Achieving Sustainable Development Goals (SDGs) among the South Asian Countries: Progress and Challenges

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Abstract

This article analyses sustainable development goals based on selected indicators to capture the progress of SDGs among the South Asian countries. The selected indicators are used to explore countries achievements of SDGs since its adoption in 2015 and challenges of

achieving specific SDG. This study adopts various methods including trend analysis, ranking and comparative analysis to analyse the progress of SDGs among the countries. The findings reveal that although SDG1 is progressing, still one third of the world poor population lives in south Asia where India (37.2%) was found highest poverty headcount based on $3.20/day followed by Nepal (33.4%) and Bangladesh (33.2%). The findings also portray that majority south Asian countries spend less than 4% of their GDP on education and health which hindrances the progress of SDG indicators. Moreover, many countries are still far reaching from the environmental sustainability indicators such as CO_2 emission per capita, air pollution and forest coverage. Overall, though the countries have achieved some positive progress in particular SDG but majority SDGs including 1, 5, 8, 11, 14-17 remain challenges for achieving the target. Therefore, this study suggests to promote policies and initiatives targeting specific SDG by the countries for achieving the SDGs by 2030.

Keywords: SDGs (Sustainable development goals), indicators, progress, challenges, South Asia

1. Introduction

Sustainable development goals (SDGs) are adopted by the United Nations in 2015 in New York where the UN member countries agreed to implement the goals by 2030.However, the adoption of SDGs has quite a long history since the term sustainable development (SD) was coined in 1987. Now, both SD and SDGs are increasingly used by the researcher, development practitioners and the policy makers for taking actions and initiatives. The World Commission on Environment and Development (WCSD) which is also known Brundtland Commission was first formally used the term "sustainable development" in 1987 and defines it as development that meet not only the need of the present but also for the future generation while not undermine environment (UNWCED 1987). After Brundtland commission, another remarkable program was held in Rio de Janeiro (Brazil) in 1992 which is called "The 1992 Earth Summit" where global leaders agreed to implement Agenda 21 comprising 27 principles of sustainable development which calls on countries to develop national-level sustainability indicators (Tsa, 2010; Sadeka, et al. 2018). A milestone in the development agenda was initiated by the UN in presence of 189 countries in 2000 by the historic Millennium Declaration which is known as the MDGs (Millennium Development Goals). The goals sought to address several core contents of development including halving extreme poverty and hunger, promoting gender equality and reducing child mortality. A framework of 8 goals, 18 targets and 48 indicators was adopted to measure progress towards the MDGs by 2015 based on 1990 benchmark data. Subsequently the targets and indicators under the 8 goals have been increased to 21 and 60 respectively. After two years, the World Summit on Sustainable Development (WSSD) in 2002 which was held in Johannesburg (South Africa) which produced the Sustainable Development Action Plan that highlighted the implementation of Millennium Development goals. The United Nations Commission on Sustainable Development (CSD) was established by the UN General Assembly in December 1992 which developed a set of indicator known as CSD indicators. The latest CSD indicator contains a core set of 50 indicators under 14 themes and it also offers guidance for applying and adapting the CSD indicators in the national level (United Nations, 2007). Therefore,

sustainable development is considered as a complex phenomenon because of the wide range of indicators (Grzebyk & Stec, 2015). The High-level Plenary Meeting on the Millennium Development Goals (MDG) or "MDG Summit" took place in New York from 20-22 September 2010. The main aim of the Summit was to accelerate progress on halving extreme poverty, and drastically reducing hunger, disease, maternal and child deaths and other ills, addressed in the MDGs targets. The United Nations Conference on Sustainable Development took place in Rio de Janeiro, on 20-22 June 2012 which called for practical measures for implementing sustainable development. Finally, the 17 SDGs were adopted by all UN Member States in 2015 as part of the 2030 Agenda for sustainable development [Figure 1]. The 17 SDGs contains a set of 169 targets and 232 indicators, and UN has set 15 years' time period from 2016 to 2030 for the countries towards implementation of SDGs. United Nations has created the SDGs after the follow-up to the Millennium Development Goals (MDGs) that has ended in 2015 to fight poverty and secure human well-being globally (Sachs, 2012; Griggs et al. 2013).
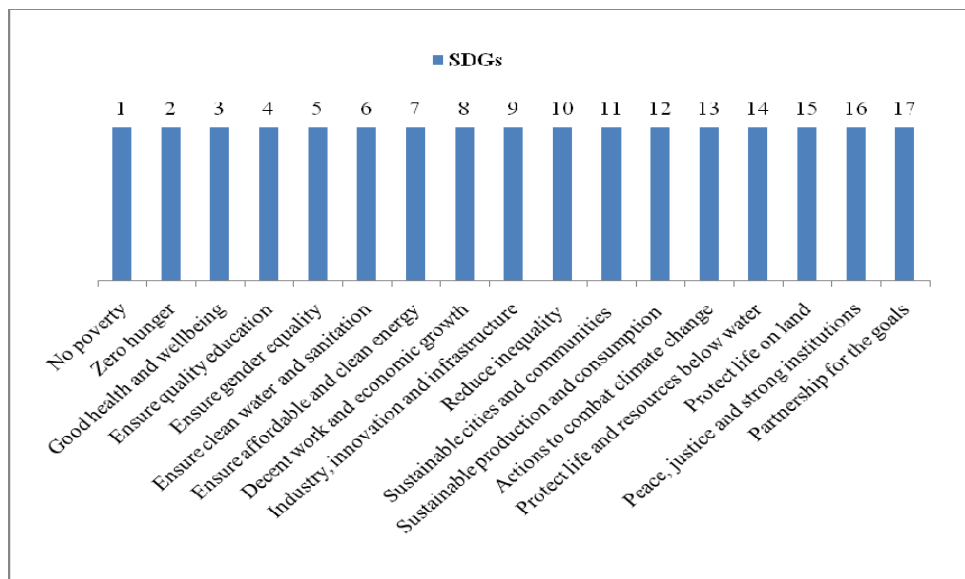

Figure 1. 17 SDGs (Sustainable Development goals)

SDGs are crucial to implement in all the South Asian countries as they share more or less similar socio-economic characteristics and also they are facing comparatively more or less similar problems in the parameters of development. Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka are included geographically in South Asia. It can be mentioned that South Asia is endowed with population resource where about one forth of world population live. The region is considered as the most density populated region of the world where 1,830 million people live with an area of 5,220,587 sq km (Sarkar et al. 2013). Maldives and Bangladesh are the two most densely populated country in South Asia. This region is considered as one of the world fastest growing regions in terms of GDP and population growth (Sarkar et al. 2013). However, in spite of higher economic growth, south

Asian countries are still suffering limited access to education, health and technology, lack of good government, and more specifically, still half of the world's poor population lives in this region. The region also contains world's largest working age population, one fourth of the world's middle class consumers, the largest number of poor and undernourished in the world, and pockets of deep poverty, rising inequality, energy shortages and high rates of malnutrition (IMF, 2011). These problems are related to SDGs and their progress needs to be evaluated among the countries as United Nations adopted SDGs to improve the overall situation of the member states by achieving targets relating to specific SDG. Thus, this study aims to analyze the progress of SDGs among the south Asian countries.

South Asia is a region which characterizes with low level of development and significant population living with lack of basic amenities, hence SDGs have already received special attention of the countries and the region (Rasu et al. 2021). Thus, to address socioeconomic and environmental problems of South Asia, SDGs implementation are vital to solve the problems and secure well-being of the people and nations as well. Therefore, this study attempts to explore the progresses and challenges of SDGs among the South Asian countries which would be useful for policy making, developing strategies and actions for achieving sustainable development goals among the countries and the region.

2. Methods of the Study

This study analyses the progress of SDGs among the south Asian countries and explores the challenges faced by them. As we know, there are huge number of indicators under the 17 SDGs, it is very difficult to conduct a study by taking all of them. Thus, a list of selected indicators under different/major SDGs are selected to compare the country's performance and identify forwardness and backwardness of the specific goals. The data are collected from the World Development Indicators of the World (2021) and Human development report (2021) and specific country statistics. This study was collected data from 2010-2021 but for the progress and comparison of SDGs, we used data 2015-2021 as SDG adopted at 2015. Besides, some crucial indexes including CPI (corruption perception index), PFI (Press freedom index), EPI (environmental performance index), SDG rank are used to compare the country performances on sustainability. Bar diagram, trend analysis and comparative analysis are used to explain the countries performance on SDGs and related indicators. The selected indicators under different SDGs for evaluating south Asian countries progresses and challenges are presented in Table 1.

Table 1. Selected sustainable development indicators for the South Asian countries

Major SDGs	Selected indicators
Goal 1	Population below income poverty line- head count ratio (%) at $1.90/day and $3.20/day
Goal 2	Prevalence of undernourishment (%)
Goal 3	Mortality rate at under five (per 1000 live births), maternal mortality, Life expectancy (Years)
Goal 4	Literacy rate (% age 15 and older), Net primary education enrollment rate, lower secondary completion rate
Goal 6	Population access to a least basic drinking water, population using at least basic sanitation
Goal 7	Access to electricity, access to clean fuel & technology for cooking
Goal 8	GDP (gross domestic product) growth (%),GDP per capita, unemployment rate
Goal 10	Income gini co-efficient
Goal 11	Proportion of urban population living in slums, satisfaction of urban transport
Goal 13	CO_2 emission per capita
Goal 15	Forest area (% of total land), permanent deforestation
Goal 17	Government expenditure on health and education (% of GDP)

Source: Adapted by authors.

3. Results and Discussion

3.1 Progress of Poverty and Hunger under SDG 1 and 2

A country's progress is largely exemplified by its poverty and hunger scenario as the developed countries reveal minimum/lowest level of poverty while developing and least developed countries exhibit highest level of poverty. Poverty is considered as one of the fundamental problems of many south Asian and African countries for achieving sustainable development as they are continuously fighting with poverty (Sarkar et al. 2013; Badiuzzaman, et al. 2018). However, south Asian countries have gained significant progress in term of poverty reduction (Asadullah et al., 2020). In spite of such progress, the region is still considered world pocket of poverty after Africa. According to the 2015 statistics, about 730 million people (9.9% of the world population) is suffering with poverty who do not have enough food to lead a healthy active life (World Bank 2018). Surprisingly, one third of the world poor population lives in south Asia. Most of the South Asian countries are facing still high level of poverty which is presented in Figure 3. According to the findings, India was attained highest poverty headcount ratio at $3.20/day (%) followed by Nepal and Bangladesh. However, though data are not available, Afghanistan was possessed highest level of national poverty line (head count ratio) in south Asia. Moreover, Maldives, Sri Lanka and Bhutan's progress and position are found better in terms of national poverty line. However, as Covid19 triggers the poverty pressure of the south Asian countries, there is an urgent need to speed up poverty reduction programs by proper policy and actions.

Figure 2. Poverty headcount ratio at \$3.20/day and \$1.9/day among the South Asian countries

South Asian countries are also suffering from prevalence of undernourishment which is presented in Figure 3. Though the countries have achieved some improvement of this situation but it is still quite challenging for some countries like Afghanistan, India, Pakistan and Bangladesh. The findings show that Sri Lanka and Nepal have lower level of undernourishment among the south Asian countries.
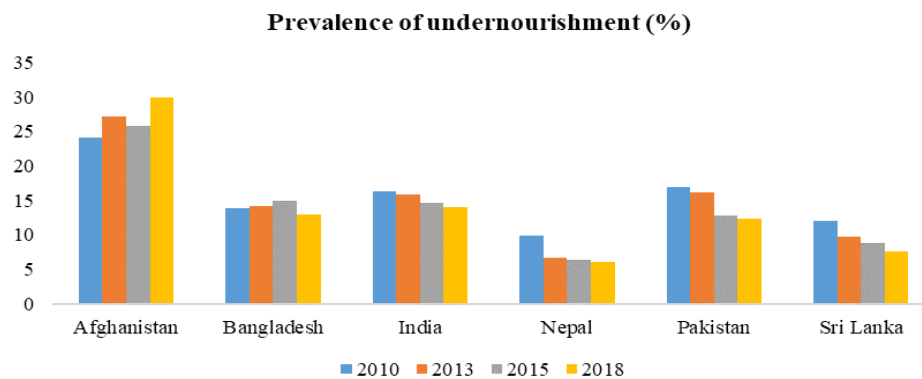

Figure 3. Prevalence of undernourishment (%) among the South Asian countries

3.2 Performance of Health Indicators under Goal 3

Though a number of indicators are included in SDG 3, this study only took 3 indicators such as maternal and child mortality and life expectancy for explain the countries situation. To achieve sustainable development, these indicators are considered crucial. As a developing region (except Afghanistan), majority countries are facing higher mortality rate due to lack of access to health services. Table 2 shows that Sri Lanka has obtained the lowest maternal mortality rate per 100000 lives birth (36) followed by Maldives (53) while highest mortality was found in

Afghanistan (638) among the South Asian countries. Besides, Afghanistan was also obtained the highest child mortality rate and Sri Lanka was found the lowest. Life expectancy at birth is another crucial factor of human development as indicated by UNDP (HDR, 2020). Life expectancy is found highest in Maldives 79.59 years and lowest in Afghanistan (63.21 years). The findings reveal that though all the countries have achieved positive improvement in all health related indicators, Bhutan and Nepal's progress is quite significant in terms of maternal and child mortality. The results are also in line with the World Bank (2019) data where we found that Maldives and Nepal were the two south Asian countries who spent 11.5% and 10% share of its GDP on public health expenditure on health in 2017.

Table 2 Health indicator's performance among the south Asian countries

South Asian countries	Maternal Mortality (per 100000 live birth)			Child Mortality under 5 (per 1000 live birth)			Life expectancy (years)		
	2010	2015	2017	2010	2015	2019	2010	2015	2019
Afghanistan	954	701	638	87.6	70.4	60.3	59.94	61.65	63.21
Bangladesh	258	200	176	48.7	37.5	30.8	70.29	73.58	74.26
Bhutan	247	203	183	42.2	33.1	28.5	71.03	72.15	73.11
India	201	158	145	58.2	43.5	34.3	67.23	69.32	70.79
Nepal	305	236	186	46.6	36.2	30.8	69.18	69.43	70.88
Maldives	67	54	53	13.9	10.1	7.6	76.99	78.41	79.59
Pakistan	191	154	140	87.1	76.1	67.2	62.64	64.18	65.61
Sri Lanka	38	36	36	11.6	8.7	7.1	73.3	76.27	76.87

Source: Adapted from World Bank (2022) and Sachs et al. (2021).

3.3 Performance of Education Indicators under SDG 4

Education is considered as a crucial element for accelerating development and sustainable development goals. The progress of education related indicators under goal 4 are presented in Table 3. Majority of the south Asian countries have progress well in case of primary and secondary education enrollment from 2010 to 2020. The highest adult literacy rate was found in Maldives (98.8) and Sri Lanka (98.8) where Afghanistan possessed the lowest literacy rate (65.4). It is also found that pupil teacher ratio is higher in case of Maldives, Bhutan and Sri Lanka. Afghanistan and Pakistan's positon in terms of pupil teacher ratio is found as worst among the countries. Another important indicator for achieving sustainable development and skill human capital is public expenditure on education. Wide variation in the share of public expenditure was found among the countries where Bhutan (7.4%) has occupied the best position and Bangladesh (2.5%) has revealed lowest position. These findings are in line with the Sarkar et al. (2013) as they identified that Bangladesh spent lowest share of its GDP on education.

Table 3. Performance of education indicator among the south Asian countries

South Asian countries	Net primary enrolment rate (%)			Lower secondary completion rate (%)			Literacy rate (% of total youth, ages 15-24)	
	2010	2015	2020	2010	2015	2020	2015	2020
Afghanistan	-	-	-	-	50.69	55.35	-	65.4
Bangladesh	95	-	-	-	-	88	87.9	94.9
Bhutan	87.5	90.1	96.3	64.6	80.2	85.1	72.8	93.1
India	96.1	97.7	-	76.3	85.4	83.2	74.4	91.7
Maldives	99	99.5	98	-	99.5	100	98.6	98.8
Nepal	99.3	98.3	96.3	66.6	86.6	99.5	67.9	92.4
Pakistan	-	-	-	38.5	45.5	49.5	71.3	74.5
Sri Lanka	95.9	99.1	99.5	97.6	96.1	96.4	98.7	98.8

Source: Adapted from World Bank (2022) and Sachs et al. (2021).

3.5 Progress of Gender Equality under SDG 5

Gender equality is an important issue which enhances country's progress and prosperity. As half of the population are women in south Asia, thus ensuring their participation in education and other sector is a priority. However, countries are found wide variation in their ratio to female to male education received as presented in Table 4. It indicates that Maldives was achieved highest attainment of female-to-male mean years of education received (90%) followed by Sri Lanka while Afghanistan was found to lowest (about 26%). Moreover, almost half of the female population of Pakistan, India and Nepal are still out of the mean years of education. Though it is found that gender equality is progressing in case of education attainment, there is need more attention of gender specific policy and programs as well as gender inclusion in both public and private sector.

Table 4. Ratio of female-to-male mean years of education received (%) among the countries

Countries	Ratio of female-to-male mean years of education received (%)		
	2010	2015	2019
Afghanistan	25.53	27.59	31.67
Bangladesh	81.82	78.46	82.61
Bhutan	51.61	61.91	68.75
India	50.0	58.54	62.07
Maldives	90.39	92.75	100
Nepal	51.11	54.84	74.14
Pakistan	49.18	56.92	60.32
Sri Lanka	88.50	90.35	100

3.5 Progress of Clean Water and Sanitation under SDG 6

The goal 6 is related to health and well-being of the people and the environment. Therefore, it is crucial to meet the need of clean water and sanitation for all the citizen. Table shows 5

percentage of population access to basic drinking water and sanitation in south Asian countries. The findings indicate countries are progressing in terms of percentage changes over 2010 -2017. However, some south Asian countries have failed to ensure these services for almost half of their population of Afghanistan, Bangladesh, India, Nepal and Pakistan. It is mentioned that SDG 6 is extremely crucial for ensuring good health and well-being of the people and the environment. Thus, the countries need to take huge effort and investment for implementing different programs, initiative, actions towards ensuring access to clean water and sanitation for all citizens (Narayanan, et al. 2012).

Table 5. Population access to basic drinking water and sanitation

	Population access to a least basic drinking water (% of total population)			Population using at least basic sanitation (% of total population)		
	2010	2015	2017	2010	2015	2017
Afghanistan	48.4	61.5	67.1	34.2	40.7	43.4
Bangladesh	96.5	96.8	97.0	39.2	45.7	48.2
Bhutan	92.7	96.8	97.2	61.9	67.3	69.2
India	86.9	91.0	92.7	41.5	54.4	59.5
Maldives	97.1	99.1	99.3	91.1	99.1	99.4
Nepal	85.4	87.8	88.8	40.9	55.7	62.1
Pakistan	89.2	90.8	91.5	49.1	56.6	59.9
Sri Lanka	85.4	88.3	89.4	91.0	94.4	95.8

Source: Adapted from World Bank (2022) and Sachs et al. (2021).

3.6 Progress of Clean Fuel and Technology under SDG 7

Electricity and clean fuel and technology are considered as the wheel of development and well-being of the people. Table 6 provides statistics of these indicators under goal 7 among the south Asian countries. The countries have progressed well in terms of access to electricity over 2010 -2018. However, majority of the countries are still suffering to ensure access to clean fuel and technology for the people. This study found that most of the people of Afghanistan, Bangladesh, India, Nepal, Sri Lanka and Pakistan are out of this access. Though access to clean fuel and technology are crucial for health and environment, south Asian countries are lag behind to ensure such facilities for their citizen. Thus, the countries should give special attention on this issue and need to take proper policy initiatives for ensuring clean fuel and technology for cooking by the people.

Table 6. Progress of indicators under goal 7 among the south Asian countries

	Access to electricity (% of total population)			Access to clean fuel and technology for cooking (% of total population)		
	2010	2015	2018	2010	2015	2016
Afghanistan	42.7	71.5	98.7	20.7	30.1	32.4
Bangladesh	55.3	73.1	85.2	12.9	16.7	17.7
Bhutan	73.3	95.5	100	46.3	51.7	52.5
India	76.3	88	95.2	34.4	39.9	41
Maldives	99.1	99.8	100	84.4	92.9	93.8
Nepal	68.6	85.2	93.9	22.3	26.6	27.6
Pakistan	70.4	71.2	71.1	35.6	42.1	43.3
Sri Lanka	85.3	94.1	99.6	21.8	25.4	26.3

Source: Adapted from World Bank (2022) and Sachs et al. (2021).

3.7 Progress of Economic Indicators under SDG 8

South Asia is recognized as a growing region of the world in terms of economic growth. Almost all the countries have gained more than 5% GDP (Gross Domestic Product) growth from 2010 to 2018. Due to pandemic started in 2019, GDP growth has been fallen down in 2019 and all the countries except Bangladesh have faced negative growth of their GDP in 2020 as shown in Figure 4. The countries are found to an increasing trend of their GDP per capita based on current US$ up to 2019 except Pakistan and Sri Lanka as they have experienced earlier decrease of their per capita GDP in 2018 which is presented in Figure 5. It is noticed that almost all the countries have faced difficulties in their economic growth and other related indicators due to Covid-19. However, South Asian countries have to deal with a more challenging situation due to their large population, weak health facilities, high poverty rates, low socio-economic conditions, poor social protection, limited access to water and sanitation and so on due to economic slowdown resulted from Covid19 (Rasu et al., 2021).

On other interesting feature of the per capita GDP of the south Asian countries is that they have below 4000 US$ except Maldives. It is mentioned that that still GDP per capita of Afghanistan (517 US$) was found below 1000 US$ where Maldives is the only country that GDP per capita has crossed 10000 US$ in 2019 (World Bank, 2019). Moreover, GDP per capita of Bangladesh, Nepal and Pakistan has still fallen between 1500 – 2000 US$. Thus, lower per capita and slower economic growth due to Covid 19 could be an important challenge for the south Asian countries for achieving SDGs by 2030.
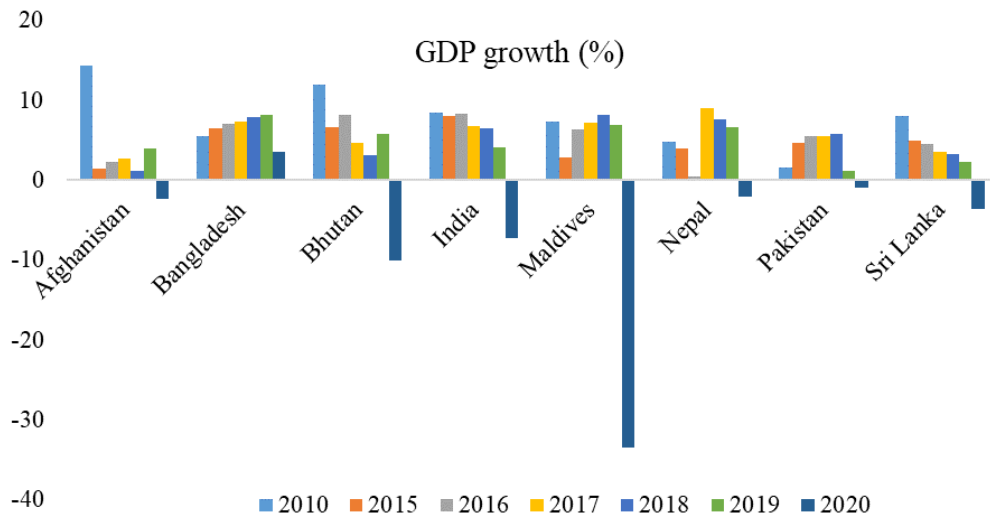
http://ijrd.macrothink.org

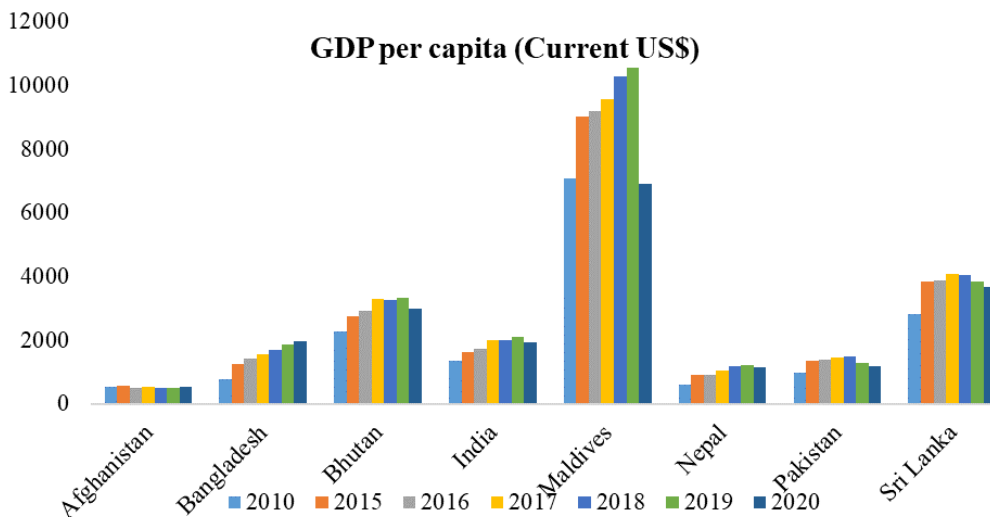Figure 4. Annual GDP growth of the south Asian countries from 2010-2020

Figure 5. GDP per capita among the South Asian countries

Source: World Bank, 2022.

Unemployment is another problem in south Asian. Though the problem was quite stable in the past years up to 2019 but due to Covid 19, rate of unemployment has been increased almost the countries in 2020 as shown in Figure 6. However, highest unemployment rate (12%) was found in Afghanistan followed by India (8%) while lowest unemployment was found in Bhutan (about 4%) among the South Asian countries. Thus, huge investment need to be taken for creation of employment opportunity of the south Asian countries.
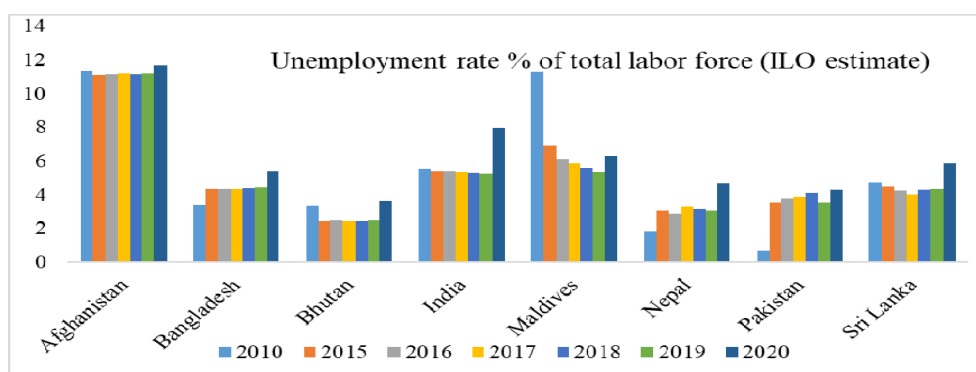
Figure 6. Unemploymet rate among the South Asian countries

Source: World Bank, 2022.

3.7 Progress of Inequality Indicator under SDG10

Table 7 shows inequality based on Income Gini Co-efficient among the south Asian countries. The income Gini coefficient is a measure of the income inequality of a distribution having a range from 0-1, where 0 corresponds with perfect equality and 1 corresponds with perfect inequality. All countries in south Asia face a greater level of income inequality which has been increased in 2016 compared to 2010-2011.However, the highest and lowest income Gini coefficient has been found in Maldives (0.59) and Nepal (0.33) respectively as revealed in Table 7. Therefore, almost all the countries are facing a profound and ever-widening disparity between the rich and poor (Afsar, 2010). It is very hard to reduce poverty without addressing the inequality issue as it is associated with poverty (Titumir & Rahman, 2011; Titumir, 2021).

Table 7. Income Gini Co-efficient, 2000-11 and 2016 among the countries

Name on the countries	Income Gini Co-efficient 2010-2011	Income Gini Co-efficient 2016	Rank (based on highest to lowest inequality)
Afghanistan	-	-	
Bangladesh	32.4	38.2	6
Bhutan	38.8	41.8	5
India	35.1	43.2	3
Maldives	38.4	59.1	1
Nepal	32.8	33.4	7
Pakistan	30.7	43.0	4
Sri Lanka	39.8	51.4	2

Source: HDR, 2013 and Sachs et al. 2021.

3.8 Progress of Sustainable Cities Indicator under SDG 11

Majority of the south Asian countries are suffering poor performance of sustainable cities indicators which hindrance to achieve goal 11. Table 8 presents selected indicators under goal 11 among the South Asian countries which indicates that about 50% of the urban population in Bangladesh and Nepal live in slum. However, Afghanistan was placed in worst position in terms of urban population living in slum where 40% and 35% of the urban population live in slum in Pakistan and India respectively. Moreover, a significant portion of the people are not satisfied on the public transport facilities among the countries.

Table 8. Selected indicators under goal 11 among the South Asian countries

	[1]Prpportion of urban population living in slum(%)			[2]Satisfaction of public transport(%)		
	2010	2014	2018	2010	2015	2019
Afghanistan	-	62.70	70.70	46	46	36
Bangladesh	61.60	55.10	47.20	70	71	82
Bhutan	-	-	-	-	-	-
India	29.40	24.00	35.20	66	68	74
Maldives	-	-	-	-	-	-
Nepal	58.10	54.30	49.30	55	58	71
Pakistan	46.60	45.50	40.10	54	58	59
Sri Lanka	-	-	-	64	72	69

Source: [1]UN Habitat 2022; [2]https://ga.gallup.com/.

3.9 Progress of Climate and Environment under SDG 13 and 15

Environmental sustainability is one of the key drivers of ensuring sustainable development and livelihood. Therefore, the environment centered sustainability is treated as strong sustainability as it focuses environment as most important and critical pillar of sustainable development (Taghvaee et al., 2022). However, many countries are facing poor performance of various environmental indicators. For, instance, Jain et al. (2022) found poor air quality in the middle income countries (MIC). South Asian countries are lagging behind about environmental sustainability without which achieving sustainable development is impossible (Sarkar et al. 2013). The Table 9 shows the performance of environmental sustainability Indicators among the countries. As previously mentioned that majority countries produce less renewable energy and clean fuel which results more burning of fossil fuels and more emission. Though emissions per capita are much greater in very high come countries than in low and middle countries, south Asian countries having lower per capita emission have experienced of increasing emission trend over time. Maldives (3.14) is producing highest Carbon dioxide emission followed by Bhutan (2.24) and India (1.91) and Afghanistan is the lowest emission producing country in south Asia. However, in terms of total emission, India is the major emission producing country in this region. In case of forest coverage, Pakistan, Afghanistan and Maldives are in critical condition as their forest coverage is revealed very low. Moreover, according to the environmental performance index (EPI), south Asian countries are located in

the bottom line of the worst countries where Pakistan (176), Bangladesh (177) and India (180) were found in the top 10 worst countries out of 180 countries (EPI, 2022). Thus, the countries should give special attention to promote better performance of environmental sustainability indicators.

Table 9. Environmental Sustainability Indicators among the southeast Asian countries

Countries	CO_2 emission from fossil fuel combustion and cement production (per capita tones)			Forest area (% of total land)	
	2010	2015	2019	2015	2020
Afghanistan	0.29	0.23	0.28	1.85	1.85
Bangladesh	0.37	0.47	0.63	14.47	14.47
Bhutan	0.68	1.33	2.24	71.23	71.45
India	1.36	1.72	1.91	23.82	24.27
Maldives	2.56	2.86	3.14	2.73	2.73
Nepal	0.18	0.22	0.49	41.59	41.59
Pakistan	0.86	0.85	1.15	5.10	4.83
Sri Lanka	0.64	0.95	1.17	34.39	34.15

Souce: World Bank, 2022.

3.10 Progress of Peace, Justice and Strong Institution under SDG 16

South Asian countries are locating in the bottom line of the indicators relating to SDG 16 as shown in Table 10. The findings indicate that no significant changes have been made by the south Asian countries in term of corruption, press freedom and justice from 2015 to 2020. Though these indicators are crucial to economy, human rights and development, but these are not well addressed by the countries. Corruption among the south Asian countries is considered as one of the hindrance of the desired developed (Myrdal, 2017). Moreover, human right violation and lower level of press freedom are also revealed in the countries which weakens their institutional capacity and rule of law (Ozdowski, 2020). Unfortunately, it is also revealed that there is a lack of political will among the leaders of south Asian countries to improve the existing situation relating to the above indicators. To achieve SDGs and especially SDG16, countries should take proper steps to uplift the following indicators.

Table 10. indicators under goal 16 among the south Asian countries

South Asian countries	[1]Corruption perception index[worst 0-100 best]		[2]Preess freedom index[best 0-100 worst]		[3]Access to justice [worst 0–1 best]	
	2015	2020	2015	2020	2015	2020
Afghanistan	11	19	37.75	37.70	0.38	0.49
Bangladesh	25	26	45.94	49.37	0.42	0.45
Bhutan	65	68	30.73	28.90	-	-
India	38	40	43.17	45.33	0.31	0.41
Maldives	36	43	34.17	29.93	-	-
Nepal	29	33	32.62	35.10	0.42	0.47
Pakistan	30	31	48.52	45.52	0.47	0.39
Sri Lanka	37	38	44.96	41.94	0.50	0.45

Source: [1]Transparency International, 2021; [2]RSF, 2020, [3]World Justice Project, 2020.

3.11 Progress of Partnership Indicators under SDG 17

Public expenditure on education and health are considered as vital partnership indicator to achieve the SDGs by 2030. The findings of this indicators among the South Asian countries are presented in Table 11. Majority of the countries did not obtain any significant changes of their public expenditure on education and health over 2010 to 2018. Maldives is the only country who spent more than 10 % of its GDP on education and health service followed by Bhutan (9.28%). Bangladesh spent the lowest share of its GDP for education and health services (1.72%) among the countries (Sarkar et al. 2013; World Bank, 2020). The importance of this indicator did not still recognized by the many south Asian countries as their share of public expenditure on education and health did not significantly increases over time. Thus, south Asian countries need to expedite the SDG 17 by increasing their share of GDP to public expenditure on education and health to achieving SDG by 2030.

Table 11 Partnership indicators under goal 17 among the south Asian countries

South Asian countries	Public expenditure on education and health (% of GDP)			Rank among the countries
	2010	2015	2018	
Afghanistan	3.95	3.78	4.55	4
Bangladesh	2.46	2.4	1.72	8
Bhutan	6.63	10.31	9.28	2
India	4.24	4.77	4.8	5
Maldives	8.61	10.63	10.75	1
Nepal	4.53	4.74	6.57	3
Pakistan	2.86	3.39	4.04	6
Sri Lanka	3.28	3.94	3.67	7

Source: World Bank, 2020.

3.12 Challenges and Policy Implications for South Asia

South Asian countries remain major challenges on the 2030 agenda for sustainable as many SDGs are still stagnating and failed to achieve the goals. Some similarities and differences are identified based on the findings in different countries. The common challenges are linked with poverty, inequality, education and health, biodiversity and marine and water resources. In spite of progress of some SDGs are made by all countries, challenges still remain for other SDGs such as 1, 2, 6-7, 10-12, 15-17. One of the key challenge of the south Asian countries is their slowdown of economic growth due to Covid19 (Asadullah et al., 2020). Besides, countries are not performing well in terms of energy and environmental sustainability (Pandey and Asif, 2022). However, in case of specific country, major challenges are facing by Afghanistan while moderate challenges are facing by Pakistan, Bangladesh, India, Nepal and Sri Lanka. However, current problem of Sri Lanka is quite acute due to their recent economic failure which makes the country more vulnerable in the region. Therefore, all the countries need to take effective policy response regarding the particular challenges and gaps for achieving the sustainable development goals by 2030.For instance, Maldives has a high per capita GDP but it has also a very high CO_2 emission, climate risk and low forest coverage which makes the country vulnerable and unsustainable. This country should promote a holistic climate risk management policy and actions along with emission reduction. It is very essential for Afghanistan, Pakistan, Nepal, India and Bangladesh to reduce the level of poverty and they need to ensure income generating activities, government support services for the poor people through the inclusive growth. As a regional organization, SAARC should be active and can play leading role for the regional development through the mutual cooperation and collaboration as well as equitable project management among the countries. Table12 presents challenges remains on SDGs and needed responses for attaining SDGs by 2030in the countries. Though South Asian countries have undertaken some policy initiatives for their development, but, there is a gap between the plan and problem due to problem specific plan and strategies. Thus, specific policy intervention could be potential towards development that can transfer considerable impacts at societal level (Lay, J. 2012; Sadeka et al., 2018). Motivation for promoting 'integrated people-oriented programs and effective efforts by the development agencies and organization towards achieving integrated and sustainable development in practice (Shaw, 2002). Thus, some critical aspects of sustainability need to be addressed for a achieving SDGs in the South Asia. India and Pakistan are the two powerful countries of this region which are facing multiple challenges that hampers sustainability of this region. Thus, this situation calls for effective regional policy initiatives to address the environmental sustainability of the region.

Table 12. Challenges and responses for the countries towards sustainable development

Country	Challenges remain in SDGs	Policy Response
Afghanistan	• SDG1-3, 5, 9-16	• Ensure political stability and attract FDI from the development partners • A comprehensive SDGs plan of actions
Bangladesh	• SDG1,8, 10, 14-17	• Pro-poor policy and partnership • Increase public expenditure on education and health and environment • Conserve bio-diversity & water resources
Bhutan	• SDG10, 12, 15	• Inequality reduction • Conserve biodiversity
India	• SDG1, 2,4-5, 10-12, 15-17	• Pro-poor policy • Increase public expenditure on education and health and environment • Biodiversity conservation
Maldives	• SDG5, 8, 10, 12, 15	• Inequality reduction • Promote and ensure afforestation
Nepal	• SDG1, 7, 10-12, 14-15	• Pro poor policy • Promote foreign direct investment
Pakistan	• SDG2,4-5, 7, 9-12, 14-17	• Pro-poor policy and partnership • Increase public expenditure on education and health and environment • Conserve bio-diversity & water resources • Afforestation and reserve forest
Sri Lanka	• SDG4, 10-12, 14-17	• Economic growth and stability • Reduce unnecessary expenditure

4. Conclusion and Recommendation

SDGs are considered vital for sustainable development which can be achieved through the better performance of multiple indicators. As a growing region in terms of economic and population dimension, south Asia could be an emerging center point for Asian and global development. However, the South Asian countries are facing some similarities and differences based on their SDGs progress and challenges. Poverty and lower per capita income, high corruption and unsustainable cities are the major problem of the countries except Bhutan, Maldives and Sri Lanka. Moreover, all countries face a greater level of income inequality where Bangladesh, India, Sri Lanka, Bhutan and Maldives's problem are acute. Higher poverty has been founded in Afghanistan, India, Nepal, Bangladesh and Pakistan. More importantly, majority of the countries spend lower share of their GDP expenditure on education and health. In case of environmental sustainability indicators, only Bhutan and Sri Lanka position are comparatively good while other countries are facing serious problems that make them far away from sustainability. Thus, Itis revealed that, many indicators of specific SDG are still stagnant or decreasing for example SDGs 15 where most of the countries are lagging behind. Therefore, it is important to address those SDGs and need to apply target oriented policy in order to achieve SDGs by 2030. Some major recommendations for South Asian countries in order to achieving the agenda for sustainable development [SDGs] are as follows:

√ As most of the South Asian countries are facing lower per capita income and higher poverty,

so there is immense need of economic stimulus package for increasing earnings of the low income people.

√ Developing human capital is crucial for all nations. So there is a great demand to increase

the share of public expenditure on education and health for accelerating quality human capital and achieving SDGs by 2030.Some countries can take lessons from other countries which are well ahead about their achievement of SDGs.

√ Finally, SDG14-15 need special focus to ensure environmental sustainability which need to

take holistic measures and actions. There is also need to promote adoption and development of peace and strong institution, sustainable planning and initiatives for achieving SDGs in the countries.

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