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Tackling Climate Change during a Pandemic

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Introduction

The lockdowns prompted by the Covid-19 pandemic have caused massive disruptions in economic and commercial activities all over the world. The movement of individuals and goods has been curtailed by the suspension of transport within and across countries. Markets and shops have been shut down, industrial workers have either been laid off or stayed away from sealed factories, and white-collar workers have often been forced to 'work from home.' School and college lessons and conferences of all type have had to go online because of social distancing guidelines and the closing of educational institutions and meeting halls. Important global events such as the Olympics, the Biodiversity Convention and the annual United Nations (UN) conference on climate change have also been postponed until next year.

The responses to this suspension of all sorts of human activities have been varied, depending on the specific circumstances and experiences of individuals, groups, countries and societies. Practical measures to cope with the situation have been accompanied by multi-faceted conversations about their positive and negative impacts, including on the environment and climate.

This policy brief is divided into two parts. The first part encapsulates the debate in the world media about the positive and negative implications of the lockdowns on the environment. It also reviews the efforts of the developed countries — except the United States — to counter the adverse economic fallout of Covid-19 through environment-friendly initiatives, especially the promotion of electric cars. It refers to the efforts of the Government of Pakistan to upgrade its healthcare infrastructure in order to deal with the pandemic as well as its initiatives to assist vulnerable citizens, such as daily-wagers, meet the essential needs of life. It describes the initiatives shaped by the government's 'Green Stimulus' package, aimed at protecting the country's natural resources as well as creating new jobs for the victims of economic upheaval.

The second part takes a longer view: it recalls the significant milestones in Pakistan's climate change agenda and concludes with some suggestions for the government.

PART I: ECONOMIC AND ENVIRONMENTAL IMPACT OF COVID-19

The UN, the International Monetary Fund (IMF) and the World Bank (WB) have all warned the world of the worst global recessions since World War II and their widespread implications, especially for developing countries. The UN Secretary General, Mr Antonio Guterres, has described Covid-19 as "one of the most dangerous challenges the world has faced in our lifetimes." Calling it a human crisis with severe health and

socio-economic consequences, he called on the international community to "work together in solidarity to stop this virus and its shattering consequences."

The IMF and the WB have announced several initiatives to help developing countries cope with the negative fallout of the deadly virus. Governments of developed countries have prepared plans to resuscitate their economies weakened by the pandemic-related suspension of human activities. The European Union has also announced a large stimulus plan to revive the economies of its member states.

The discussion on the pandemic-related lockdowns touches upon both the positive and negative effects of the reduction in human activity all over the world. The climate change community is still debating the consequences of the pandemic on global climate action.

For one, globally, the media has reported that the reduction in emissions of greenhouse gases during and since the lockdowns has resulted in a discernible improvement in air quality in scores of cities and towns all over the world. A report in The Guardian on May 19, 2020, for example, points out that carbon emissions had plunged 17 percent by early April compared with 2019 levels. There have also been other 'feel good' reports, such as those indicating an increase in the population of birds in cities and of wild species of animals spotted within them.

However, the negative impacts seem to be far more serious. Cities and towns and suburbs the world over have had to contend with huge piles of unrecyclable organic and solid waste, leading to rising emissions of methane. Un-exported perishable food and fisheries have added to the burgeoning waste. The closure of restaurants and the proliferation of take-away outlets has also led to a huge increase in the use of unrecyclable plastic bags and containers. There have been reports of jobless people in the developing countries returning to their villages, and indulging in illegal mining, fishing, logging and wildlife hunting to earn a living.

Lockdowns and travel bans have also slowed down environment-related scientific activities in developed countries, such as data collection, research cruises etc. And social distancing has led to the a larger number of people forsaking public transport and using cars to go to offices, exacerbating traffic congestion and air pollution.

Global Response to Covid-19

US President Trump announced he would seek Congressional approval for a USD 2 trillion package to address the economic consequences of Covid-19. At the same time, however, President Trump has misused the disruption of economic activities because of Covid-19 as a pretext to roll back the mandatory environmental review of infrastructure projects, such as highways. Meanwhile the American Environmental Protection Agency has announced that it will exercise "enforcement restraint" in responding to violations of environmental regulations by industry.

On the other hand, some positive initiatives have also come to light. The European Union's Green Stimulus Plan envisages economic recovery plans costing EUR 750 billion (USD 825 billion) which include renewable energy, electric cars and the retrofitting of old buildings to make them more energy efficient. The German government has prepared a EUR 130 billion 'Green Package' for activities related to addressing climate change, innovation and digitalisation. Under the German stimulus plan, electric cars would be subsidised. The French government's stimulus package, worth EUR 30 billion, is to be spent on several green energy programmes. The Netherlands and Spanish governments have also announced green stimulus plans.

Outside Europe, the largest Covid-19-related relief and reconstruction package has been announced by the Japanese government. The package, unveiled in two parts, will cost USD 2.18 trillion, amounting to 40

percent of the country's GDP. The South Korean government has launched a 'Green New Deal', envisaging a net-zero emissions economy by 2050. The plan comprises a heavy carbon tax, huge investment in renewable energy, training of workers for a green economy, and an end to the funding of fossil fuels projects. China has also embarked on a number of initiatives to neutralise the effects of the pandemic-related economic slowdown. China is already the world's leader in producing electricity from renewable sources, having developed the capacity to produce 728 GW of green energy by end 2018. The green agenda will be further stepped up.

In South Asia, predictably, the largest stimulus package has been announced by India, which envisages spending USD 265 billion to revive its economy, which had been ravaged by a 7-week-long countrywide lockdown. The Indian package amounts to 10 percent of the country's GDP, and is aimed at reducing unemployment, which has reached an unprecedented 24.7 percent of the total labour force. Renewable energy will be a major component of India's relief and regeneration plan, which includes generation of 175 GW of renewable energy by the year 2022. The clean energy plan includes 100 GW from solar, 60 GW from wind, 10 GW from Biomass and 5GW from small hydro plants. India's green energy plans have received worldwide acclaim.

Pakistan's Response to the Impacts of Coronavirus

As elsewhere, the impacts of the Covid-19 pandemic have aggravated Pakistan's socio-economic challenges, leading the State Bank of Pakistan (SBP), the IMF, the WB and the Asian Development Bank (ADB) to revise downward their already low forecasts about the country's GDP growth. The international financing institutions have also provided debt relief and other support to enable Pakistan to cope with the negative consequences of the pandemic.

Pakistan's government has sought to improve the country's weak health infrastructure and services, including adding beds to public hospitals, and increasing the number of ventilators from a few hundred to several thousand. The number of medical laboratories with facilities for testing Covid-19 infections has also been increased from a handful to 130. An amount of PKR 50 billion (USD 298.94 million) was allocated for purchasing medical equipment for treatment of Covid-19 patients. China has provided generous assistance to Pakistan for countering the virus.

The government has also earmarked PKR 280 billion (USD 1.68 billion) to ensure constant availability of essential food items at the Utility Stores run under its control. Financial support has been given to the National Disaster Management Authority (NDMA) in order to improve logistic arrangements for food supply.

Furthermore, the Government of Pakistan announced a PKR 1.25 trillion (USD 8 billion) rescue and stimulus package, comprising direct financial assistance to poor and jobless citizens and for protecting industry and businesses. The package comprises an allocation of USD 1.2 billion for providing relief to daily-wagers and labourers who have lost their means of livelihood; USD 600 million for disbursement to industrialists and exporters to resolve their liquidity issues; USD 600 million for the agriculture sector and small and medium-sized enterprises (SMEs); USD 300 million to enable the Utility Stores to sell five basic edible commodities, including flour, sugar, and ghee at subsidised rates; USD 1.69 million for procurement of 8.3 million tons of wheat; and tax breaks on health and food supplies.

In addition, the government is making direct transfers of PKR 3,000 per month to five million people under the Benazir Income Support Programme. Under the Ehsaas Emergency Cash Programme launched in April 2020, 12 million families were projected to receive Rs 12000 per month for a stipulated period. Ehsaas announced that a total of 16.2 million people, who have been rendered jobless because of Covid-19, would

be provided financial support. The resources available to the newly launched social protection scheme have been increased to PKR 203 billion. Provincial governments also allocated funds for cash payments to the neediest. They are also providing tax relief to the SME industrial enterprises affected by the pandemic. Support to businessmen is being provided through a range of fiscal measures, such as tax breaks and fuel and transport subsidies, etc. The SBP has announced a temporary Economic Refinance Facility to fuel new investments. Concessional loans are also being provided to the manufacturing sector.

Environment- and Climate Change-Related Initiatives

The most significant environment and climate change-related programmes of the government, shaped by the so-called 'Green Stimulus for Environmental Activities' to provide livelihood opportunities for daily-wagers in forestry and waste management, are noted below:

- The 10 Billion Tree Tsunami Initiative (TBTS):

Encouraged by the success of the Billion Tree Tsunami Initiative carried out by the PTI-led government in Khyber Pakhtunkhwa province (2014-2018) — which had reportedly created half a million jobs and increased the province's forest cover — the federal government has launched a country-wide campaign to plant 10 billion trees. The campaign is being jointly spearheaded by the federal and provincial governments. The government claims to have secured funds for the initiative which, it says, will create 200,000 new jobs. It also claims that 200 million trees have already been planted across the country during the past two years.

- Expanding and strengthening the Protected Areas for Biodiversity Conservation:

The government intends to designate a number of additional areas as 'Protected Areas' according to the widely accepted definition, and adopt measures for preserving their ecological assets. It also intends to increase the number of officially designated 'national parks' from the existing six to 15. The establishment of a National Park Service, whose members will be designated as Nigehban or Custodian of the Environment, is also being considered to create new jobs.

- Ban on Plastic:

The government intends to ban the import, production, and sale of all single-use plastic articles.

- The Eco-System Restoration Initiative (ESRI):

The government has launched its Eco-System Restoration Initiative to facilitate a transition towards an environmentally resilient Pakistan, by mainstreaming adaptation and mitigation through ecologically targeted initiatives. These include afforestation, biodiversity conservation, enhancing a policy environment consistent with the objectives of Pakistan's Nationally Determined Contribution (NDC) and achieving Land Degradation Neutrality (LDN). The objective of this initiative is to establish an independent, transparent and comprehensive financial mechanism in Pakistan, called the Eco-System Restoration Fund (ESRF), to finance projects and programmes. All the relevant details of this ambitious programme have not yet been disclosed.

- Introduction of Electric Cars:

The government has approved a National Electric Vehicle Policy, targeting a 30 percent shift to electric cars by 2030.

- Recharge Pakistan Initiative:

The government intends to introduce measures for rainwater-harvesting, stormwater management, and solid and liquid waste management in at least 20 cities across the country.

- The Karachi Zero-Emission Metro Bus Project and similar urban transport schemes in other major cities.

- Substitution of coal-fired projects by hydropower plants:

The government claims to have shelved large coal-fired power plants proposed to be established in Muzaffargarh and Rahim Yar Khan (with a capacity of producing 2700 MW of electricity) under the China-Pakistan Economic Corridor and replaced them by two hydropower projects with a capacity to produce 3700 MW of electricity. The sites of the hydropower projects have not yet been disclosed.

PART II: PAKISTAN'S CLIMATE AGENDA

Pakistan ratified the UN Framework Convention on Climate Change (UNFCCC) adopted at the UN Conference on Environment and Development (UNCED) in Rio in 1992, and the Kyoto Protocol for the implementation of the Convention, adopted in 1997. It has been regularly attending the annual meetings of the 'Parties to the Convention' (COPs) as well as special climate change conferences convened by the UN Secretary General. Pakistan participated in the COP held in Paris in December 2015, at which the Paris Agreement (on Climate Change) was adopted and subsequently ratified the Agreement. However, the Pakistan government did not undertake any serious initiative for addressing climate change.

Pakistan's 'Climate Agenda' began to take shape in 2008 when the government established an inter-ministerial and multi-stakeholder 'Task Force' to comprehensively assess the adverse impacts of climate change on its key economic sectors and to propose measures to counter them through adaptation. The Task Force submitted its report to the government in 2010.

As noted in the detailed report of the Task Force, Pakistan's vulnerabilities to the effects of climate change have been shaped by a combination of geo-physical, economic and demographic factors. These include the country's location in a generally hot and humid region with a low rate of precipitation. Pakistan's land and soil conditions are predominantly arid, semi-arid, and hyper-arid, which make farming impossible without perennial irrigation. Pakistan is dependent for freshwater on the one and only Indus river basin, whose tributaries are fed largely by the ice- and snow-melt in the high altitude Himalaya-Karakoram-Hindu Kush (HKH) mountain glaciers that are sensitive to higher temperatures.

The flows from the glacier ice- and snow-melt are supplemented by the twice-yearly monsoon winds, causing precipitation that also recharges the Indus aquifer. Like the glaciers, the monsoon patterns are highly vulnerable to the effects of climate change. Given Pakistan's dependence on its agriculture and livestock sector, not only for food security but also for 40 percent of all jobs and the livelihoods of the large rural population, large segments of the population are highly vulnerable to extreme weather events.

Pakistan's population explosion, resulting from an over three percent yearly growth, accompanied by chaotic and unregulated urbanisation — which has diminished farmland on the one hand and increased demands for housing, education, healthcare and essential necessities of life — serves to amplify Pakistan's vulnerabilities to climate change. Widespread and relentlessly growing poverty has now pushed an estimated over 50 million people to the margins of the economy.

Finally, the country's 1000 km-long coastline makes millions of people in the southern coastal region and the Indus delta vulnerable to seawater intrusion and the contamination of freshwater by seawater. There are reports of the loss of nearly a million acres of cultivable land in the districts of Thatta, Badin and Sajawal because of the intrusion of seawater.

National Climate Change Policy

A National Climate Change Policy (NCCP), which was largely based on the report of the Task Force, was adopted in September 2012. In 2014, a 'Framework for the Implementation of the NCCP' was also developed. The two documents together contain more than a hundred policy recommendations on mitigation and adaptation and on other components of climate action.

The measures for mitigation (reduction of greenhouse gas or GHG emissions) include production of energy from hydro and other renewable sources such as solar and wind, as well as promotion of energy efficiency and conservation. The policy recommends efforts to reduce GHG emissions through use of cleaner fuels and more effective farmland management. It also recommends installation of energy-efficient boilers and other equipment by industry.

The recommendations for adaptation concern water resources, agriculture and livestock, human health, forests, and other ecosystems. Recommendations on agriculture relate to maximising crop yields through better seeds and the development of heat-resistant crop varieties. Suggestions concerning water resources relate to enhanced water storage through additional dams and water-use efficiency through integrated water resource management. The recommendations also address cross-cutting issues such as awareness raising, capacity building, and regional and international cooperation. They also suggest strengthening institutional capacities at the federal, provincial and lower levels of government, and enlisting the active participation of the business community and other stakeholders, as well as regional and international cooperation.

The elaborate recommendations included in the NCCP and the Framework for its Implementation have not been followed up by the government in any systematic manner. The government has not strengthened the small and poorly resourced Ministry of Climate Change in order for it to campaign for the implementation of the NCCP. The only actions it has undertaken are the tasks requested by the annual COPs of UNFCCC, such as the compilation of the national communications on climate change-related policies, the preparation and updating of national inventories of GHG emissions and, more importantly, the compilation of the National Adaptation Plan of Action (NAPA) and National Appropriate Mitigation Activities (NAMA).

Pakistan adopted a 'Strategy for Clean Development Mechanisms (CDM)' in 2005 but failed to take full advantage of the carbon-trading scheme by effectively promoting the scheme among industrial enterprises. The sectoral ministries and other statutory bodies dealing with climate-sensitive sectors, such as Water Resources, Energy, Agriculture and Food Security, also failed to produce and implement policies to address the climate-related dimensions of their mandates. Consequently, until recently, Pakistan lacked comprehensive national policies on the existentially vital subjects of energy, freshwater resources, agriculture and food security.

The major reasons for Pakistan's inability to undertake effective measures concerning climate change include its weak and fragmented institutional arrangements, the lack of qualified personnel in government, and financial and technical deficits. Inadequate capacities in the provincial governments to address the effects of climate change in their areas of responsibilities, and the lack of cooperation and coordination between the federal and provincial governments have impeded robust climate initiatives. Pakistan has also not made serious efforts to secure capacity development assistance from friendly governments.

Pakistan Climate Change Act

The most significant climate change-related initiative of the federal government has been the preparation of a climate change bill, approved by the two houses of parliament in 2017 as the Pakistan Climate Change Act (PCCA), 2017. This landmark legislation establishes a potentially adequate institutional architecture for addressing the impacts of climate change on Pakistan. The Act provides for the establishment of an apex body, called the National Climate Council (NCC), chaired by the prime minister or a minister nominated by

him/her and comprising the federal ministers of Climate Change, Finance, Agriculture, Food Security and Research, Petroleum and Natural Resources, Water and Power and Foreign Affairs, as well as the chief ministers of all the provinces. The NCC is mandated to approve overarching national climate-related policies and guide their coordinated implementation.

The PCCA also provides for the establishment of an executive body, called the National Climate Change Authority (NCCA), to formulate comprehensive adaptation and mitigation policies in order to fulfil Pakistan's obligations under international climate agreements. The Authority will also be responsible for preparing climate change programmes and projects, in particular those submitted for funding to the UN Green Climate Change Fund (GCF), as well as other multilateral funding mechanisms such as the Global Environment Facility (GEF), the Adaptation Fund as well as the international finance institutions. The Authority shall be supported by advisory committees, whose members will include those from respected academic institutions, representatives of non-governmental organisations and research institutions. The Act also envisages the creation of a Climate Change Fund to finance mitigation and adaptation projects.

The government also promised to strengthen the Global Change Impact Study Centre (GCISC), the country's only climate-related research and development centre, as a technically robust research and development institution.

Unfortunately, the institutional structure enshrined in the 2017 Climate Act has remained on paper and the current government has not taken any cognisance of its existence. Consequently, important matters concerning climate change, such as the preparation and revision of the Nationally Determined Contribution (NDC) document — that provides detailed information on how a country intends to tackle climate change mitigation and adaptation — the updating of the Greenhouse Gas Inventory, and the preparation of the national mitigation and adaptation plans, will have to be undertaken in an ad hoc manner.

Happily, the government's inability to follow up on the PCCA does not mean that Pakistan has not made any serious efforts to promote climate change mitigation and adaptation. During the past few years, some of the major line ministries have developed comprehensive policies concerning their mandates, whose objectives happily coincide with those of the National Climate Change Policy. These include the first-ever National Water Policy (2018), whose objectives specifically include countering the negative implications of climate change on water resources.

The new Renewable Energy Development Policy (2019), which aims to increase the share of power produced from renewable sources — other than from large hydro plants — such as solar, wind and biomass to 30 percent of the total national energy stock by 2030, constitutes a major contribution to global GHG mitigation effort.

Similarly, the objectives of the Agriculture and Food Security Framework are in harmony with those noted in the NCCP. Moreover, given the increase in the number, duration, and severity of extreme weather events such as floods and droughts — which cause large scale material destruction and displacement of people — the steps taken by the government to boost the capacities of the National Disaster Management Authority (NDMA) serve the urgent adaptation needs of the country. Similarly, the energy-efficient Metrobus systems, established in Karachi and other cities, will help in reducing carbon emissions and air pollution.

Impacts of Climate Change on Pakistan

Increase in Temperature: Pakistan's surface temperature has gone up by more than the global average (1 C) due to the country's location in a hot and humid region. Higher temperatures mean an increase in the demand for electricity, the thirst of crops and livestock as well as lower crop yields in the event of excessive heat, a higher demand for drinking water, and an upsurge in heat-related diseases. Higher temperatures also slow the growth of forests and mangroves.

Disruption of Monsoon Wind Patterns: The twice-a-year monsoon rains might come too early or too late, be too weak, or overly excessive, causing frequent bouts of floods or droughts. The effects on farm outputs can be easily imagined. Luckily, unlike neighbouring India and Afghanistan, Pakistan has not experienced prolonged periods of drought or a significant drop in precipitation during the past few decades. Reduced precipitation will affect the recharging of the Indus aquifer, which now caters to more than half of the country's irrigation needs.

Extreme Events: The most frequently mentioned impact of climate change is an increase in the frequency, duration and severity of extreme events, such as floods and droughts as well as hurricanes and prolonged heatwaves. The number of extreme weather events in Pakistan has increased during the past few decades. The 2010 country-wide floods, which devastated infrastructure, ravaged standing crops, displaced millions of people and created other hardships, is a constant reminder of the negative effects of climate change. The infrastructure, including hospitals and schools, destroyed by the 2010 floods has still not been completely repaired and restored.

Rapid Melting of Ice and Snow of Glaciers: Rapid melting in the HKH high-altitude glaciers due to higher temperatures can cause the formation of glacial lakes, some of which can burst, such as the Attabad glacial lake did in Gilgit Baltistan, cutting off the population in the area from the rest of the country. The rapid ice- and snow-melt also erodes the mass of the glacier, which reduces its ability to store ice. The rapid melting of the glaciers eventually reduces the flow of freshwater into the rivers fed by the glaciers. The rivers of the Indus Basin depend to a much larger extent on the water supplied by ice- and snow-melt than rivers elsewhere. According to climate experts, the water assets of the Indus River Basin might suffer a loss of 15-20 percent because of this recession of the glaciers.

Reduced Flows in the Western Rivers: These rivers originate in or pass through India and occupied Kashmir, and the reduction in flow caused by climate change-induced prolonged droughts could create increased tensions in our relations with India.

Reduced Water for Power Generation: A significant reduction in the availability of water would reduce the power generation capacity of our hydropower plants, which is often experienced during the dry months, as well as in our nuclear power plants.

Seawater Rise: The Arabian Sea has risen by 1.1mm between 1856-2000. Pakistan's coastal region has already experienced the intrusion of rising seawater into several coastal districts of Sindh, causing flooding and salination of soil and freshwater. Flooding has forced fishing communities and farmers to seek alternative homes and livelihoods in nearby cities and towns.

Consequences of the Impacts of Climate Change

In the 2014 Synthesis Report containing the major findings of its Fifth Assessment Report (AR 5), the UN's Intergovernmental Panel on Climate Change (IPCC) stated:

"Climate Change will amplify existing risks and create new risks for natural and human systems. The risks are unevenly distributed and are generally greater for disadvantaged people and communities in countries at all levels of development; increasing magnitudes of warming increases the likelihood of severe pervasive and irreversible impacts for people, species, and ecosystems. Continued high emissions would lead to mostly negative impacts for biodiversity, ecosystem services and economic development and amplify risks for livelihoods and for food and security, rural livelihoods and income, particularly for poorer populations."

As witnessed during the ongoing Covid-19 pandemic, developing countries will be increasingly hard-pressed to divert scarce resources from socio-economic development and poverty eradication to providing immediate relief to their people afflicted by climate change-induced weather calamities.

The overarching goals of Pakistan's climate-related actions are to save lives and livelihoods through effective adaptation measures. The focus of the adaptation strategy should be on reducing — to the extent possible — the vulnerabilities of the poor and disadvantaged sections of the population, especially those living below the poverty line.

Mitigation strategies are primarily meant to contribute to the global efforts to stabilise the climate through reducing and, eventually, ending greenhouse gas emissions. But they also have local benefits. Mitigation initiatives aim for energy generation from clean, renewable sources; at preventing deforestation and forest degradation, and promoting afforestation and reforestation; at restoration of wetlands and mangrove forests; and at discouraging the use of biomass for heating and cooking, which releases black carbon.

In Pakistan, as with other oil- and gas-importing countries, the development and deployment of renewable sources of energy will reduce the huge expenditure on imported fossil fuels, estimated at around USD 15 billion, as well as alleviate urban pollution and phenomena such as the annual winter smog in a dozen or so cities.

RECOMMENDATIONS

Effective climate action would require a 'Whole of the Country Approach' and the participation of all stakeholders. Noted below are some recommendations for consideration by the government:

- Operationalisation of the Climate Act 2017

The operationalisation of the Act would help in streamlining climate-related decision-making. It will enable Pakistan to take actions in fulfilment of its obligations as a Party to the UNFCCC and the Paris Agreement. It would also facilitate support from friendly countries as well as the multilateral windows established under the Paris Agreement, especially the Green Climate Fund as well as the Adaptation Fund and the Global Environment Facility established earlier. Pakistan could secure useful assistance in strengthening its institutional capacities to deal with climate change at the federal and provincial level from the Capacity Building Network, established under the Paris Agreement.

- Compilation of the National Plans and Strategies for Adaptation and Mitigation

These should be finalised at an early date. Arrangements should be made for maintaining and updating the inventories of GHG emissions for submission to the Climate Change Secretariat at UNFCCC.

- Making the Climate Change Authority Functional

The Climate Change Authority could help in expediting the preparation and finalisation of projects for funding from bilateral and multilateral sources other than those operating under the Paris Agreement.

- Expanding the Climate Change Authority

The participation of climate change experts, scientists, the private sector and civil society representatives in the work of the Climate Change Authority would ensure the whole-hearted support of the whole country in climate-related initiatives.

- Better Coordination within Government

The effectiveness of climate action could be greatly enhanced by increased cooperation and coordination among all the ministries and statutory bodies of the federal government, on the one hand, and between the federal and provincial governments, on the other.

- Building Capacity

The capacities of the Ministry of Climate Change, the Global Change Impact Study Centre and the Forestry Wing of the Ministry of Climate Change should be strengthened through allocation of human and financial resources and training facilities. The Ministry of Climate Change should also support building up the capacities of departments in the provinces that deal with environment and climate change issues.

- Implementing Policies

The implementation of the recently enacted policies on water resources and renewable energy resources, the Energy Conservation Policy and the Food Security Framework would contribute to the implementation of the mitigation and adaptation vision of climate change.

Ambassador Shafqat Kakakhel is a retired Pakistani diplomat who served as Permanent Representative to the UN Environment Programme (UNEP), as well as UN Assistant Secretary General and Deputy Executive Director of UNEP. He has written and lectured extensively on transboundary rivers in South Asia actively and participates in Track 2 dialogues between Pakistan and India and Afghanistan.