



# Green Finance And Sustainable Development Goals: Lessons From Select South Asian Economies

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## ARTICLE INFO

## ABSTRACT

Sustainable Development is a process of rejuvenation that aims for long-term resilience, where social inclusion, environmental sustainability, and economic development possess equal worth. In September 2015, all the member states of the United Nations reached a consensus to transform the world through Agenda 2030, which consists of 17 Sustainable Development Goals (SDGs) and 169 specific targets. The World Bank and the International Monetary Fund placed importance on the development finance, which is crucial for achieving the 17 SDGs. The Organization for Economic Co-operation and Development (OECD) and the United Nations Development Programme (UNDP) have collaboratively designed a framework to enhance the developmental impact of international private-sector investments by aligning them with the Sustainability Development Goals (SDGs). This framework also recognizes the important role of the public sector in creating an environment to synchronize the private sector investments with the SDGs. The SDG-aligned capital flows should be mobilized towards the countries having a funding gap in the SDG oriented sectors.

This study attempts to explore the need for financing the SDG-oriented dimensions of the selected South Asian economies, namely Bangladesh, India, Pakistan and Sri Lanka. A composite index is constructed using Principal Component Analysis for each dimension ranging from 2000 to 2019. The trends of the indices confirm that financing is necessary with regard to the stated dimensions. It is highly imperative for the policy makers to focus on the SDG related dimensions for the selected economies for a safe and sustainable future.

**Keywords:** SDGs, SDG-aligned capital flows, PCA.

## INTRODUCTION

The global economic, political, and environmental challenges gave rise to the concept of Sustainable Development Goals (SDGs) at the United Nations Conference on Sustainable Development held in Rio de Janeiro in 2012. The SDGs replaced the Millennium Development Goals (MDGs), launched in 2000, to eradicate extreme poverty, hunger, deadly diseases, and child mortality worldwide by 2015. The MDGs also emphasized promoting gender equality and universal primary education, among other developmental priorities. The MDGs were groundbreaking in bringing about radical transformation through eight measurable goals; however, the progress was uneven globally. With the MDGs scheduled to conclude in 2015, the need to discuss the post-2015 agenda emerged. The United Nations continued the legacy initiated by the MDGs by invigorating the process with the Sustainable Development Goals (SDGs). These goals were of utmost importance in steering the world economy away from increasing disparities, social discrimination, and environmental threats, towards sustainable development. Sustainable development is a concept that strives to meet present needs without compromising the needs of future generations. It is a regenerative process to achieve long-term resilience, where social inclusion, environmental sustainability, and economic development hold equal significance. In September 2015, all the member states of the United Nations reached a consensus to transform the world by 2030 through sustainable development. This initiative led to the formulation of a comprehensive action plan through an inclusive process involving 10 million individuals who shared their perspectives to shape Agenda 2030, comprising 17 goals and 169 specific targets. The World Bank and the International Monetary Fund emphasized that increased development finance is a crucial prerequisite for achieving the 17 SDGs. Thus, finance plays an essential role in achieving the Sustainable

Development Goals. Both public and private sector organizations should significantly contribute to sustainable projects that align with the SDGs. Studies reveal that a robust financial model framework can expedite the achievement of the SDGs effectively. Unrestricted international capital flows are only feasible with appropriate regulations and conventions. A transparent financial system attracts higher-quality capital flows that promote inclusive growth and sustainable development. While sustainable investing was not universally endorsed previously, it has now gained momentum. Conventional investment trends focused solely on economic gains, neglecting social benefits. However, sustainable investing integrates environmental, social, and governance-related insights (ESG) without sacrificing investors' financial entitlements. This approach empowers investors to make better sustainable investment decisions. Global unity is crucial in pursuing the mission of Agenda 2030. Hence, the Organisation for Economic Co-operation and Development (OECD) and the United Nations Development Programme (UNDP) have collaboratively devised a framework to enhance the developmental impact of international private-sector investments by aligning them with the SDGs. This framework also acknowledges the pivotal role of the public sector in creating an environment conducive to synchronizing private sector investments with the SDGs, thus contributing to building a resilient economy. By directing the financial resources into priority sectors, advancement across the spectrum of SDGs can be magnified. The core concept of SDG-aligned finance is to redirect funds from less impactful sectors towards those aligned with the SDGs. International capital flows take various forms, with foreign direct investment (FDI) emerging as a prominent type in recent times. FDI involves an investor gaining control over a foreign entity through direct investment. Factors influencing FDI flow include trade relationships, political stability, economic conditions, legal frameworks, cost-efficient labour, and proximity to foreign markets. Another significant type is foreign portfolio investment, where investors invest in foreign companies without seeking control. This type is characterized by liquidity and volatility. The third category, debt flows, encompasses financial transactions involving banks and private entities. Among these types, debt flows are generally considered the most unstable and prone to fluctuations. The joint report by the OECD and UNDP outlines a three-fold approach to establishing the conceptual foundation of SDG-aligned finance - mobilizing the financial resources, directing the investment towards sustainable development and enhancing the economic, social and environmental impact of investments.

## LITERATURE REVIEW

**Zhan, Paulino (2021) “Investing in the Sustainable Development Goals: Mobilization, channeling, and impact”** This paper evaluates the global trends in both investing in and financing the SDGs focusing on the challenges. It scrutinizes the challenges for mobilizing investments into SDG sectors as well as regulatory dilemmas in promoting SDG investment. The article has also highlighted policy measures for accelerating investment in the SDGs and for promoting better ESG standards, compliance, and reporting.

**Roor (2019) “SDG Investing in Practice”:** The author conducted some case based studies through which the author identified some important dimensions related to SDG investing. The author stated that SDG investments should have ESG integration as it directs attention to world's social and environmental challenges thereby enhancing renewed focus on business. Specific ‘SDG ratings’ should also be developed as more attention towards development of sustainability metrics would provide factual business information which in turn would make the sustainable information more mature.

**Aust, Morais and Pinto (2019) “How does foreign direct investment contribute to Sustainable Development Goals? Evidence from African countries”** By analyzing a sample of 44 African countries, regarding their SDG scores, the authors indicated that the presence of foreign investors positively influences SDG scores. However, although FDI has a positive impact in areas such as basic infrastructure, clean water, sanitation, and renewable energy, some adverse environmental consequences may occur for host countries.

**Suehrer (2019) “The Future of FDI: Achieving the Sustainable Development Goals 2030 through Impact Investment, Global Policy”** Through this paper the author revealed that despite the fact that, the developing countries are facing funding gap of trillions of US\$ to meet the SDGs, the possible solutions to close this gap have not been widely discussed. Moreover a global platform has not been established to promote actionable investment opportunities for private investors. The author also suggested that new approaches should be developed to promote impact investing that would significantly reduce the funding gap influencing the future of FDI.

**Yahouedeou, Wu, Omedi, Fan, Zhou (2018) “A Literature Review of the Participation of Foreign Direct Investment in Sustainable Development Achievement in Developed and Developing Countries.”** Through this paper the authors reviewed how FDI helps SD achievement in developed and developing countries. In both the types of countries positive implication of FDI was found, which is considered as a strong vehicle in SD achievement.

**Roy (2015) “An empirical study on the relationship between foreign direct investment and economic growth for selected ASIAN countries”:** The authors have performed an empirical treatment on the selected 35 Asian economies, followed by sub samples of low and high income countries within the time frame of 1975 to 2011 in the context of a production function. (Roy, 2015). Selecting some factors such as the infrastructure variables, human capital, financial and governance an overview was portrayed about the

“absorptive effects” of these factors to attract FDI. These factors are also studied in understanding their capabilities in providing an explanation to the Lucas Paradox which implies whether FDI flows get attracted to the relatively high income group countries.

**Donaubauer, Meyer, Nunnenkamp (2015)“Aid, Infrastructure, and FDI: Assessing the Transmission Channel with a New Index of Infrastructure”:** The study was carried out with a view to establish that only targeted development assistance at economic infrastructure attracts FDI flows in developing countries by enhancing the endowment with infrastructure in transportation, communication, energy and finance.

## RESEARCH GAP

As per the World Investment Report 2023, the investment gap across all the SDG sectors has increased from \$2.5 trillion to more than \$4 trillion per year in 2023. The gaps are huge in energy, water and transport sectors. After analyzing the existing literature, it is evident that alignment of capital flows in tune with SDGs is of utmost importance. SDG aligned capital flows should be mobilized towards the countries having a funding gap in the priority sectors. This paper addresses the current research gap, through a comprehensive index system, established to explore the determinants of capital flows with respect to SDG oriented dimensions such as health and healthcare, education, food and agriculture, natural environment, climate change and Information and Communication Technology of the chosen South Asian economies, based on data availability.

## OBJECTIVE

The objective of the study is to explore the need for financing the SDG-oriented dimensions such as health and healthcare, education, food and agriculture, natural environment, climate change and Information and Communication Technology (ICT) of the selected South Asian economies, namely Bangladesh, India, Pakistan and Sri Lanka.

## TRENDS IN FDI

As per the World Investment Report, over the past few years, the international investment projects in SDG-oriented sectors in developing countries have increased considerably. However, the growth trajectories in those sectors are very slow since the implementation of the SDGs in 2015. In developing nations, the consolidated values of SDG-oriented Greenfield investments and international project finance increased from \$290 billion in 2015 to \$471 billion in 2022. From Figure I, it is evident that the Greenfield investments in developing nations have increased in the renewable energy sector. However, the power sector, excluding renewable energy received fewer investments. Again, the investments in transport services, agrifood systems and health sector accelerated, whereas the education sector, Wash Sector (including water, sanitation and hygiene) received fewer projects in 2022. Again, Figure II reveals that the international project finance dealings in wash sector and education sector have increased in 2022. However, all the other sectors faced plummeting international investments.

**Figure I: Announced Greenfield Projects in developing economies in SDG sectors, 2020-2022**

SDG-relevant sector	Developing economies			
	2020	2021	2022	Growth rate, 2021–2022 (%)
<b>Total</b>				
Value	99 927	113 607	242 959	114
Number of projects	1 155	1 296	1 540	19
<b>Power*</b>				
Value	10 800	4 175	3 939	- 6
Number of projects	23	20	16	- 20
<b>Renewable energy</b>				
Value	38 523	52 739	162 505	208
Number of projects	191	146	176	21
<b>Transport services</b>				
Value	9 488	12 945	21 591	67
Number of projects	183	271	431	59
<b>Telecommunication*</b>				
Value	24 614	21 592	23 179	7
Number of projects	243	291	321	10
<b>Water, sanitation and hygiene (WASH)</b>				
Value	566	4 128	1 631	- 60
Number of projects	7	19	15	- 21
<b>Agrifood systems</b>				
Value	11 287	11 750	19 838	69
Number of projects	293	274	280	2
<b>Health</b>				
Value	3 776	5 137	9 350	82
Number of projects	151	190	207	9
<b>Education</b>				
Value	874	1 140	926	- 19
Number of projects	64	85	94	11

Source: UNCTAD, based on information from Refinitiv SA

**Figure II : Announced International Projects in developing economies in SDG sectors, 2020-2022**

SDG-relevant sector	Developing economies			Growth rate, 2021-2022 (%)
	2020	2021	2022	
<b>Total</b>				
Value	141 475	370 241	228 286	- 38
Number of projects	381	603	642	6
<b>Power<sup>a</sup></b>				
Value	23 123	105 667	48 213	- 54
Number of projects	37	57	60	5
<b>Renewable energy</b>				
Value	86 661	205 648	123 338	- 40
Number of projects	291	420	438	4
<b>Transport infrastructure</b>				
Value	23 344	28 624	25 708	- 10
Number of projects	24	57	53	- 7
<b>Telecommunication<sup>b</sup></b>				
Value	4 863	18 345	12 263	- 33
Number of projects	9	32	37	16
<b>Water, sanitation and hygiene (WASH)</b>				
Value	1 486	1 159	13 247	1 043
Number of projects	13	11	21	91
<b>Agrifood systems</b>				
Value	1 851	8 137	4 424	- 46
Number of projects	4	10	20	100
<b>Health</b>				
Value	129	2 255	524	- 77
Number of projects	2	7	5	- 29
<b>Education</b>				
Value	18	406	569	40
Number of projects	1	9	8	- 11

Source: UNCTAD, based on information from Refinitiv SA.

### PROFILE OF THE ECONOMIES.

Global cooperation and the participation of all nations are crucial in achieving the Sustainable Goals developed by the United Nations. The developing and developed economies have also pumped up their efforts and framed various policies and frameworks strategically to achieve inclusive and sustainable growth. Financing is an indispensable factor that can uplift a nation. However, the role of government alone is not sufficient in this regard. Private sectors should come forward to invest in SDG-oriented dimensions. The different strategies undertaken by the selected South Asian economies to achieve the SDGs are briefly discussed below:

The Government of Bangladesh is committed to inclusive sustainable growth, leaving no one behind. It aims to become a developed nation by 2041 in line with the UN Agenda 2030. To achieve this, the government has undertaken various strategies such as: a) preparing the SDG Action Plan with new projects, b) launching the SDG tracker to monitor implementation, c) creating the SDGs Financing Strategy, d) convening the 1st National Conference on SDGs Implementation Review, e) developing a framework of collaboration between the Government and the UN agencies in Bangladesh, and f) forming the National Data Coordination Committee. The UN agencies and the UN Development System Reform (UNDS) are taking continuous action comprehensively to help the Bangladesh Government boost the developmental impact of SDGs. They have extended their support to various projects in sustainable development solutions. The Government of India's leading think tank, NITI AAYOG, has undertaken the task of harmonizing the SDGs through proper planning schemes and has recognized ancillary ministries for each goal. India's commitment to SDGs is reflected in its national development motto, "Sabka Saath Sabka Vikas" (Collective Efforts for Inclusive Growth). Moreover, the Ministry of Statistics and Programme Implementation (MoSPI) has developed the National Indicator Framework (NIF) to monitor the progress made on SDGs. The UN Country Team in India has also extended its support to NITI AAYOG, Union ministries, and state governments to ensure inclusive growth in the nation, leaving no one behind in achieving the SDGs. The Government of India has also created a favourable ecosystem for the private sector to ensure its contribution to the nation's economic growth. Additionally, the World Bank Group's 'Doing Business 2020' report credits policy and financial reforms under the 'Make in India' campaign for playing an active role in attracting foreign investment to the SDG-enabling sectors of the nation. The Government of Pakistan has adopted its national development agenda in line with the SDG Agenda 2030. It has also developed an institutional framework by integrating the SDGs into national policies and strategies for SDG implementation. The Ministry of Planning, Development, and Special Initiatives and Provincial Planning and Development Departments have collaborated to establish SDG support units at the federal and provincial levels. The Government of Pakistan also ensures that both public financial allocations and alternate financing modalities are important and aligned with SDGs for achieving the Agenda 2030 target. The Sri Lankan Government has also integrated the SDGs into national policies, processes, and strategies. It has designed SDG-oriented strategies in a manner that mandates every ministry, department,

provincial council, provincial ministry and department, and local authority to prepare a Sustainable Development Strategy according to the act of parliament. It's worth noting that the Government of Sri Lanka has also collaborated with the United Nations Sustainable Development Framework (UNSDF) to implement and review the progress of SDGs.

## METHODOLOGY

Sample: The study refers to the 17 Sustainable Goals of the UN Agenda 2030 and identifies the SDG-oriented priority sectors of the selected South Asian economies, including Bangladesh, India, Pakistan, and Sri Lanka, due to data availability. The priority sectors are regrouped into six dimensions: health and health care, food and agriculture, education, information and communication technology (ICT), climate change, and the natural environment. Each of the six dimensions relates to the 17 SDGs (referred in Table I) as proposed by the United Nations. Each dimension comprises specific indicators (referred in Table II along with the abbreviated forms of the indicators). Asiedu (2002), Wagner et al (2012) have highlighted that infrastructure is considered as a very strong determinant to attract capital flows in to a nation. Donaubeur et al (2015) recognizes that targeted development assistance towards economic infrastructure attracts FDI flows in developing nations. Addison and Heshmati (2003) stresses on the need to develop IT infrastructure to attract FDI. Thus, considering the above studies, it can be stated that there is a direct linkage between global aid, trade and infrastructure (Wagner et.al 2012). In case of cross country studies, comparable measure should consist of various dimensions of infrastructure (Roy 2015). Referring to the studies of Roy (2015), the authors have considered composite infrastructure indices for each dimension of each selected economy. The factor analysis and the principal component analysis are used to calculate the weights and the composite index scores.

**Table I : Grouping of Dimensions with respect to SDGs**

Dimensions	SDGs
Health and healthcare	<b>SDG 3:</b> To ensure healthy lives and well-being for all at all ages <b>SDG 6:</b> To ensure availability and sustainable management of water and sanitation for all
Food and agriculture	<b>SDG 2:</b> To end hunger and promote food security and improved nutrition and promote sustainable agriculture
Education	<b>SDG 4:</b> To ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Information and Communication Technology	<b>SDG 9:</b> To build resilient infrastructure, promote inclusive and sustainable industrialization and innovation
Climate Change	<b>SDG 13:</b> To take urgent action to combat climate change and its impacts
Natural Environment	<b>SDG 14:</b> Conserve and sustainably use the oceans, seas and marine resources for sustainable development

**Source:** Chart has been computed by the authors with reference to the UN Agenda 2030

**Table II : Specific indicators of different dimensions**

Dimension	Indicators	Abbreviated Form
<b>Health and Healthcare</b>	Life expectancy at birth, total (years)	lifeexp
	People using at least basic drinking water services (% of population)	basicdrinkingwater
	People using safely managed sanitation services (% of population)	safesanitation
	People using at least basic sanitation services(% of population)	basicsanitation
	Public private partnerships investment in water and sanitation(current US\$)	pppinvsanitation
	Investment in water and sanitation with private participation (current US\$)	invinsanitation
	Domestic private health expenditure (% of current health expenditure)	dppvthexp
	External health expenditure per capita (current US\$)	exthexp

	Domestic general government health expenditure (% of GDP)	dgovthexpGDP
	Current health expenditure (% of GDP)	curhexpGDP
	Mortality rate, infant (per 1,000 live births)	mortinfant
	Risk of impoverishing expenditure for surgical care (% of people at risk)	impoverishingexpsurgery
	Prevalence of undernourishment (% of population)	undernourished
	Birth rate, crude (per 1,000 people)	birthrate
	Death rate, crude (per 1,000 people)	deathrate
<b>Food and Agriculture</b>	Fertilizer consumption (kilograms per hectare of arable land)	fertilizerconsumption
	Land under cereal production (hectares)	landcerealprodn
	Agricultural irrigated land (% of total agricultural land)	agrirrigatedland
	Agriculture, forestry, and fishing, value added (% of GDP)	agrforfish
	Employment in agriculture, female (% of female employment) (modeled ILO estimate)	empagrfemale
	Employment in agriculture, male (% of male employment) (modeled ILO estimate)	empagrmale
	Livestock production index (2014-2016 = 100)	livestockindx
	Cereal yield (kg per hectare)	cerealyield
<b>Education</b>	Literacy rate, adult total (% of people ages 15 and above)	literacy
	School enrollment, primary (% net)	schoolprimary
	School enrollment, secondary (% net)	schoolsecondary
	Government expenditure on education, total (% of GDP)	govtexpedu
	Current education expenditure, total	curexpedu
<b>ICT</b>	Access to electricity (% of population)	accesselec
	Electricity production from oil, gas and coal sources (% of total)	elecprodnoilgascoal
	Investment in energy with private participation (current US\$)	invinenergy
	Investment in transport with private participation (current US\$)	invintransport
	Public private partnerships investment in ICT (current US\$)	pppinvinICT
	Mobile cellular subscriptions (per 100 people)	mobsusbription
	Fixed telephone subscriptions (per 100 people)	fixedtelsubscription
	Fixed broadband subscriptions (per 100 people)	fixedbbsubscription
	Energy use (kg of oil equivalent per capita)	enguse
	Electric power consumption (kWh per capita)	elecpowercons
	ICT goods exports	ictexp
Transport services (% of service exports, BoP)	transptransport	
<b>Climate Change</b>	CO2 emissions (kt)	co2em
	Total greenhouse gas emissions (kt of CO2 equivalent)	ghgem
	Methane emissions (kt of CO2 equivalent)	methane
	PM2.5 air pollution, population exposed to levels exceeding WHO guideline value (% of total)	pm2.5
<b>Natural Environment</b>	Electricity production from renewable sources, excluding hydroelectric (kWh)	elecprodnrenewableresources
	Renewable energy consumption (% of total final energy consumption)	renewenergyconsmprn
	Renewable internal freshwater resources per capita (cubic meters)	renewfreshwater
	Total natural resources rents (% of GDP)	natresrents

Source: Chart has been prepared by the authors with reference to the World Bank Database

## DATA ANALYSIS

### Computation of Index

To compute the indices, the following steps are followed for each dimension for a time frame ranging from 2000 to 2019. Similar steps are followed for all the selected economies of South Asia with same sets of indicators for each dimension. For the purpose of index construction, this paper considers only the Food and Agriculture dimension with respect to Indian economy. The steps of the construction of index are as follows:

#### Step i) Normalization of Indicators

At first the indicators need to be normalized and for that reason all the indicators have been transformed using the log transformation. It is done to make the original data more normal and to reduce the skewness of the original data. This boosts the validity of statistical analysis.

#### Step ii) Applicability of Factor Analysis Test

Secondly the Kaiser-Meyer-Olkin (KMO) and Bartlett's sphericity test are performed in the SPSS software to find out whether the data are suitable for the Factor Analysis Test. Kaiser and Rice (1974) stated that if the Kaiser-Meyer-Olkin Measure exceeds 0.5 and the test statistic value have the probability value (p-value) which is less than 0.05, then only the data set can be proceeded with factor analysis test. In case of Food and Agriculture dimension, with respect to the Indian context, the KMO Test and Bartlett Test of Sphericity are reported as,

**KMO Test Statistic = 0.662.**

**p-value < 0.01**

This implies that the factor analysis technique is appropriate as confirmed by KMO value and the significance level confirms that factor analysis can be done.

#### Step iii) Factor Analysis Test and PCA

Thirdly, the factor analysis test is performed to extract the common variance from all the indicators. PCA test is performed using the maximum variance rotation method to obtain the principal components with eigenvalues >1. Next, the rotated component matrix exhibits the factor loadings for each indicator matching with one component based on Eigen values obtained. Rotation has been done for easier interpretation of the factor analysis.

#### Step iv: Assignment of weights

For the assignment of weights, the first component of the rotated matrix is considered and the summation of all the factor loadings is found out.

After the summation, respective weights for each indicator are computed i.e.

**Weight (W) = Loading**

**$\Sigma$  Loadings**

If the weights for each indicator are represented as  $W_1, W_2, W_3, \dots, W_n$  and the log values of the indicators are denoted by  $X_1, X_2, X_3, \dots, X_n$ , then the formula for the computation of a composite infrastructure index score before normalisation is represented as follows:

**$W_1 X_1 + W_2 X_2 + W_3 X_3, \dots, W_n X_n$**

**$\Sigma W$**

#### Step v : Construction of Infrastructure Index (after normalization)

The composite infrastructure index is then normalized and represented within a scale of 0 to 1. The normalization value of index is calculated as follows:

**Composite score =  $(X_i - X_{min}) / (X_{max} - X_{min})$**  where  $X_i$  represents the composite infrastructure index score of year  $i$  before normalisation.  $X_{max}$  and  $X_{min}$  represent the maximum and minimum scores of all the years, respectively.

While computation of the infrastructure indices in the SPSS software, for all the six dimensions with respect to all the selected economies, the authors came across two issues for certain cases. For example,

a) There were cases, when rotation could not be computed and only one component could be extracted. In such cases, the authors have progressed with the single component extracted.

b) In other cases, statistics could not be computed since one of the indicators had zero variances. In such cases, the authors omitted the indicators with zero variances from the data sheet and re performed the analysis to extract the principal component.

## FINDINGS

To analyse the health and healthcare dimension, the authors have segregated the said dimension into two parts – HH1 and HH2. HH1 includes those indicators that suggest that an upward rising trend in the indices is desirable. Contrary to this, HH2 deals with those groups of indicators, which suggest that downward trends in the indices are desirable. In HH2, both birth rate and death rate are included. In both the cases, a downward

trend in desirable as increase in birth rate and decrease in death rate can lead to problems of over population. Since the study deals with developing nations, population control is a very crucial criterion in these nations to reach the SDG target so that an inclusive approach can be undertaken to uplift the health and healthcare dimension leaving no one behind. Table III shows the infrastructure indices of all the six dimensions with respect to all the selected South Asian Economies- namely Bangladesh (BDG), India (IND), Pakistan (PAK) and Sri Lanka (SLK) within the time frame 2000 to 2019. It is evident from the table that all the four nations experienced a decreasing trend in HH2 from the initial years. On the other hand, HH1 shows an increasing trend in the nations. Thus, it can be stated that the countries are taking appropriate actions to uplift the well-being of the people. In case of food and agriculture dimension, Bangladesh and Pakistan showed an increasing trend, but India and Sri Lanka showed a decreasing trend. Thus, we require more capital flows in India and Sri Lanka to meet the SDG Agenda 2030. In case of education dimension, we can see that Sri Lanka and Pakistan showed a decreasing trend. This suggests that more capital flows should be mobilized in Sri Lanka and Pakistan to promote learning opportunities for all. India and Bangladesh, on the other hand showed an increasing trend in this nation. In case of Information and Communication Technology, except Bangladesh all the nations showed a decreasing trend. These nations require much more funding in these sectors. In case of climate change, though all the nations showed a decreasing trend but in 2019 the trend slightly increased in all the nations. This shows that the nations are actively taking actions to curb the emission of toxic gases. However, the action should continue for a better and sustainable environment. Conserving natural environment is very important for a healthy environment. However, the trend states that except India all the nations are ignoring this fact. The capital flows should be channelized towards these nations to help them protect the natural resources. Renewable sources of energy should be utilized for which huge investments are required.

<b>Table III: Dimension-wise comprehensive infrastructure indices of Bangladesh, India, Sri Lanka and Pakistan</b>																				
<b>Health and Healthcare Dimension 2 (HH1)</b>																				
Year	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19
BDG	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	1.0	1.0
IND	0.0	0.0	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.5	0.7	0.7	0.7	0.7	0.8	0.7	0.9	0.9	0.9	1.0
PAK	0.0	0.2	0.5	0.6	0.5	0.6	0.6	0.7	0.8	0.7	0.7	0.9	0.8	0.9	1.0	0.8	0.9	1.0	1.0	1.0
SLK	0.3	0.2	0.0	0.4	0.2	0.4	0.6	0.5	0.8	0.6	0.7	0.6	0.6	0.6	0.8	0.8	0.7	1.0	0.8	0.9
<b>Health and Healthcare Dimension 2 (HH2)</b>																				
BDG	0.9	1.0	1.0	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0
IND	0.7	1.0	1.0	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.0	0.0
PAK	0.7	1.0	1.0	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0
SLK	0.3	1.0	1.0	0.8	1.0	0.7	0.7	0.6	0.6	0.7	0.5	0.5	0.4	0.3	0.3	0.2	0.1	0.1	0.1	0.0
<b>Food And Agriculture Dimension ( F&amp; A)</b>																				
BDG	0.0	0.0	0.1	0.1	0.6	0.6	0.6	0.2	0.3	0.3	0.3	0.3	0.4	0.8	0.8	0.8	0.9	0.9	1.0	1.0
IND	1.0	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.0
PAK	0.1	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.4	0.5	0.6	0.8	0.8	0.8	0.8	0.9	0.9	1.0
SLK	1.0	1.0	0.9	0.8	0.8	0.7	0.8	0.7	0.8	0.7	0.5	0.5	0.3	0.3	0.4	0.2	0.0	0.0	0.0	0.1
<b>Education (EDU)</b>																				
BDG	0.6	0.9	0.6	0.6	0.5	0.0	0.1	1.0	0.1	0.1	0.0	1.0	1.0	0.9	0.9	0.9	1.0	1.0	0.9	1.0
IND	0.5	0.1	0.0	0.5	1.0	1.0	0.9	0.0	0.0	0.2	0.2	0.4	0.3	0.4	0.5	0.8	0.8	0.8	0.9	0.8
PAK	0.0	0.0	0.2	0.2	0.3	0.7	1.0	1.0	0.8	0.8	0.6	0.8	0.8	1.0	0.6	0.5	0.6	0.8	0.8	0.3
SLK	0.0	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	1.0	1.0	0.8	0.8	0.8	0.8	0.8	1.0	1.0	0.0
<b>Information and Communication Technology (ICT)</b>																				
BDG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
IND	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
PAK	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
SLK	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0
<b>Climate Change (CC)</b>																				
BDG	0.5	0.0	0.0	0.1	0.1	0.6	0.1	0.2	0.2	0.2	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.0	0.5	0.5
IND	0.5	0.0	0.0	0.0	0.1	0.6	0.1	0.2	0.2	0.3	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.0	0.5	0.5
PAK	0.5	0.0	0.0	0.1	0.1	0.7	0.2	0.2	0.3	0.3	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0	0.5	0.5
SLK	0.6	0.0	0.0	0.1	0.1	0.8	0.1	0.1	0.1	0.1	0.8	0.9	0.9	0.8	0.9	1.0	1.0	0.9	0.4	0.4
<b>Natural Environment (NE)</b>																				
BDG	0.9	0.9	0.9	0.9	0.9	1.0	1.0	0.9	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.7	0.2	0.2	0.1	0.0
IND	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
PAK	0.6	0.6	0.7	0.6	0.6	0.7	0.7	0.5	0.5	0.4	0.5	0.6	0.6	1.0	1.0	0.7	0.0	0.0	0.1	0.1
SLK	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0

Source: Chart has been prepared by the authors using SPSS software

## CONCLUSION

The developing nations require huge funding in all the major dimensions stated above. Though the nations are taking actions to bring improvement in the SDG oriented areas, but it is not sufficient to reach the SDG target by 2030. The current investment gap is 60 percent higher than the gap of \$2.5 trillion estimated by UNCTAD in 2014 on the eve of adoption of the SDGs. Given the current investment gap, more efforts are needed to maneuver green finance towards the deprived SDG-related sectors of the stated economies. The role of government is of utmost importance in creating a favourable environment to attract the capital flows towards the SDG sectors. Moreover, the private sectors should come forward to invest in SDG sectors. The United Nations has stated six action packages for investment in SDG- oriented sectors such as- liberalization and regulation, private investments, global partnerships, regional investment, innovative investment by re-orienting financial markets and SDG investment in recurrent crisis. With the stated action packages along with the governmental intervention, the developing economies can move some steps forward towards the Sustainable Development Goals. Thus, it is highly imperative for the policy makers to focus on the SDG related dimensions for the selected economies for a safe and sustainable future.

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