

DRAFT BACKGROUND PAPER

COVID-19 and green recovery in the Hindu Kush Himalaya

Introduction

The COVID-19 and climate crises are monumental global challenges. But when tackled in tandem through the prism of sustainable and resilient development, they can create opportunities for policymakers, the public and private sectors, and the civil society to support rapid and inclusive recovery from COVID-19 by using climate action framed around the 2030 Agenda and the Paris Agreement on climate change. The decade of climate action and

delivery for sustainable development, therefore, provides a key opportunity for countries to lay the groundwork for a low-carbon future.

The fallout of the pandemic is evident. It is therefore important to develop strategies to provide immediate relief to those adversely affected, including protection for the most vulnerable such as cottage and small enterprises, the self-employed, individuals with limited coping mechanisms, and women and youth.

FIGURE 1A KEY AMBITIONS TOWARDS GREEN RECOVERY

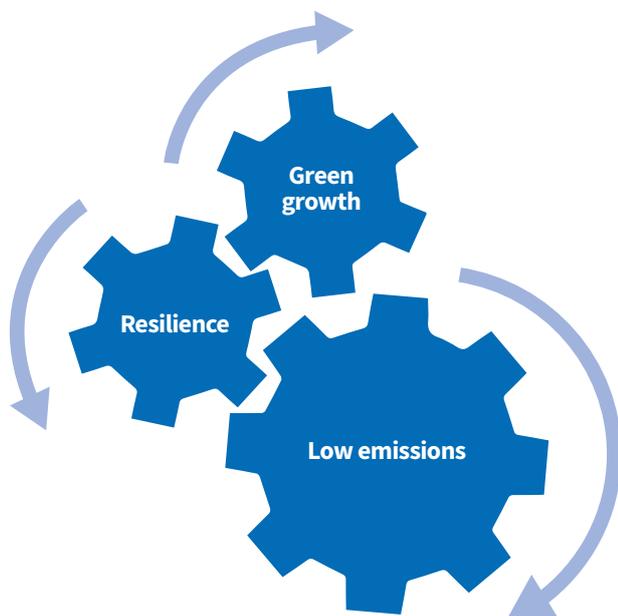
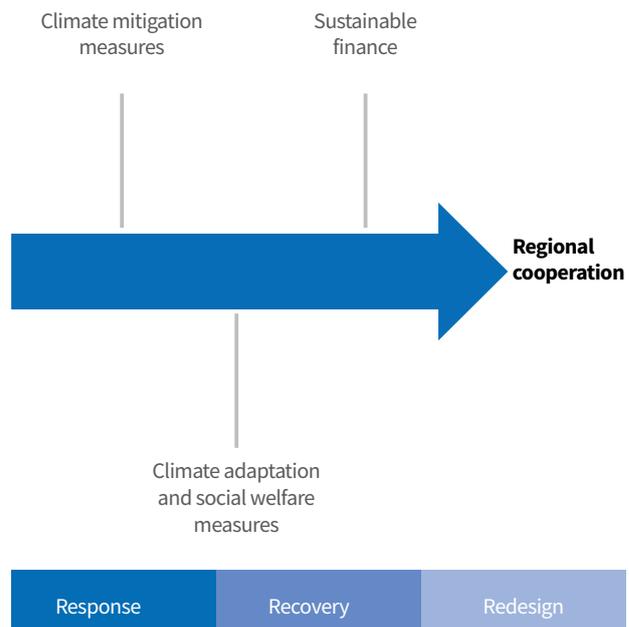


FIGURE 1B OPPORTUNITIES FOR GREEN RECOVERY



COVID-related responses to address climate action and green recovery

- This paper reviews national and international COVID-19 recovery measures – including economic and policy measures – in the Hindu Kush Himalaya (HKH).
- In most HKH countries, economic and policy measures focus on the 3 Rs – response, recovery, and redesign – to ensure green resilient inclusive development (GRID) (Figure 1b):
 - **Response** – emergency measures in the short term (a few months to one year) to address concerns that have directly emerged from the COVID-19 pandemic, which may require prompt action
 - **Recovery** – characterized by (a) medium-term outcomes and (b) aligning recovery measures with an explicit focus on environmental and climate issues, which involves planned, intentional action
 - **Redesign** – characterized by (a) outcomes in the longer term (from more than a few years to a few decades) and (b) paradigm shift in the growth model/ transformation. This requires redesigning current socioeconomic and sociocultural systems to be sustainable and resilient.

Ultimately, it is important that the investments of today lead to sustainable and resilient solutions for an inclusive, green, and sustainable tomorrow. While initial recovery efforts have focused on cushioning the immediate impact, the next phase

should include explicit strategies for the future. This requires recovery efforts anchored in climate change mitigation and adaptation, environmental protection and justice, and strengthening the green and circular economy to achieve socially just and inclusive societies with sharply reduced inequalities. It also means ushering affected individuals into new sectors aligned with the vision for this future green economy. It requires developing responses that factor in the multidimensional impacts, target support for vulnerable groups, and help realize equal access to opportunities and resources (rather than unintentionally aggravating existing vulnerabilities and inequalities). It calls for support that strengthens the resilience of individuals and businesses alike, helping them to build back and even improve their livelihoods and ability to withstand further shocks in the future.

While COVID-19 recovery is aligned to climate action in some instances, it is not so in other instances. In cases where it is aligned, HKH countries have used different approaches to ensure that recovery from COVID-19 is aligned with climate action or delivers GRID. These measures include:

- Using climate investments/measures to recover from COVID-19
- Tweaking existing measures to ensure COVID-19 recovery involves GRID
- Designing new measures to ensure GRID

In cases where recovery is aligned, it can unlock significant opportunities for adaptation, mitigation, and finance (Figure 2).

FIGURE 2 ALIGNING COVID-19 RECOVERY WITH CLIMATE ACTION

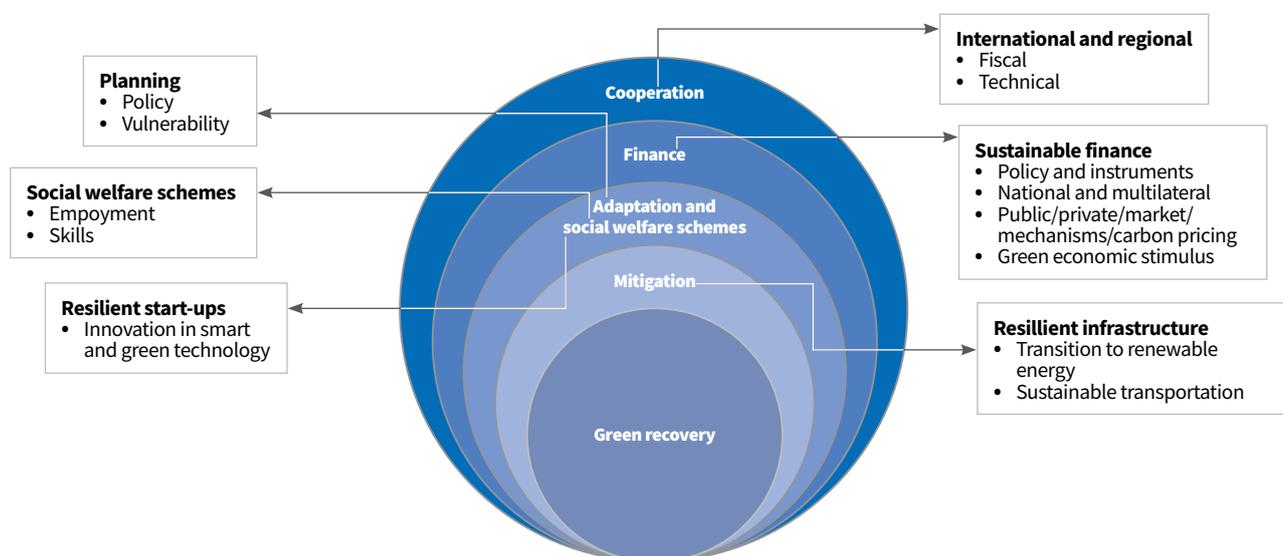


TABLE 1

SECTORS UNDER FOCUS FOR GREEN RECOVERY

Social/economic/governance/policy	Sectors	Finance and cooperation
Developing policies to help the vulnerable and adversely impacted during COVID-19	Sustainable energy: access to energy (particularly renewable energy)	Investments in climate-resilient, green, and livable towns
Economic response and recovery: Protecting jobs, small and mid-size enterprises (SMEs), and informal sector workers	Sustainable transportation	Overseas green economic and trade cooperation zones
Empowers people and builds resilience	Resilient infrastructure	Green regulatory services
Improves education and healthcare	Digital economy, promotion of start-ups and innovation	International standards on climate investments
Creates new livelihoods and supports farmers and small businesses	Green trade and supply chain	Rebuilding carbon markets
Gender inclusion, climate resilience, balanced regional development, and private sector participation	Ecosystem protection and restoration	Regulation of offshore investments
Building back better	Air pollution	
Social cohesion and community resilience		

Some common priority areas identified under green recovery

The key reasons for initiating a green recovery plan are:

- Reduction in greenhouse gas emissions
- Aiming to achieve the targets set under the Paris Agreement
- Maximizing sustainability outcomes and achieving SDGs
- Priority on climate actions
- Promoting carbon neutrality

Country updates

Afghanistan

As a low-income country, Afghanistan needs continued international support to recover from the COVID-19 pandemic. According to UNDP GTAP model (A-GTAP-CGE) for Afghanistan, which has estimated the short-term impact of COVID-19, the country needs short- to medium-term funding to tackle COVID-19. The international community is committed to helping Afghanistan to overcome the pandemic through multiple channels. Until its fall in August, the Government of the Islamic Republic of Afghanistan was in close contact with bilateral and multilateral partners and was engaging actively with citizens, civil society, academia, NGOs, and international partners to formulate and design measures, plans, and appropriate actions for both mitigation as well as adaptation to strengthen resilience against the climate and environmental crises. The Nationally

Determined Contributions (NDCs), which is the document that focuses on adaptation, mitigation, and finance, commits to a 13.6 per cent reduction in GHG emission by 2030 conditional on the support received to implement its projected programmes and projects. This document needs to be redesigned for the purpose of addressing the major gaps. It needs to include the health sector to respond to unforeseen health issues such as COVID-19.^{i,ii} What the position of the new government that came to power in August 2021 is on the national objectives agreed to under the previous government is not clear yet as the situation in Afghanistan is still very fluid.^{iii,iv}

ADAPTATION MEASURES

Mini-grids market: Redesign

A new United Nations Development Program (UNDP) project had been approved by the Green Climate Fund before the fall of the previous government in August. If the project were to go ahead, it would focus on innovative solar mini-grids that will lay the foundation for a mini-grids market in Afghanistan. It was to be implemented by the Ministry of Rural Rehabilitation and Development and was co-financed by UNDP. The amount is around USD 17.2 million with a total budget of USD 21.4 million. It includes:

- Setting-up of three solar mini-grids to showcase the viability of this model, with the aim of driving future investments
- Designing a national mini-grids market by creating an enabling environment. This will require facilitating private sector investments through suitable policies and regulations, green procurement guidelines, institutional frameworks,

delivery models and financing, technological solutions, and capacity building.

- Provision of clean energy to 49,000 beneficiaries, almost half of them women, through the first proof-of-concept mini-grids alone. This will result in a 173,082 tCO₂ emissions reduction over the lifetime of the deployed technology.
- Creation of market conditions to scale up mini-grids
- Direct impacts on SDG7 and indirect impacts on other SDGs. This includes climate action relating to gender equality, poverty reduction, education, and achieving zero hunger by increasing agricultural productivity.

Plan and policy on climate change: Redesign

- The National Environmental Protection Agency, as a part of its commitments to the UNFCCC and to strengthen climate protection measures, has prepared the Afghanistan Climate Change Strategy and Action Plan (ACCSAP). They have had to redesign the plan in order to revise the NDCs and National Adaptation Plan (NAP) in order to accommodate climate change adaptation measures in the context of COVID-19.
- Addressing issues related to climate change in the areas of agriculture, biodiversity, forests and rangeland, energy, disaster preparedness, and water^v

MITIGATION MEASURES

Transition to renewable energy: Redesign

- Implementation of 2000 MW solar power. This is a cross-cutting project (community-based forest and land management) which is planned to be implemented in five provinces until 2024.
- The plan also includes development of technology needs assessment^{vi}

KEY FISCAL MEASURES: THE 3 Rs^{vii}

The authorities rolled out about 0.8 per cent of the GDP in social assistance under the World Bank-funded Relief Effort for Afghan Communities and Households (REACH) programme in 2020, with the remaining 0.6 per cent of the GDP being rolled out in 2021.

The authorities spent about 2.2 per cent of the GDP to fight COVID-19 in 2020, including:

- A health package of around AFN 10.9 billion
- A social package of around AFN 14.7 billion

- Transfers of about AFN 1.3 billion to provinces to finance COVID-19 response
- Support to agriculture of about AFN 5.2 billion
- Support for short-term jobs creation amounting to roughly AFN 1.0 billion

The 2021 budget includes the following COVID-related spending:

- Health package of AFN 2.4 billion
- Social package of AFN 8.9 billion
- AFN 3.3 billion for other, related spending

Bangladesh

The Government of Bangladesh believes that the responses to the two global crises could be mutually reinforcing whereby the global COVID-19 recovery package can be integrated into enhancing actions on climate change. The Paris Agreement on Climate Change and the 2030 Agenda for Sustainable Development provide a clear international framework for actions and they form the basis of the country's shared responsibilities towards people and the planet. These frameworks for action have to be reflected in and integrated into the national, regional, and global COVID-19 recovery packages.

ADAPTATION MEASURES^{viii}

Transition to renewable energy (RE): Response and redesign

- The Global Environment Facility (GEF)-funded initiative to enable electric vehicles (EVs) adoption includes, among others, developing an EV roadmap/guidelines/policy, which factors in environmental, social safety, and gender considerations; setting up of institutional frameworks, technical standards, tariff, incentive structures, taxes, safety regulations for EVs, and vehicle efficiency; as well as integration and installation of solar-grid hybrid charging stations at selected urban and semi-urban areas for different EV types.

Resilient infrastructure: Response

- Constructing nineteen new climate-resilient buildings (1st phase) for approximately 600 families displaced by climate change (climate victims)
- Undertaking several initiatives at local and national levels for sustainable management of solid waste and hazardous waste (e.g., medical

waste including COVID-19 waste and e-waste) in line with the concept of the circular economy

programmes although effective targeting remains a challenge

MITIGATION MEASURES^{ix}

Transition to RE: The 3 Rs

- In its vision for 2021, the government plans to increase the renewable and sustainable generation capacity share by 10 per cent of total electricity consumption. Off-grid solar home systems (~ 6 mi) and ~ 20+ RE projects are under way.

Afforestation and reforestation: The 3 Rs

- It is expected to increase by 2 per cent by 2021
- The country targets to achieve 25 per cent tree cover by 2030
- Continuous innovation and introduction of new, stress-tolerant (saline, drought, flood water) crop varieties, expansion in floating gardens, and production technology

KEY FISCAL MEASURES

National climate fiscal framework^x and other national measures^{xi}: The 3 Rs

- Under the national climate fiscal framework, around USD 2 billion on average has been allocated each year since 2010 from the national budget for climate action and this amount has been increased to USD 3 billion annually during the last few years to give more priority to climate action
- In 2020, the Ministry of Finance announced a stimulus package of roughly USD 588 million for industries in the export sectors, which was to be channeled through Bangladesh Bank and distributed by the commercial banks at a service charge of 2 per cent
- This special fund to support workers' salaries, benefitting close to 4 million workers over a four-month period, was disbursed through mobile financial services and bank accounts
- The Ministry of Finance is also subsidizing the interest payments on working capital loans of about USD 7.1 billion provided by scheduled banks to businesses
- Roughly USD 250.9 million was announced by the Government of Bangladesh under a housing scheme for the homeless
- Roughly USD 176.7 million has been allocated by the Government of Bangladesh for the poor who have faced job losses due the pandemic
- The FY22 Budget includes higher allocations for health, agriculture, and social safety net

Asian Development Bank (ADB)^{xii}: Recovery

The key measures under ADB's Country Operations Business Plan (COBP) for Bangladesh from 2021–2023 are as follows:

- In order to jumpstart economic recovery after the slowdown induced by the COVID-19 pandemic, social protection initiatives, public expenditure, and fiscal management were identified as the key areas in need of assistance
- USD 5.28 billion (2021–2023) has been allocated for gender inclusive development policies, climate resilience, balanced regional development, and private sector participation
- USD 500 million has been allocated to mitigate the medium- and long-term economic and social impact of the pandemic
- Around USD 200 million has been earmarked for the Agriculture Productivity Improvement Project USD 300 million has been earmarked for the Second Skills for Employment Project
- USD 650 million has been allocated for the agriculture sector, the protection of natural resource, and rural development
- USD 750 million has been targeted for projects in the energy sector, with a focus on renewable energy, rural electrification, and energy efficiency
- USD 768 million has been allocated for water and urban infrastructure sector investments in climate-resilient, green, and livable towns

World Bank: Climate and recovery measures

- Living in the Light: Building on the success of the programme, the World Bank has extended its support to scale up other clean renewable energy options including solar irrigation, solar mini-grids, roof-top solar, and solar farms. The World Bank financing for two consecutive Rural Electrification and Renewable Energy Development (RERED) projects stands at USD 726 million.^{xiii} Although this is climate action, it can also be linked with green recovery.
- The World Bank and the Government of Bangladesh have signed a USD 250 million financial package to help Bangladesh create more and better jobs, recover faster from the COVID-19 pandemic, and build resilience towards future crises.^{xiv}

Bhutan

The COVID-19 outbreak has put significant pressure on both the health sector and the economy. Bhutan has also been negatively affected by an extended crisis and economic downturn in neighbouring countries (especially India). Both the Royal Government of Bhutan and the UN Country Team for Bhutan have moved quickly and pro-actively to respond to the COVID-19 pandemic. These efforts have focused on ensuring a sustainable future for Bhutan by supporting choices today that would lead to an inclusive, green, and sustainable tomorrow that will be embedded in the Sustainable Development Goals and the concept of Gross National Happiness. This would lead to recovery efforts anchored in climate change mitigation and adaptation, environmental protection, and strengthening of the green and circular economy.

ADAPTATION MEASURES

Adaptation planning: The 3 Rs measure

- Bhutan's NAP is under preparation by the National Environment Commission

Health first: Protecting health services and systems: Response

- The country aims to enhance health services to combat COVID-19
- There is also a focus on zonation of the country to boost localized/contained health services

Protecting people – Social protection and basic services: Response

- Prioritizing and targeting households or individuals who are vulnerable. Providing support to these households first will ensure that the needs of the vulnerable are met in a timely and appropriate manner.
- Designing employment and re-skilling programmes from a gender-sensitive perspective. Ensuring options that are gender sensitive in developing employment and re-skilling programmes is very important.

Economic response, recovery, and redesign: Protecting jobs, SMEs, and informal sector workers

- Support for re-skilling and upgrading, including within the tourism sector. As Bhutan aspires to diversify its offerings within the arenas of ecotourism, nature-based tourism, and other unexplored areas, the current “downtime” should be seen as an opportune moment to invest in

building capacity and expertise (e.g., nature guides, eco-tourism, and farm tourism). This would constitute a response measure.

- As a redesign measure, the country plans to introduce complementary policies and measures to sustain re-skilling and economic diversification measures. In order to sustain re-skilling programmes, for example, in construction, incentives may need to be offered to Bhutanese contractors to use local labour. Similar measures can be introduced to promote the cultivation and consumption of locally grown vegetables over imported vegetables.

Macro-economic response and multilateral collaboration: Recovery and redesign

- Supporting liquidity and operations of affected tourism-related businesses. Considering the heavy debt burden faced by most business owners (especially in the hotel sub-sector), stimulus packages as well as monetary and fiscal measures may need to be reviewed for their effectiveness in supporting small businesses over the long-term

Social cohesion and community resilience: Recovery

- As a recovery measure, the aim is to incorporate social and environmental sustainability aspects into the Bhutanese economy
- Building on the strong foundations of Gross National Happiness, Bhutan aims to transform its economy by integrating into it concepts such as (but not limited to) sustainable consumption and production, circular/regenerative economy, and valuation of ecosystem services
- Building robust and shock-responsive social protection schemes such as employment insurance schemes given the lack of current coping mechanisms and to have in place quick responses to protect people from future economic shocks
- Encouraging a saving culture among the Bhutanese, which is vital to complement government programmes to protect the population and to “build back better”

MITIGATION MEASURES

Mitigation planning: 3 Rs

- Climate Change Policy of the Kingdom of Bhutan, 2020
- Updated Nationally Determined Contributions
- Long-term Low Emission Climate Resilient Development Strategy (under preparation)
- Waste Management Flagship Programme

Economic response and recovery – Protecting jobs, SMEs and informal sector workers: Recovery

- Plans to align alternative employment and re-skilling programmes with future labour and skills requirements. It is important to link these programmes with the skills envisaged in the government’s new 21st Century Economic Roadmap.
- Strategic investments in rural Bhutan as well as in individuals who wish to relocate from rural to urban areas and vice-versa by assessing their skills and qualifications and identification of talents. This can help facilitate the transformation of Bhutan’s agriculture and IT sectors in line with the vision articulated in the 21st Century Economic Roadmap.

International collaboration: Response

- The aim is to support food security, green investments, and the return of willing individuals to rural areas/farms. The focus on agriculture must be complemented by value-chain linking activities (e.g., processing and packaging), cluster-based incentives to promote smallholder farmers and CSIs involved in agroindustry, and coordinated use of storage and transportation facilities.

KEY FISCAL MEASURES: THE 3 Rs

- For key response measures, His Majesty’s Welfare Fund and fiscal stimulus measures (loan interest waivers and payment deferrals) have been established
- For key redesign measures, the Bhutan Climate Fund and Green Finance Roadmap will be utilized^{xv, xvi}
- Linked to the Build Bhutan initiative, the Government has also launched the Specialized Firms initiatives to boost youth employment in various construction schemes
- The Government has announced a National Resilience Fund to mitigate job losses and salary cuts linked to COVID-19. The support has included grants for individuals directly affected by the pandemic (now extended until June 2022).
- In addition, the fiscal stimulus in the FY 2020-21 Budget includes the implementation of an Economic Contingency Plan (ECP) aimed at helping different sectors, including tourism resilience, agriculture, Build Bhutan and improvement of farm roads, over and above the annual budget (BTN 4 billion)

- A budget of BTN 1.3 billion has been re-appropriated for health, essential food and fuel, and quarantine and related initiatives
- Support will be provided to the Food Corporation of Bhutan (FCB) to stock essential food and non-food items. It will further enable fiscal decentralization with upscaling of national grants.
- Investments in GovTech is allowing Bhutan to reap benefits during COVID-19 including fast disbursement of cash relief funds^{xvii}

China

China is the world’s largest greenhouse gas emitter.^{xviii} To take robust, ambitious, and urgent action to reduce emissions, the Chinese President Xi Jinping, at the UN in September 2020, and again at the recent Leaders’ Summit on Climate convened by US President Joe Biden, committed China to aim to have carbon dioxide (CO₂) emissions peak before 2030 and achieve carbon neutrality before 2060.^{xix} With these measures, China has set forth long-term targets to support the global effort to reach carbon neutrality.

Some initiatives pledge to green the manufacturing system by targeting traditionally polluting industries such as steel, chemical, construction, textile, paper, and leather industries and shutting down or banning polluting industries. In March 2020, China published the 14th Five Year Plan (FYP) and 2035 Vision – the country’s highest mid-term programmatic document – indicating greener development growth strategies and an “ecological civilization” as one of six overarching priorities over the next decade and beyond.^{xx}

China avoided a prolonged large-scale COVID-19 pandemic outbreak through a very strict nation-wide lockdown. Therefore, China’s stimulus packages for economic recovery was integrated into the 14th Five Year Plan, in which climate change mitigation and adaptation focus on the following areas:

ADAPTATION MEASURES

Developing and implementing Climate Adaption Action Plan 2021–2035: Response and recovery

- Expansion in the infrastructure for charging of EVs^{xxi}
- Extending support for the new energy vehicle (NEV) sector^{xxii}
- Developing action plans for the carbon peak

Strengthening national and international collaboration:

Recovery and redesign

- In the medium term, China plans to boost green Belt and Road Initiative (BRI) investments. Five key ministries and regulators will jointly promote climate investments both domestically and overseas^{xxiii}
- In June 2020, China announced its engagement with middle- and low-income countries in solidarity against COVID-19^{xxiv}
- China can act as financier, technology provider, knowledge broker or development partner, in enabling a green recovery through projects like “Greening Chinese overseas investments”^{xxv}

MITIGATION MEASURES

Developing and implementing Climate Adaption Action Plan 2021–2035: The 3 Rs

- Setting up mandatory targets to reduce the carbon and energy intensity of the economy
- Setting climate and energy targets and outlining several new targets for 2025 and 2030
- Setting targets to obtain approximately 40 per cent of the country’s electricity needs from nuclear and renewable sources by 2030, which is an estimated 1500 GW
- Identifying the following targets in the 14th FYP (2021–2025):
 - Energy intensity: 13.5 per cent decrease from that in 2020
 - Carbon intensity: 18 per cent decrease from that in 2020
 - Energy: Target is to ensure that 20 per cent of total energy consumption comes non-fossil sources
 - Nuclear power: Target is to produce 70 GW by 2025^{xxvi}
- Introducing Guiding Opinions on Strengthening Ecological Environment Protection in Pilot Free Trade Zones and Promoting High-quality Development: These opinions guide the pilot free trade zones to address and strengthen ecological and environmental protection, and promote high-quality economic development.^{xxvii}

KEY FISCAL MEASURES

Belt and Road Initiative (BRI) or One Belt One Road (OBOR):^{xxviii} The 3 Rs

- This was China’s main international cooperation and economic strategy announced in October 2013
- It aims to support green development in regard to green finance, green transport, green innovation, green urbanization, and green standards
- By March 2020, 138 countries and 29 international organizations had signed cooperation agreements with the BRI
- BRI’s finance and investments were USD 27.5 billion in the first half of 2020 and USD 19.3 billion in the first half of 2021
- The financing of Chinese BRIs has accelerated in the logistics sector, particularly in transport in Asia as well as resources and other strategic assets (e.g., ports). Chinese overseas investments have increased in expectation of a post-COVID-19 recovery.
- In 2021, better opportunities for investing have been identified in smaller projects that are quicker to implement such as solar and wind; The “Guidelines for Greening Overseas Investments and Cooperation” issued by the Ministry of Commerce (MOFCOM) and the Ministry of Ecology and Environment (MEE) state the need of stricter and, if necessary, international environmental standards along the whole project lifecycle

Macro and micro fiscal: The 3 Rs

- China has passed a total of US\$731 billion in fiscal stimulus^{xxix}
- Speeding up the carbon trading mechanism by investing in other countries
- Announcing an estimated RMB 4.9 trillion (or 4.7 per cent of GDP) of discretionary fiscal measures, of which RMB 4.2 trillion is estimated to have been invested in 2020. Key measures include: (i) increased spending on epidemic prevention and control, (ii) production of medical equipment, (iii) accelerated disbursement of unemployment insurance and extension to migrant workers, (iv) tax relief and waived social security contributions, and (v) additional public investments.
- Overall high public sector expenditure. This includes support outside the budget, such as additional guarantees for SMEs amounting to RMB 400 billion (0.4 per cent of GDP)

- Encouragement of lending to SMEs, including support for uncollateralized SME loans from local banks; raising the target for large banks' lending growth to MSEs from 30 per cent to 40 per cent; and establishing an evaluation system for banks' lending to MSEs^{xxx}
- Announcement of the Environment Dedicated Fund: This Green Development Fund proposes to provide green investments worth USD 12.66 billion (88.5 billion yuan) in the Yangtze River economic belt and support environmental protection, ecological restoration, pollution control, clean energy, and green transportation^{xxxi}

India

India is the third largest emitter of greenhouse gases after China and the US. Clean energy generation like solar, wind, and other renewable technologies have been prominent among stakeholders in India, having received the most attention in the last decade. Clean energy generation and ecological restoration are the broad categories for green recovery in India. Based on the share of financial outlays, commercial banks and government combine to make up 70 per cent with international organizations accounting for only 15 per cent of the current green funding in India.

ADAPTATION MEASURES

Energy policy: The 3 Rs measures

- The Government of India has, so far, developed around 70 policies under the energy sector (52 at the national level, including 32 “unquantified” and 20 “quantified”; 18 at the state level, including 11 “unquantified” and 7 “quantified”) from January 2020 to early March 2021
- They provide support for specific parts of the energy sector
- The total amount set aside for implementing the policies is USD 122.6 billion
- The government has committed to converting 48 per cent of its energy needs to clean energy (18 per cent conditional, 30 per cent unconditional) of which 30 per cent is renewable energy
- Focus on EVs, energy efficiency, multiple energy types, renewables, transmission and distribution, and transport
- To prioritize energy security and make India self-reliant as well as to boost domestic manufacturing, the government has announced initiatives like production-linked incentive schemes, concessional loans for setting up power projects and extension of safeguard duties on the imports of solar cells, modules, etc.

Environmental cleaning: The 3 Rs

- Installation of air pollution control technologies in thermal power plants
- Adding 100 more districts to the city gas distribution network
- Waiving inter-state transmission charges for renewable energy and the Andhra Pradesh renewables export policy
- In the case of transport, promotion of liquefied natural gas (LNG), the Delhi Electric Vehicles Policy, e-buses and charging stations under the FAME scheme

MITIGATION MEASURES

Renewable energy: The 3 Rs

- India is considered to be on track to achieve the 450 GW renewable energy target by 2030. India is running the world's largest clean energy programme to achieve 175 GW of renewable capacity, including 100 GW of solar power by 2022. The target encompasses the mountainous region of the country as well.
- The country has pledged to a 33–35 per cent reduction in the “emissions intensity” of its economy by 2030
- Among the measures that were heavily supported in the COVID-19 relief package were a liquidity boost for distribution companies; reduction in domestic natural gas prices; a waiver of transmission charges for renewable energy generators; and revision of private sector lending guidelines to prioritize renewables.
- The Government of India has committed at least USD 35 billion (28.5 per cent of the USD 122 billion energy-related funding for renewables) to support renewable energy while allocating a large proportion amounting to USD 69 billion (56.5 per cent) to support “other” types of energy. This includes budgetary transfers, policy support, public finance, and investments by state-owned enterprises.

Air pollution: Response

- The Union budget has allocated USD 0.3 billion to tackle air pollution
- The central and state governments' electric vehicle, renewable energy, and energy conservation policies are a further step towards combating local air pollution

Government policies promoting social welfare:

Response

- Four policies clearly aim to combat unemployment and create jobs:
 - India's Green Strategic Partnership with Denmark
 - Andhra Pradesh's Renewable Energy Export Policy
 - Ratle Hydroelectric Plant in Jammu and Kashmir
 - Sustainable Alternative Towards Affordable Transportation initiative, as part of which 5,000 compressed bio-gas plants (CBG) are planned by 2025

Strengthening of green industrial policies: Response and redesign

- India has strengthened its financial support in the FY2021/22 Budget to the Solar Energy Corporation of India (SECI) and Indian Renewable Energy Development Agency Limited (IREDA)
- The country launched its first National Hydrogen Energy Mission in 2021
- It has increased the income of farmers and rural populations via solar technologies. One Indian state is supporting farmers by providing nine hours of free solar power every day

Large-scale RE grid integration: Response and redesign

- Support for large-scale RE grid integration across the country, along with storage, balancing mechanisms and the inclusion of other clean technologies like offshore wind and green hydrogen
- Under tranche 1 of the stimulus package "Atma Nirbhar Bharat Abhiyan" in 2020, discoms were supported financially with as much as around INR 900 billion crores (USD 12.1 billion)
- Further, around INR 3 trillion (USD 41 billion) have been committed to achieving India's target in renewable energy under India's biggest single quantified energy policy in FY2020–21^{xxxii}

KEY FISCAL MEASURES: THE 3 RS

- India has passed USD 325 billion in total fiscal stimulus packages in response to COVID-19
- India's fiscal stimulus largely supports industry and energy activities that have intensive impacts on the environment but the majority of its most recent stimulus measures in the 2021/22 Budget were green, thereby pushing up its GSI score

- National (jobs): Approximately USD 817 million (INR 6 billion) has been committed for job creation (including those available to tribal communities) in forest management, wildlife protection, afforestation and plantation work^{xxxiii}
- INR 500 billion (USD 6.7 billion) has been allocated to scale up medical infrastructure
- In the case of the tourism industry, an INR 1 million (USD 13,000) loan has been granted to travel agencies; another INR 1 million loan has been granted to tourist guides. Tourist visas will be provided free to the first 500,000 tourists when the process begins.
- India aims at rural digital connectivity by investing ~USD 2.6 billion in rural broadband connectivity^{xxxiv}

Myanmar

On 27 April 2020, Myanmar's Ministry of Planning, Finance and Industries (MoPFI) launched a comprehensive economic stimulus plan. The COVID-19 Economic Recovery Plan (CERP) consists of 7 goals, 10 strategies, 36 action plans, and 76 actions that cover a range of fiscal and monetary measures. The plan was launched with the slogan "Overcoming as One" and included everything that is necessary to bring the economy back on the right track. It involved 7 goals:

- Improving the macroeconomic environment through a monetary stimulus
- Easing the impact on the private sector through improvements in the investment, trade and banking sector
- Easing the impact on labourers and workers
- Easing the impact on households
- Promoting innovative products and platforms
- Strengthening the healthcare system
- Increasing access to COVID-19 response financing

In the long term, it will also be titled as Myanmar Economic Relief and Reform Plan (MERRP).^{xxxv} Most of the green recovery measures are linked with the NDCs and related to climate action.

ADAPTATION MEASURES

Agriculture/food security: The 3 Rs

- To provide emergency rations through community-based food banks and associations during the COVID-19 pandemic

- Food banks to be developed as an adaptation strategy to food security and agriculture
- Links to Intended Nationally Determined Contribution (INDC): Implementing climate smart agriculture which can be accomplished through implementation actions such as legume crop diversification, measures in the agroforestry sector and systematic control of soil quality and irrigation water
- Achieving climate-smart agriculture, fisheries and livestock systems by 2030 that will maintain productivity and growth and support the livelihoods of dependent communities and households
- Implementing climate-smart agricultural practices that can withstand changes in climate and contribute to the reduction of GHG emissions in the agricultural sector

Human settlements: Recovery

- To establish resilient infrastructure and services and inclusive and sustainable cities by 2030 and link them with the Myanmar Climate Change Master Plan and the Myanmar Climate Change Strategy

Health: Response

- Recruit more medical staff and volunteers to serve in quarantine centres/facilities

Governance: Response

- Implementation of Myanmar's COVID-9 Economic Relief Plan (CERP), Overcoming as One. Proposed in April 2020, it has 7 Goals, 10 Strategies, 36 Action Plans and 78 Actions, covering a broad range of extraordinary fiscal and monetary measures, combined with a set of human-focused and common-sense policy responses.
- The main goals are:
 - To improve the macroeconomic environment through a monetary stimulus
 - To ease the impact on the private sector through improvements to investment, trade and banking sectors
 - To ease the impact on labour and workers
 - To ease the impact on households
 - To promote innovative products and platforms
 - To strengthen health care systems
 - To increase access to COVID-19 response financing (including contingency funds)
- Linking COVID-19 recovery and climate change adaptation via the NDC partnership

MITIGATION MEASURES

Environmental policy: Recovery

- To incorporate environmental policies into the country's economic and social development strategies in order to prioritize low-carbon and green economy pathways via responsible investment and partnerships with both the private sector and civil society
- Reducing emissions from deforestation and forest degradation (REDD+) programme
- Waste management and circular economy/sustainable production and consumption
- Delivering carbon sequestration by 2030
- International cooperation: To strengthen environmental conservation and sustainable development in Myanmar and to address regional and global challenges through bilateral and multilateral agreements, experience sharing, and implementation arrangements

Governance: Recovery

- Strengthening institutions to combat climate change
- Creating awareness and capacity building in the education sector

Transition to renewable energy: Recovery

- To secure sustainable and renewable energy and to efficiently utilize existing technology and innovations in the generation, storage, supply and use of energy
- Links to INDC to increase by 2030 the 9.4 GW hydroelectric power keeping within the technical limits of the hydroelectric potential. A total of 1060 MW of solar energy was recently tendered by the Ministry of Electricity and Energy.

Land sector: Recovery

- Forestry sector: Linked with INDC (Forestry Target) to increase the forest land under public protection: hence, increase forests/reserved forests and protected areas to 30 per cent and 10 per cent, respectively, of the land area of the country by 2030
- NDC (FOLU) (Forestry) Target: Zero deforestation by 2045
- Household sector: Efficient cook-stoves
- Industry sector: Targets for energy efficiency which are linked with INDC

- Enhancing GHG removal with forest plantations in the Dry Zone
- Increasing forest cover and GHG removal through forest plantations

Sustainable transportation: Recovery and response

- Policy guidance will be provided to achieve resilient, low-carbon-energy transport and industrial systems to sustainably support inclusive and sustainable development and economic growth by 2030
- Management to prevent COVID-19 importation: Minimization in the use of various forms of transport resulted in a reduction in GHG emissions with many meetings conducted online. Hence, the Government of Myanmar will need to explore e-mobility and safe mass transportation.
- Supporting local communities of national races and ethnic groups towards resilient and adaptive capacities not only in the context of COVID-19 but also with regard to climate change impacts. For this purpose, it is possible to initiate a “Challenge Grant” competition amongst Myanmar’s ICT/e-commerce community for innovative ideas to combat COVID-19.

KEY FISCAL MEASURES

Sustainable finance (public/private)/market mechanisms/carbon pricing: The 3 Rs

- Carbon emission reduction through low carbon technology and energy efficiency
- Promoting innovative products and platforms: Innovation of mobile applications; use of mobile payment services; e-banking for insurance mechanisms^{xxxvi}
- Negotiating with private financial institutions to give more flexible interest rates and mortgage payments for households that are negatively affected by the COVID-19 pandemic
- Encouraging E-Commerce as an innovative idea to reduce economic vulnerability
- On lending:
 - Transferring MMK 400 billion to Myanmar Economic Bank to establish a COVID-19 Fund to provide soft loans to affected businesses (particularly the priority sectors of garment, tourism and SMEs)
 - Provision of MMK 600 billion in loans to farmers

- Insured Fund for Workers: Payment of 40 per cent of the salary to insured workers as a family assistance fund in accordance with the Social Security Law
- COVID-19 Vaccination Fund: Myanmar government has established a COVID-19 Vaccination Fund to procure vaccines^{xxxvii}

Nepal

The country has responded to the COVID-19 crisis through fiscal and monetary measures focusing on the following: immediate health and safety measures; food distribution to reduce livelihood impacts; and economic support to severely affected firms.

In September 2021, the Government of Nepal and the country’s development partners endorsed the landmark “Kathmandu Declaration” to develop a strategic action plan for Nepal towards GRID. The declaration was endorsed at a high-level roundtable event titled Nepal’s Transition to Green, Resilient, and Inclusive Development (GRID) for Sustainable Recovery, Growth, and Jobs by the Ministry of Finance on behalf of the Government of Nepal and the Asian Development Bank, Australia, European Union, Finland, France, Germany, International Monetary Fund, Norway, Republic of Korea, Switzerland, United Kingdom, United Nations, United States and the World Bank.

ADAPTATION MEASURES

Adaptation planning: The 3 Rs

- Building a climate resilient society by conducting climate change impact assessments every five years including health and safety
- To develop monitoring, forecasting and early warning systems for disasters such as floods, landslides, land erosion, drought, lightning, windstorms, heat waves, cold waves, forest fires, fires, and epidemics
- Launch of a province-level green recovery initiative providing jobs to hundreds of people staying at quarantine centres to plant trees. This resulted in more than 7,000 trees being planted in and around public spaces in four months.

Health: The 3 Rs

- Development of preparedness, forecasting, and prevention mechanisms to avoid epidemics of vector-borne and communicable diseases induced by climate change

Water: The 3 Rs

- Development and expansion of rainwater harvesting and storage
- Deployment of water-efficient technologies to increase access to and easy availability of drinking water

Policy measures: The 3 Rs

- Urban/rural development (e.g., energy access): Climate-smart villages and cities will be built by developing safe, sustainable and resilient habitats and infrastructure
- Social: Citizens' lives (behavioural changes)/ employment – Identifying local and indigenous knowledge, skills and technologies to be adopted with regard to climate-change-affected households, communities, and risk zones
- Governance: Livelihoods will be facilitated by mainstreaming good governance and gender equality and social inclusion into the formulation of policies and institutional frameworks and implementation of programmes related to climate

MITIGATION MEASURES

Transition to RE: The 3 Rs

- Reducing dependency on fossil fuels and conserving the environment by increasing access to clean and cost-effective energy (such as solar energy, wind energy and mini hydropower)
- Promotion of low carbon emission and energy efficient technologies in sectoral development activities
- Promotion of rural energy (improved cook stoves, e-cooking, and contribution to rural poverty reduction and environmental conservation by ensuring access to clean, reliable, and appropriate energy in the rural areas)

Sustainable transportation: The 3 Rs

- Investment in electric transportation in Nepal, thereby significantly reducing greenhouse gas (GHG) emissions from the transport sector (e-mobility)

KEY FISCAL MEASURES

Sustainable finance (public/private)/market mechanisms/carbon pricing: The 3 Rs

- National resources will be identified for implementation of climate change-related policies. All resources will be mobilized judiciously by

increasing bilateral, multilateral, and international financial resources

- Health spending will be increased
- Social assistance will be strengthened by providing for the most vulnerable and taking measures to partially compensate those in the formal sector for lost wages in the event of job loss
- Provision of opportunities for informal sector workers who have lost their jobs to participate in public-works projects^{xxxviii}
- An agreement was signed between the Government of Nepal and its development partners on Nepal's GRID. Under the Kathmandu Declaration, Nepal's development partners have identified up to USD 4.2 billion in potential future support, in addition to the USD 3.2 billion in previously committed resources to support GRID^{xxxix}
- Identifying additional measures in the following areas in the FY 2020/21:
 - Healthcare (the establishment of additional hospital facilities)
 - Business support (a lending programme for cottage, small and medium-sized enterprises and those in the tourism sector)
 - Job creation (labour-intensive in the construction sector and training for work in manufacturing and services sectors)^{xl}

Pakistan

Pakistan is committed to the challenge of initiating green recovery to protect the environment and create much needed employment. The green stimulus package of the country focuses on innovative financial tools to help build sustainable and responsible economic growth. Against this backdrop, the COVID-19 crisis provided an opportunity to reflect on environmental needs and Pakistan seized it to break out of the depression and reboot a stressed economy with a green Stimulus focused on two objectives: a) protecting the natural environment and b) creating green jobs. The focal areas for intervention included planting more trees, expanding and reviving protected areas, and improving urban sanitation – all of which could generate quick employment while also allowing the country to come out of the crisis on a nature-positive pathway.^{xli}

ADAPTATION MEASURES

Launch of the eco-system restoration initiative: The 3 Rs

- The Government of Pakistan has launched the Eco-system Restoration Initiative for the following:
 - Facilitating transition towards an environmentally resilient Pakistan through ecologically targeted initiatives covering afforestation and biodiversity conservation, and enabling and enhancing a policy environment consistent with the objectives outlined in Pakistan's NDCs
 - Restoring at least 30 per cent of degraded forest, 5 per cent of degraded cropland, 6 per cent of degraded grassland (rangeland), and 10 per cent of degraded wetlands in Pakistan by 2030
 - Establishing an independent, transparent and comprehensive financial mechanism called "Eco-system Restoration Fund (ESRF)" to finance the projects and programmes under the initiative

Water recharge: The 3 Rs

- The project "Recharge Pakistan through Integrated Flood Risk Management and Building Resilience to Climate Change through Ecosystem-based Adaptation" includes:
 - Ecosystem-based adaptation for integrated flood risk and water resources management
 - Enhancing resilience of vulnerable communities to climate change
 - Enabling a paradigm shift towards ecosystem-based adaptation in Pakistan
 - Reduction in flood risk impacts for around 10 million vulnerable people and benefits to them from the project for climate-adapted livelihoods by the year 2030

Protected areas initiative: The 3 Rs

- To develop 15 model protected areas (supported with ~ USD 24 million) covering over 7,300 km² and the creation of over 5,500 jobs

MITIGATION MEASURES

Sustainable energy and transportation: The 3 Rs

- National electric vehicle policy: To target a 30 per cent shift to electric vehicles by 2030,^{xiii}
- Move towards ~60 per cent clean energy by 2030

Sustainable development: Response

- Pakistan's 10 billion Tree Tsunami Project: Under this programme, the government has committed to increasing its protected areas to 15 per cent by 2023. The project is expected to create jobs for almost 85,000 daily wage earners^{xiii}

KEY FISCAL MEASURES

- In 2020, a relief package worth 2.9 per cent of the GDP was announced. Some of the key measures included support for health, daily-wage earners, SMEs and the agriculture sector as well as emergency contingency funds under the Disaster Management Plan^{xiv}
- Plans to launch the first-ever "Green Euro Bond" worth USD 500 million^{xv}
- In the medium term, an ingeniously designed "Debt for Nature" swap scheme, which has been recently put in the pipeline, targeting USD 1 billion funding for supporting this directional shift. Pakistan has been recently chosen to pilot an impact-based nature bond linking debt retirement with quantifiable performance on biodiversity protection^{xvi}

Green economic stimulus: Response

- This aims at promoting environmental activities which can also have economic impacts
- The Green Stimulus Initiative, a USD 120 million loan package granted in April 2021 by the World Bank to Pakistan, builds upon the 2019 drive for a Clean Green Pakistan. This recovery package supports green jobs, afforestation programmes, and the conservation of Pakistan's national parks through a dedicated Ecosystem Restoration Fund^{xvii}
- It focuses on creating livelihood opportunities for daily wage-earners in forestry, protected areas, and waste management sectors

ENDNOTES

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Disclaimer

This paper on post-pandemic green recovery in HKH member countries is a work in progress. It summarizes information at the country level and attempts to identify the priorities for green, resilient, and inclusive development in the post-pandemic period. However, the data in the paper are subject to change as the COVID-19 pandemic is far from over and many policy responses are still evolving and restrictions to control the pandemic are still in place.

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