities. However, officials are reluctant to share information due to the absence of a secure mechanism for the sharing of information.

7.5 Provide Adequate Physical Resources

Lack of physical resources is a common problem faced by the selected organizations. Hence, the government needs to provide adequate building facilities, technical equipment, internet facilities, ICT equipment, and other essential physical resources to those institutions. In particular, sanitary facilities and accessibility facilities need to be provided for disabled candidates to increase their participation in education, since 'Universal basic education goals could not be achieved without providing educational opportunities for differently abled children' (Annual Performance Report - Ministry of Education, 2020).

7.6 Maintain Appropriate Collaboration with the other Related Organizations

There should be better coordination and collaboration among the responsible institutions to achieve SDG 04. Accordingly, each responsible institution could cooperate with other related institutions, and communicate their plans and programs. This is especially important in the planning and implementation stages.

7.7 Conduct a National Assessment on Preparedness Level

Although responsible organizations have initiated several plans and programs to achieve SDG 04 in Sri Lanka, there is no proper assessment of the level of preparedness for achieving SDG 04. It is necessary to implement a national survey covering all responsible institutions as the 2030 SDG Agenda is less than 7 years from being achieved. This national assessment should cover the availability of financial and physical resources, the level of awareness of SDG 04, and the issues and difficulties faced by each responsible institution in implementing SDG 04.

7.8 Need to Strengthen an Authorized Institution

All responsible educational institutions are regulated by different authorities, but SDG 04 could not be implemented properly due to the lack of authority. There should be an exclusive authorized and regulatory body to regulate all other organizations responsible for achieving SDG 04 in Sri Lanka. Currently, the Sustainable Development Council of Sri Lanka is the authorized body for the implementation of the SDGs in Sri Lanka. But this organization should be strengthened in terms of financial resources, and capacity development with training programs to enhance the knowledge and skills of officials who are responsible for achieving the SDGs. For that, qualified and experienced resource persons should be recruited, and the activities of the council should be monitored and evaluated. There should also be strong alignment, rules, and regulations from the ministerial level in implementing the SDGs. While there is a common roadmap for the SDGs, there should be a separate roadmap for each goal.

8. Conclusion

This study examines the preparedness level in achieving SDG-04 in Sri Lanka by 2030, identifying challenges and difficulties, and proposes policy measures to improve the preparedness level in achieving SDG-04 in Sri Lanka by 2030. The preparedness was examined in terms of awareness, resource availability, training

regarding SDG goals, and collaboration with other related organizations. Adequate awareness about the 2030 agenda and an adequate level of inclusion of the SDGs in the action plan were exhibited among the elected officials. The awareness about SDG 04 and its indicators, resource availability, training regarding SDG goals, and collaboration with other related organizations are lacking.

Further, training opportunities, prioritization of objectives, monitoring and evaluating of implementation of SDG 04 authority issues, shortages of staff, and lack of information sharing on SDGs were identified as the main problems and difficulties faced by these organizations who are responsible for the implementation of SDG programs.

Compared to other developing countries, Sri Lanka has made significant progress in the education sector, and some responsible officials have perceived that Sri Lanka could achieve SDG 04 in 2030. Sri Lanka has shown some progress in the field of education as a country where free education has been implemented since independence, there may be a possibility of achieving SDG 04 by 2030 to a satisfactory level if the initiated programs are implemented efficiently. But 100% completion of SDG 04 by 2030 could not be guaranteed. If the current programs are conducted efficiently, SDG 04 could be completed at a significant level. Conducting effective training programs, improving the field of research on SDG 04, recruiting new staff, establishing a proper mechanism for data sharing on SDG 04, providing adequate physical resources, maintaining an appropriate collaboration with the other related organizations, conducting a National assessment on preparedness level to achieve SDG 04 and establishing an authorized and regulatory institution are policy measures to address the problems and also to enhance the preparedness level to achieve SDG 04 in 2030.

9. Limitations and Further Research

This study focused only on SDG 04, however, since a comparison of all the sustainable objectives reveals that they are all similar in relevance, future studies might focus on the implementation of other SDGs. In Sri Lanka, several responsible organizations are involved in implementing SDG 4. Due to time constraints and financial constraints, this study only covered 15 responsible organizations which have been included in the agency framework of the implementing SDGs and its sub-indicators in Sri Lanka and this framework has been prepared by the Sustainable Development Council of Sri Lanka. Therefore, future research can be conducted by covering other responsible organizations.

9.1 Declaration of Conflicting Interests

The authors declared no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

9.2 Funding

This study was supported by the Research Centre for Governance and Public Policy, University of Sri Jayawardenepura, Sri Lanka.

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