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Fiscal Stimulus in South Asia: Implications for resilience and sustainable development during and after COVID-19*

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Abstract

The world continues to be gripped by COVID-19, though the pandemic's impact varies across countries and regions. The South Asian case is illustrative. The region is marked by inherent socioeconomic and other vulnerabilities, including high population density, relatively poor health care, and limited water sanitation facilities. South Asian countries also evince varied levels of damage from the pandemic. This paper examines the region's circumstances as of November 2020, using macroeconomic data to explore varied pandemic impacts and fiscal policy responses. We also discuss the COVID-19 fund formed at the South-Asian regional level with contributions from all eight South Asian countries. Our analysis includes each country's external and internal share of fiscal stimulus, and the implications for sustainable development goals (SDGs). In an argument for integrating resilience and development frameworks, the paper analyses Japan's example of national resilience planning and related sustainable development frameworks. Our research indicates that a sustainable recovery is advantaged by fiscal stimulus that can be linked to extant developmental frameworks.

Keywords *COVID-19 · fiscal stimulus · South Asia · resilience · sustainable development*

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1. Introduction

The South Asian region encompasses Afghanistan, Bangladesh, Bhutan, India, Maldives, Pakistan and Sri Lanka, and represents one-quarter of the global population. The region faces several critical issues in fighting the COVID-19 pandemic as well as building a viable recovery. Ten months have passed since South Asia reported its first COVID-19 case, in Nepal on January 23rd, 2020. At that time, the global community was already grappling with the accelerating impacts of climate change. Thus the Covid-19 pandemic has created a truly unprecedented and multifaceted crisis. The lockdown policy prescribed by the World Health Organization (WHO) revealed dramatically varied socio-economic threats among the developed and developing nations. These differences are in part due to geography, but even more so because of divergent welfare regimes, disaster vulnerability and resilience among countries and territories. In the current climate of extreme uncertainty, the global community is yet to engage with the targets for the Sustainable Development Goals (SDGs). Yet it is imperative that the present crisis be addressed in tandem with promoting the SDGs. Failure to bolster long-term sustainability risks worsening inequality, higher opportunity costs, cascading hazards, and further retreat from planetary thinking and globalism (e.g. DeWit et al, 2020).

Recent research highlights examples of fiscal stimulus packages that address long-term resilience and sustainability in tandem with immediate measures to protect public health and the economy. But this approach is not yet generalized. Virtually all pandemic-affected countries have announced fiscal stimulus packages in a context of quite limited discussion of how to simultaneously implement disaster risk reduction (DRR), national resilience and sustainable development[1]. It is particularly important that the developing countries articulate and implement appropriate short- to medium- and longer- term strategies towards the SDG targets lest alleviation of poverty and other goals be forfeit (e.g. Karim, 2018).

This paper thus adds to the analysis of how to undertake Covid-19 fiscal stimulus that addresses DRR, resilience and sustainable development in the global South, notably South Asia. South Asia is one of the most densely populated regions in the world, and designing fiscal interventions to protect lives and livelihoods in addition to achieving the SDGs is a huge challenge. Even without a pandemic, South Asia confronts more disaster threats, climate-induced disaster displacement, deteriorating ecosystems, and geo-political tensions than other developing regions. We explore the region's actions and then turn to the Japanese example. Japan's population density and disaster risks are similar to South Asia. And it has embedded its Covid-19 countermeasures in a larger paradigm of all-hazard, collaborative industrial policy.

[1] See Karim and Noy (2020).

2. COVID-19 overview in South Asia

2.1 Current status of COVID-19

South Asia encompasses roughly 5.2 million km2 (2.0 million square miles), which is 11.71% of the Asian continent or 3.5% of the world's land surface area. The aggregate population of South Asia is approximately 1.89 billion, or about one quarter of the global total. South Asia thus combines a limited territorial area with a large population, make it the world's most densely populated region. Like other populous regions, South Asia has been affected by the COVID-19 pandemic. As of October 12, 2020, global confirmed infections total about 37.4 million with just under 1.08 million deaths. Among the South Asian countries, India has reported the highest COVID-19 mortality, followed by Pakistan, Bangladesh and Afghanistan respectively. In terms of percentages, current data on death rates are higher in Afghanistan (3.65%), followed by Pakistan (2.13%), India (1.87%), and Bangladesh (1.32%). Nepal, Sri Lanka and Bhutan have reported comparatively fewer deaths, with Bhutan as yet reporting no fatalities. As for COVID-19 recoveries, India remains on top followed by Pakistan, Bangladesh, Afghanistan and Nepal respectively.

2.2 Migration and Remittance Flows

Our primary objective in this paper is to look at South Asian fiscal stimulus packages and their impacts on DRR, national resilience and sustainable development. It is thus important first to assess the economic damage. One important measure is migratory remittances, which reached USD 714 billion in 2019, from roughly 1 billion workers overseas or displaced within domestic economies. At least 60 low- and middle-income countries rely on remittances for more than 5% of GDP, and the remittance income flows exceed foreign direct investment and official development assistance. These data show that countries heavily reliant on globalization are among the hardest-hit economies.

Table 1: Projections of Remittance Flows

Region	2009	2016	2017	2018	2019 (E)	2020 (F)	2021 (F)
East Asia And Pacific	-4.8	-0.5	5.1	6.8	2.6	-13	7.5
Europe And Central Asia	-14.7	-0.3	20	10.9	6.6	-27.5	5
Latin America And The Caribbean	-11.3	7.4	11	9.9	7.4	-19.3	5.9
Middle-East And North Africa	-6.2	-1.2	12.1	1.4	2.6	-19.6	1.6
South Asia	**4.5**	**-5.9**	**6.2**	**12.1**	**6.1**	**-22.1**	**5.8**
Sub-Saharan Africa	-0.2	-8.3	9.3	13.7	-0.5	-23.1	4
World	-5.1	-0.9	7.7	8	2.8	-19.9	5.2

Source: Ratha et al. (2020) based on the World Bank's projections.

Table 1 is derived from the World Bank's regional projections. The table displays migratory remittance flows from 2009-2021, with the estimates for 2020 (the initial year of Covid-19) being most striking. Ratha et al. (2020) use these data to highlight South Asian vulnerability. Their comparison indicates that South Asia's migratory remittance flows are likely to decline by 22.1% compared to the global average drop of 19.9%. We see that Europe and Central Asia (-27.5%) are likely to be hit harder followed by Sub-Saharan Africa (-23.1%). The Latin American and the Middle Eastern countries are roughly consistent with the global average. By contrast, East Asia and the Pacific nations appear likely to incur the least damage. Even so, all regions experience greater damage from Covid-19 than from the 2009 Lehman Shock and recession. To be sure, the World Bank forecast that 2021 will see a general recovery, with a global average doubling of remittance growth comparing 2019's 2.8% with the projected increase of 5.2% in 2021. But the latter number is dependent on an optimistic assessment of the pandemic per se in addition to a robust return of global economic activity. Seen from the perspective of October 2020, there seem limited grounds for such optimism. There is little coordination among the major economies, and the United States is notably lacking in fiscal stimulus.

2.3 SAARC COVID-19 Fund and Mutual Collaboration

In the absence of coordinated global action, collaborative COVID-19 initiatives similar to fiscal bailouts are evident across various regional economic blocs. South Asia is no exception. On March 15, 2020, during a video conference of the SAARC[2] Heads of State, Indian Prime Minister Narendra Modi proposed a COVID-19 Emergency Fund. This emergency fund was primarily set up as part of the regional response to the global pandemic. Figure 1 displays each SAARC nation's contribution to the COVID-19 Emergency Fund.

As of 10 April 2020, the emergency fund had accumulated a total of USD 21.8 million in contributions from the eight-member countries. India's donation of USD 10 million was the initial investment. The Indian announcement was followed by the Maldives with a contribution of USD 200,000 and Bhutan contributing USD 100,000. On March 22, Bangladesh announced it would contribute USD 1.5 million, followed by Nepal and Afghanistan each with a voluntary contribution of USD 1 million. Subsequently, Sri Lanka and Pakistan contributed USD 5 million and USD 3 million respectively.

[2] The South Asian Association for Regional Cooperation (SAARC) is the regional intergovernmental organization and geopolitical union of states in South Asia. Its member states are Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka.

Figure 1: Contribution to SAARC COVID-19 emergency fund (millions USD)

Source: http://covid19-sdmc.org/covid19-emergency-fund

3. Fiscal stimulus in South Asia: facts and figures

3.1 State of the economy: macroeconomic balance

Table 2 demonstrates the macroeconomic indicators of the South Asian countries including GDP growth, current account balance (% of GDP) and government net lending/borrowing (% of GDP) for pre-COVID, COVID and post-COVID scenario. We take 2019 as our pre-COVID year with a forecast scenario of the prescribed macroeconomic indicators for 2020 (COVID year) and 2021 (post-COVID year).

Table 2: Macro Economic Balance across South Asia

Country	GDP growth (%)1			Current account balance (% of GDP)2			General government net lending/borrowing (% of GDP)[2]		
	2019	2020 (f)	2021 (f)	2019	2020 (f)	2021 (f)	2019	2020 (f)	2021 (f)
Afghanistan	3	-5	1.5	8.591	4.898	5.753	-0.983	-4	-2.007
Bangladesh	8.2	5.2	6.8	-2.7	-2.167	-0.816	-5.247	-6.425	-5.977
Bhutan	4.4	2.4	1.7	-23.073	-21.254	-20.167	0.642	-5.529	-5.858
India	4.2	-9	8	-1.126	-0.592	-1.422	-7.442	-7.422	-7.301
Maldives	5.9	-20.5	10.5	-26.131	-23.135	-11.844	-5.58	-11.987	-6.427
Nepal	7	2.3	1.5	-7.718	-6.451	-6.156	-4.561	-5.975	-4.995
Pakistan	1.9	-0.4	2	-4.955	-1.706	-2.359	-8.848	-9.197	-6.469
Sri Lanka	2.3	-5.5	4.1	-2.152	-3.631	-2.938	-6.766	-9.445	-8.289

Source: Asian Development Outlook 2020 Update (September 2020)1; World Economic Outlook (April 2020).[2]

Projections indicate that government borrowings of all the eight countries of South Asia are likely to make moderate to drastic improvements in the post-COVID scenario compared to the COVID year. Among them, Sri Lanka, Bangladesh and Nepal are expected to make a moderate level of improvement (roughly 1%) while Maldives, Pakistan and Afghanistan are likely to achieve drastic improvement (2-5%) in their public sector debt levels. However, India and Bhutan are expected to make mild progress in the improvement in the government lending scenario. The pre-COVID (2019) year also reflects negative numbers with the only exception of Bhutan which further translates hard economic hit by the pandemic due to stringency in economic lockdown.

We next analyze the current account balance (as % of GDP) of the South Asian nations for all three COVID-related years i.e. 2019, 2020 and 2021 respectively. The current account balance seems to improve (in the negative domain) in the post-COVID (2021) year for all South Asian countries with few exceptions. The region's bigger economies, particularly India and Pakistan, are expected to see deterioration in their current account balances in 2021. However, Pakistan seems to be better off compared to the pre-COVID (2019) year while India might return almost to its pre-COVID equilibrium in the post-COVID economic era. The only positive case in this category holds for the landlocked country of Afghanistan with a 1% point projected increase in the post-COVID year (Table 2).

Finally, using Table 2, we tend to analyze the overall economic growth (measured in terms of % change in Gross Domestic Product, GDP) of all the South Asian countries in 2019, 2020 and 2021 respectively. Despite a drastic reduction in economic growth rates due to the pandemic in 2020 (compared to pre-COVID year), countries such as Bangladesh, Nepal and Bhutan managed to avoid negative growth in 2020. Maldives is found to be the hardest hit due to COVID-19 in terms of economic growth (-20.5%) that is followed by India (-9%), Sri Lanka (-5.5%) and Afghanistan (-5%) consecutively. However, these countries are projected to achieve positive growth rates in the post-COVID era with India, the Maldives and Sri Lanka have been forecasted to double their growth rate figure compared to the pre-COVID year. Bangladesh is projected to achieve an economic growth rate of 6.8% in 2021, but this is far behind its pre-COVID performance of 8.2% in 2019. The primary drivers are likely to be the uncertain fortunes of migrant workers (impacting remittances) and the severe impacts on global supply and value chains. Nepal and Bhutan are expected to grow even less in the post-COVID scenario despite avoiding negative growth. The reasons behind this projection might be cross-border restrictions in the tourism sector and the impact on regional trade.

3.2 Fiscal Stimulus: Internal and External Assistance

Of critical importance for post-COVID recovery in South Asian countries is the amount of fiscal assistance received, both domestic and international. Like most affected countries, South Asian nations undertook fiscal policy to mitigate the

public health trauma due to the COVID-19 pandemic and revive their economies in the midst of negative effects from the global lockdown policy. Table 3 exhibits the amount of fiscal stimulus provided by domestic and international counterparts in the South Asian countries.

Table 3: COVID-19 fiscal stimulus in South Asia

Country	Total Amount (million USD)[a]	Government Stimulus (million USD)	International Assistance (million USD)	As % of GDP (2019)	Package Per Capita(USD)
Afghanistan	1089	101	987	5.70%	28.62
Bangladesh	15717	12078	3639	5.19%	96.39
Bhutan	494	448	46	20.20%	647.74
India	370365	364812	5553	12.88%	271.04
Maldives	475	162	313	8.30%	896.26
Nepal	1688	526	1162	5.51%	59.01
Pakistan	15494	13104	2389	5.56%	71.54
Sri Lanka	2358	1034	1324	2.80%	108.18

Source: ADB COVID-19 Policy database [b]

Note: [a] Total assistance includes the summation of government stimulus and international assistance received by respective countries (excluding international assistance provided by other countries). Government stimulus includes liquidity support, credit creation, government support to income/revenue, direct long-term lending, central bank financing government and a budget reallocation. International assistance includes swaps and clearing arrangements (borrower), assistance from ADB, international loans and grants and others (World Bank, IMF, USAID, AIIB, etc.). Package per capita is calculated through dividing the total package by the population of the respective countries.

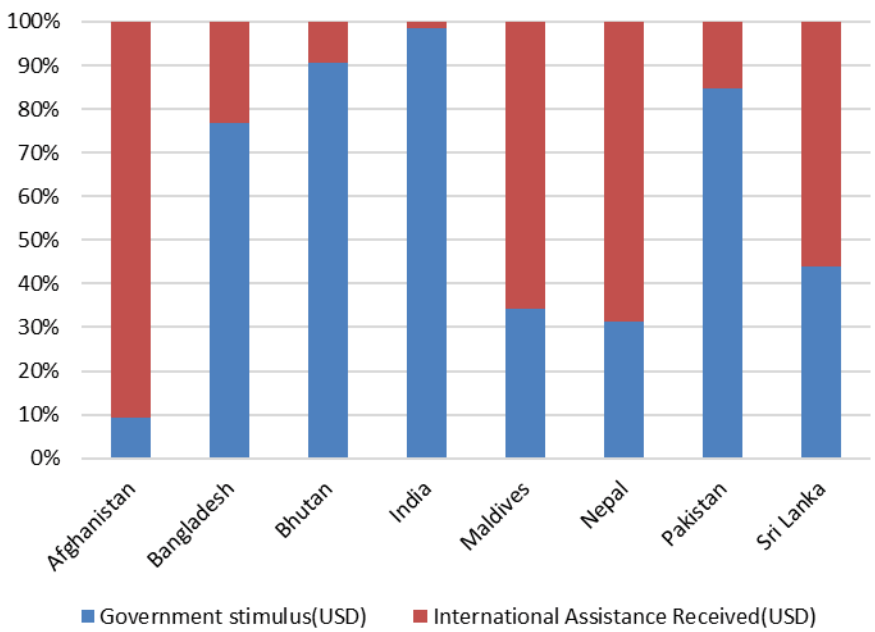
[b] Data is updated as of Sep 21, 2020 in ADB COVID-19 policy database. For majority of the South Asian countries, stimulus packages announcement started from March/April 2020.

Our data in Table 3 are derived from the Asian Development Bank COVID-19 Policy database, updated to September 21. The table reveals that all eight countries of the South Asian region have received quite moderate levels of fiscal stimulus to mitigate the economic risks imposed by the pandemic. Among them, India received the highest amount of fiscal stimulus (USD 370 billion), followed by Bangladesh (USD 15.718 billion USD), Pakistan (15.494 billion USD), and Sri Lanka (2.359 billion USD). Note that the table's numbers for fiscal package totals are the sum of government stimulus plus international assistance from development banks, donor agencies, and fiscal partners. As a percentage share of GDP, this total fiscal stimulus is 12.88% for India, 8.30% for the Maldives, 20.20% for Bhutan, 5.19% for Bangladesh, 5.56% for Pakistan, 5.70% for Afghanistan, 5.51% for Nepal and 2.80% for Sri Lanka.

Next, we assess whether there is much weight given to DRR, resilience and sustainable development. We identify two indicators to analyze this decision-making process of the lending agencies i.e. announcement and receipt of both the government stimulus and international assistance from the development banks and donor agencies. They are: i) the size of the total assistance as a percentage of GDP; and ii) the size of the stimulus package per capita. Our a-priori assumption is the higher the amount of financial assistance (measured as % of GDP), the greater the benefits via increased liquidity. Again, the fiscal amount should be proportionate to the size of the population. Therefore, our per capita fiscal package indicates whether the amount is adequate to revive economic activity after the total closure policy of the national governments. It is important to note here that although Bhutan received the highest per capita amount in this category, it might not indicate the adequacy of fiscal boosting in the economy. The number could perhaps reflect the lower population size. Moreover, targeting the right beneficiaries and governance issues (including administrative guidelines) are crucial to maximize the benefit of these fiscal interventions in the South Asian region.

Figure 2 demonstrates the proportion of government stimulus and international assistance received by each of the eight South Asian countries. The figure highlights Afghanistan's extreme dependence on overseas assistance.

Figure 2: External and internal share of fiscal stimulus in South Asia



Source: ADB COVID-19 Policy database

In this perspective, it is perhaps also important to highlight the issue of public debt management; both internal and external. We put forth two cautionary notes in this context: i) fiscal stimulus which has been laid down from internal sources could tend to generate similar impacts as of fiscal policy expansions i.e., taxation and/or public expenditure. The tax structure and expenditure pattern could vary substantially among the South Asian countries implying diversified impacts in the recovery stages. In many cases, where the tax returns are extremely minimal (with significantly lower during the pandemic), the internal resources mobilization were also found to be stagnant as well. This undoubtedly indicates to the need of securing bigger foreign investments contributing to larger external debts to be efficiently managed in the post COVID era; ii) in cases of external debt management; in immediate post pandemic recovery stages, the completion of mega projects turned out to be quite challenging in the absence of large foreign investments to generate external resources and curtailment of costs. In some countries, the level of foreign reserves was already in a critical stage before the pandemic (e.g., Sri Lanka), making it devastating and crippling down the economy after the pandemic with aggravating crisis scenario due to the Russia-Ukraine war. Therefore, the issue of external debt is extremely important in the context of multi-crisis management at various stages. The channeling of the stimuluses in the fiscal context could perhaps be a balancing tool to mitigate some internal pressures arising from these crises and ensuring a sustainable equilibrium in the growth recovery process.

3.3 Monetary Policy Measures

This paper's main objective is to analyze the prospect of fiscal boosting towards DRR, resilience and sustainable development in the South Asian region.
But the analysis also requires a brief discussion of complementary monetary policy initiatives. Table 4 outlines these measures undertaken by South Asian governments to cope with the COVID-19 pandemic.

Table 4: Monetary policy measures

Country	Interest rate cut	Macro financial package (% of GDP)
Afghanistan	0	0
Bangladesh	12.5	1.57
Bhutan	0	0
India	26.98	5.9
Maldives	0	0
Nepal	16.66	0
Pakistan	47.16	0.63
Sri Lanka	28.71	1

Source: Elgin et al. (2020). http://web.boun.edu.tr/elgin/COVID.html

Note: Interest rate cuts by the monetary policy authority (percentage of the ongoing rate since February 1st, 2020).

We identify two indicators with respect to monetary policy measures: (i) interest rate cuts by the monetary policy authority (percentage of the ongoing rate since February 1st, 2020); and (ii) the size of the macro-financial package (as % of GDP)[3] . Among the South Asian countries, Pakistan undertook the highest cut in interest rates (47.16%), followed by Sri Lanka (28.71%), India (26.98%), Nepal (16.66%), and Bangladesh (12.5%). As a percentage share of GDP, the size of the macro-financial package is highest in India (5.9%), followed by Bangladesh (1.57%), Sri Lanka (1%), and Pakistan (0.63%). By contrast, the Maldives, Bhutan and Afghanistan have not undertaken monetary policy measures. This fact is in spite of the Maldives being hit extremely hard by the global lockdown.

3.4 Links to Sustainable Development Goals (SDGS)

We noted earlier that COVID-19 presents a severe challenge of saving lives and securing livelihoods in the midst of a global lockdown policy. And additional task is the timely achievement of the SDGs and its targets across nations. Table 5 summarizes the most pertinent details of the SDGs as outlined by the United Nations Department of Economic and Social Affairs (2020).

Table 5: List of most affected SDGs due to COVID-19

SDG Goals	COVID-19 Impact
GOAL 1: No Poverty	Loss of income, leading vulnerable segments of society and families to fall below Poverty line.
GOAL 2: Zero Hunger	Food production and distribution could be disrupted.
GOAL 3: Good Health and Well-being	Devastating effects on health outcomes.
GOAL 4: Quality Education	School for many closed; remote learning less effective and not accessible for some.
GOAL 5: Gender Equality	Women's economic gains at risk and increased levels of violence against women. Women account for the majority of health and social care workers who are more exposed.
GOAL 6: Clean Water and Sanitation	Supply disruptions and inadequate access to clean water hinder access to clean handwashing facilities, one of the most important prevention measures.
GOAL 7: Affordable and Clean Energy	Supply and personnel shortages are leading to disrupted access to electricity, further weakening health system response and capacity.
GOAL 8: Decent Work and Economic Growth	Economic activities suspended; lower-income, less work time, unemployment for certain occupations.

[3] See Elgin et al. (2020).

SDG Goals	COVID-19 Impact
GOAL 10: Reduced Inequality	Affected by disruptions in goal no. 4, 5, 8 and 11.
GOAL 11: Sustainable Cities and Communities	Population living in slums face higher risks of exposure due to high population density and poor sanitation conditions.
GOAL 13: Climate Action	Reduced commitment to climate action; but less environmental footprints due to less production and transportation.
GOAL 16: Peace and Justice and Strong Institutions	Conflicts prevent effective measures for fighting COVID 19; those in conflict areas are more at risk of suffering a devastating loss.
GOAL 17: Partnerships to achieve the Goal	Although aggravates backlash against globalization, highlights the importance of international cooperation on public health.

Source: UNDESA (2020).

Without substantial policy intervention, it seems quite a daunting challenge to achieve the SDGs goals by 2030. In an attempt to showcase the impacts of fiscal interventions on DRR, resilience and sustainable development in the South Asian region, Table 6 portrays the amount of fiscal boosting in USD on particularly the health and social protection sector announced by the respective SA nations connecting with the existing SDG index score.

Table 6: Sdg Index Score Across South Asia

Country	2020 SDG index score	Rank (Out of 166 countries)	Fiscal Boosting (USD million)	Sector
Bhutan	69.3	80	93	H
Maldives	67.6	91	334	H & SE
Sri Lanka	66.9	94	974	H & SE
Nepal	65.9	96	1,073	H & SE
Bangladesh	63.5	109	650	H & SE
India	61.9	117	5,654	H & SE
Pakistan	56.2	134	12,224	H & SE
Afghanistan	54.2	139	1,685	H & SE

Source: Sachs et al. (2020); ADB 2020a
Note: H indicates Health sector and H & SE represent Health and Socio Economic protection sector.

Among the South Asian nations; Bhutan has the highest SDG index score (69.3) with Afghanistan being at the bottom (54.2).[4] Among 166 global countries,

[4] Among the 166 countries, the highest 2020 SDG index score was achieved by Sweden (84.72) and the lowest score by the Central African Republic (38.54).

South Asia's larger nations - namely India, Pakistan, Sri Lanka and Bangladesh - rank at 117, 134, 94 and 109 respectively. The table also tracks the amount of fiscal boosting in such affected sectors as health and social protection[5] in the South Asian nations. We highlight health and social protection because of their signal importance in saving lives, reviving the economy, and achieving the SDG targets. We find that Pakistan has announced the highest amount of fiscal packages in the health and social protection sector, followed by India, Afghanistan, Nepal, Sri Lanka, Bangladesh, and the Maldives. Recently, official in the Asian Development Bank (ADB) have proposed creating an effective regional hub for international tax cooperation (ADB 2020b). Two of the SDGs have emerged as extremely important in the discussion: i) Tackling global poverty, and ii) promoting shared prosperity. In addition, Sachs et al. (2019) introduced six transformations as modular building-blocks of SDG achievement. These transformations are: (1) education, gender and inequality; (2) health, well-being and demography; (3) energy decarbonisation and sustainable industry; (4) sustainable food, land, water and oceans; (5) sustainable cities and communities; and (6) the digital revolution for sustainable development. It seems imperative to operationalize these transformations through institutions within the disaster risk governance structures of the national governments.

4. Scope of integration into resilience and development framework

The COVID-19 pandemic will have a lasting impact on all aspects of development planning. The pandemic has brought to light the need for effective risk management to maintain current levels of development as a basis for further implementing the International Health Regulations (IHR), SDGs, the Sendai Framework, the Paris Agreement, and the New Urban Agenda, in addition to other global, regional and national frameworks.

Previous epidemic countermeasures have failed to include indirect and wider economic impacts in needs assessment and recovery planning. Yet designing and implementing effective recovery policies clearly require a detailed understanding of the overall economic impact of COVID-19. This comprehensive approach would be an important step for policy actions that promote economic growth while reducing inequalities and ensuring decent work for marginalized and high-risk populations. Providing a decent and safe work environment for frontline workers and healthcare personnel has also emerged as an important area for policymaking. Preparation of migration policies based on existing trends for biological hazards, e.g., revising migration policies in accordance with emergent pandemic and other biological hazards, may help national and sub national governments craft comprehensive and effective responses.

Outbreaks, epidemics and pandemics comprise a mix of health, social security and developmental challenges. Much like conflict and large-scale natural disasters,

[5] Due to data limitations, only health sector fiscal boosting is shown in the Bhutanese case.

an outbreak has long-term impacts on livelihoods, the availability of food, and mental and physical wellbeing. Hence, the whole-of-society approach needs to be followed when responding to and planning for recovery from viral outbreaks, epidemics and pandemics. Concerning livelihoods, both formal and informal sectors are affected, though the extent of uncertainty may vary. In the formal sector, pay cuts and layoffs increase in the midst of an outbreak, reducing economic activity and tax revenues. In the informal sector, access to work becomes even more erratic, affecting food security and wellbeing. Lack of employment opportunities can thus push marginalized populations into poverty. The rise in public debt, inability to pay off loans, reduction in tax revenue, slow growth, low inflation, and reduced access to investment capital are common issues across all the sectors. Therefore, linking fiscal countermeasures with resilience and development frameworks is very important to address these issues and achieve a sustainable recovery. In this respect, we have examined the case of Japan, and attempted to draw a few lessons which can also be applied to South Asia.

Japan is advantaged by a robust resilience-oriented policy regime that pre-dated COVID-19 and then became a major conduit for channeling transformative aspects of the COVID-19 fiscal stimulus. For several years, Japan's policy context has been framed by multi-level and multi-stakeholder industrial policy that seeks to maximize the capacity to address such societal challenges as rapid ageing and depopulation in addition to the imperative of climate mitigation and adaptation (DeWit et al. 2020). For example, Japan's Society 5.0's policy arms include digital transformation in smart cities, remote-sensing for DRR, and integrating variable renewable energy. The Society 5.0 paradigm predated COVID-19, and was funded at JPY 781.6 billion in Japan's December 2019 stimulus. In April of 2020, Japanese COVID-19 fiscal countermeasures built on that December stimulus, increasing the transformative investment in Society 5.0 in tandem with protecting health and livelihoods.

Japan's Society 5.0 was also directly linked to the SDGs before COVID-19, and has become even more integrated since. One reason is that COVID-19 lockdowns highlighted the importance of digital networks in tandem with the challenge of maintaining fiscally viable regional economies. Thus, Japan's main business association, Keidanren, drafted a November 17, 2020 policy paper emphasizing the importance of "Society 5.0 for SDGs" as key to building back better from COVID-19 (Keidanren, 2020). Similarly, Japan's National Governor's Association, reflecting a consensus among subnational governments, explicitly linked Society 5.0 and SDGs actions as critical transformative policies for a resilient recovery from COVID-19 (NGA, 2020). Even before the onset of COVID-19, Japan's multi-level action on SDGs was more robust than other developed countries, in encouraging Japanese subnational governments to address domestic challenges as much as external engagement and global contributions (Seki, 2019). And during the 2020 year of COVID-19, Japan's SDGs collaboration has clearly deepened as a mechanism for promoting a sustainable recovery.

Japan's pre-COVID policy regime for resilience and transformative development was not limited to Society 5.0 and SDGs. It had four pillars: 1) SDGs and their local planning and implementation; 2) Society 5.0 and its planning and implementation; 3) Smart/Super city projects as venues for deploying the fruits of industrial policy, green infrastructure, open-data, and other aspects; and 4) National Resilience planning and implementation. DeWit et al. (2020) argued that the effectiveness of fiscal stimulus is enhanced by extant resilience-oriented plans and institutions to channel the flow of funds. And indeed, Japan's COVID-19 fiscal stimulus of 42% GDP is increasingly being directed into sustainability through public-private collaboration and national resilience planning. In addition, current planning for Japan's Fiscal Year 2021 national budget and 3rd supplemental budget (for the 2020 Fiscal Year) indicates that building back better from COVID-19 is likely to expand.

Let us examine pertinent details of Japan's collaborative context, which is helping channel COVID-19 fiscal stimulus into sustainability. As is shown in Table 7, Japan has a broadly inclusive Local SDGs Public-Private Collaborative Platform. The table lists the platform's members by category (e.g., subnational governments) and then by the total members per category. As of October 31, 2020, the platform's membership includes 807 of Japan's prefectural and local governments in addition to most of the national government's central agencies (including the Cabinet Office and ministries concerned with finance, internal affairs, health and labour, education, the economy and industrial policy, and the environment). In addition, civil society was broadly represented by 2,618 business firms, research institutions, NPOs and other organizations. Importantly, the total membership of 3,438 nearly tripled compared to the April 2020 total of 1,235 members. This rapid increase in the platform's total membership, in just 6 months, reflects the impact of COVID-19.

Table 7: Japan's Local SDGs Public-Private Collaborative Platform

Member Category	Number of Members
Sub national Governments	807
Central Agencies	13
Private Firms and others	2,618
Total Membership (as of October 31, 2020)	3,438

Source: Future City, 2020

Another important vehicle for shaping Japanese action is its Smart City Public-Private Collaborative Platform, whose total organizational membership is itemized in table 8. Of particular note is the growing number of local governments, 134 as of November 5, 2020, a significant increase over the 114 recorded in April of the same year. This platform is yet another venue via which Japan is implementing the

Paris Agreement, SDGs, and SFDRR, with best practices shared among multiple stakeholders.

Table 8: Japan's Smart City Public-Private Collaborative Platform

Member Category	Number of Members
Sub national Governments	134
Central Agencies	11
Businesses, Research Centres, and others	410
Business Associations	2
Total Membership (as of November 5, 2020)	544

Source: MLIT, 2020a

A more recent platform is Japan's Green Infrastructure Public-Private Collaborative Platform. Table 9 shows that its membership as of September 30, 2020 exceeds 714 local governments, central agencies and other stakeholders. This total is a significant increase over the 409 members when the platform was set up 6 months earlier, on March 18. Moreover, the local government membership includes Sendai City (the host city for the 2015-2030 Sendai Disaster Risk Reduction program), Tokyo, and other influential cases. Moreover, the important role of central agencies is coupled with the participation of business, academe, NPOs and other stakeholders whose collective expertise encompasses water, energy, construction, and other areas crucial to designing and implementing comprehensive green-infrastructure solutions. Under COVID-19, Japan's growing emphasis on green-infrastructure helps channel investment into climate mitigation, adaptation and inclusive sustainability.

Table 9: Japan's Green Infrastructure Public-Private Collaborative Platform

Member Category	**Number of Members**
Sub national Governments	53
Central Agencies	4
Businesses, Research Centres, and others	244
Individual Memberships	413
Total Membership (as of September, 30, 2020)	714

Source: MLIT, 2020b

Yet another of Japan's key collaborative governance platforms is National Resilience (DeWit et al. 2020). Japan's National Resilience initiative dates back to 2014 and emphasizes all-hazard disaster preparation, building back better, and "whole of government" collaboration. Its ambit overlaps with the platforms discussed above, in that it encompasses smart communications, sustainable

energy systems, resilient water networks, and the other critical infrastructures. Moreover, the impact of COVID-19 has also accelerated its diffusion among subnational governments. By October of 2020, all of Japan's 47 prefectures had adopted their own regional versions of the National Resilience Planning (NRP). As we see in table 10, as of October 1, 2020 1,685 of Japan's 1741 cities, special wards, and towns had either adopted their own local versions of the NRP or were formulating plans. That number of local governments doing NRPs was just under eight times the 203 total in July of 2019. In this case too, multi-stakeholder and multi-level governance is encouraging the productive and sustainable deployment of COVID-19 fiscal stimulus.

Table 10: Japan's Local National Resilience Plans (NRPs)

Administrative Level	July 1, 2019	October 1, 2020
Local Government	203	1,601

Source: National Resilience, 2020

Japan's collaborative governance remains a work in progress rather than a benchmark of what to do. All the same, the significance of Japan's multi-level, collaborative approach is seen in its contrast with Europe. In the latter, inadequate fiscal aid and resilience-oriented governance are risking a poor post-COVID outcome. A joint survey by the EU Committee of the Regions (CoR) and the OECD warned of this in a November 19, 2020 presentation. The Cor/OECD findings reveal that EU sub national require significant investments in resilience and digitization in order to achieve a sustainable recovery. Yet the Director of the OECD Centre for Entrepreneurship, SMEs, Regions and Cities argues that current initiatives are "disjointed" and lacking in coordination. "Governments must make a concerted effort to coordinate effectively and implement meaningful policies that will help these local and regional areas emerge from the crisis more resilient and sustainable" (CoR, 2020).

Japan's example offers hints for South Asia. It shows that a robust and goal-oriented institutional context enhances the scope for proper integration of fiscal boosting in national and local planning. South Asia countries can build on their own institutional resources. For example, Bangladesh's Delta Plan is an overarching development framework until year 2100, which encompasses all components of urban and rural planning. Though beyond the scope of this paper, it would be valuable to examine the extent to which fiscal boosting has strengthened Delta Plan implementation. There is ample room to explore synergies with such development activities increasing the use of environment-friendly and cost-effective agricultural technology, the mechanisation of agriculture, enhancing renewable energy, expanding agricultural lands, ensuring women's empowerment

in agricultural activities, use of information technology in agriculture, and the diffusion of bioscience technology. Similarly, India's 100 Smart City program is a core developmental pathway for smart and green urban infrastructures. Over the past few years, the Indian government has invested in its smart city program, especially in terms of upgrading infrastructures. It is now time to look at the holistic urban development, keeping in mind ecosystem based recovery and business development, as argued by Mukherjee et al. (2020).

5. Conclusion

This paper analysed fiscal and related policy in South Asian countries, which were in differential stages of development before the pandemic. Prolonged lockdown in most of these countries has severely affected lives and livelihoods, and undermined development goals. Our analysis of the fiscal boosting in eight South Asian countries has pointed out different aspects, based on the country's economy, dependence on external assistance, and emphasis on health and socio-economic protection sectors. Fiscal boosting will differentially affect SDGs as shown in the previous section. The analysis of Japan's fiscal stimulus measures (already over 40% of GDP and slated to increase) indicates that fiscal stimulus works well when it is integrated with extant schemes for resilient national and local development. Thus, it is argued that the effectiveness of fiscal boosting in South Asian countries is likely to be enhanced if it is integrated into national development frameworks such as the Delta Plan in Bangladesh or smart city programs in India.

Lastly, the COVID-19 pandemic recovery is a chance to "build back better" while leaving no one behind. An inclusive, long-term recovery plan for South Asian countries needs to take a holistic approach to address existing gaps and work towards sustainability. A biological hazard like the COVID-19 pandemic affords an opportunity to strengthen the partnerships central to SDG 17. Partnerships are needed to develop warning mechanisms in addition to reducing gaps in data sharing and accuracy for effective evidence-based policy and decision making. Multi-stakeholder partnerships are an essential complement to exploit advances in science and technology. Thus bolstered global partnerships and effective risk governance need to be brought into the core of preparedness and response for future health emergencies. In this respect, furthering the Health Emergency Disaster Risk Management (HEDRM) Framework may support a coordinated response across various linked sectors rather than straining one particular sector.

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