

14th Annual Report 2021



THE STATE OF THE ECONOMY CHANGING WORLD-PAKISTAN RESET



The Shahid Javed Burki Institute of Public Policy at NetSol

BIPP 14th Annual Report 2021

The State of the Economy Changing World-Pakistan Reset

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Institute of Public Policy at NetSol**

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The institute aims at synergizing the research, education, think tank and knowledge management functions to become a Centre of Excellence in Public Policy. BIPP's mission is to improve the welfare of the citizenry with particular emphasis on identifying policy measures that will lead to inclusive, people-centered growth with equity, political stability and sustainable development besides fully harnessing the potential for regional and global integration of the country. BIPP's areas of interest are social, economic, environmental and political development and security, trade and foreign policy.

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Foreword

The year 2021 would end about the time we present this report to the public. It was a difficult year not only for Pakistan but also for the world at large. This was the case in particular for the geographic space in which we live. The most difficult circumstance was the arrival of the Covid-19 pandemic. By the time we welcome 2022, the disease would have taken more than 5 million lives. The world would have lost more than 6.7 million people with the United States losing 800,000; Brazil 675,000; and India 500,000. In our coverage of the disease for the report, we look at the pandemic from the historical perspective and discuss why Pakistan suffered less than the countries in its neighbourhood. The disease not only took a heavy human toll; it also sent the global economy spiraling downwards. In 2020, the first year of the pandemic, world output declined by 3.1 percent. With the disease having been brought under control by the widespread use of vaccines developed to deal with it, global output increased by 5.9 percent in 2021. Emerging and developing Asia saw a decline of 0.8 percent in 2020 but will end the year by bouncing back by 7.2 percent. Pakistan was faced with a serious external account's shortfall, a development that took it back to the International Monetary Fund for relief. However, as detailed in the chapter on the economic outlook, the country fell short of fulfilling the promises it had made to the IMF which suspended the release of tranches owed to Islamabad. As I write this, negotiations are proceeding to put the program back on track. While the State Bank of Pakistan has projected a growth rate of 4.4 percent for the 2020-21 year, the estimates from the Asian Development Bank and the IMF were a bit lower. The year 2021-22 is likely to see a higher rate of growth but lower than the country's potential.

The pandemic and the associated economic decline affected more the poorer segments of the population,

increasing income and wealth inequality in the country. The government headed by Prime Minister Imran Khan launched several programs directed at the poor. The programs aim to directly transfer funds to the poor, cutting out the intermediaries that, in the past, reduced the impact of public intervention. In early November, the government launched a program aimed at controlling the rise of prices of essential commodities that had reduced real incomes of poor households.

Once again, we give in this report a fair amount of space to Pakistan's economic relations with China, focusing on the development of and changes in the Chinese economy that would have consequences for Pakistan. China is well on its way to becoming the world's largest economy, overtaking the United States in a decade or so. As such it is appropriate for Pakistan to place itself firmly in the Chinese economic orbit. China, with rapidly aging population and with the labor demanding higher wages than was the case when China, decades ago, began to industrialize, is looking for new ways to propel its economy. It is relying on the various supply chains to provide parts and components needed by large industries. A lot of what its mature industries need is being provided by labor-intensive industries in Vietnam, Cambodia, even Malaysia. The authorities in Pakistan should come up with an industrial policy that would link its fairly developed small and medium industries with large enterprises in China. Pakistan should enter the network that now defines the international industrial production system. The system relies on widely spread supply chains.

This is the context in which we have placed our discussion of the China Pakistan Economic Corridor Economic Program, the CPEC. This investment program continues to develop in terms of its content and linkages. One thing I learnt about China when I

was working on the country for the World Bank is that the Chinese don't launch major investment initiatives by fully defining them right at the beginning. These programs evolve with time as more experience is gained. Thus this is precisely what is happening with CPEC.

We have also highlighted in the report the need to develop and resuscitate S&T governance in Pakistan to respond to the emerging dynamics of S&T advancements in the world. In the highly competi-

tive world, it is an absolute necessity that the country assimilates and pursues the current methods of innovation, areas of innovation and speed of innovation for both wealth creation, poverty alleviation and sustainable economic growth.

I will end this foreword by thanking the people who have worked hard to bring it out. In addition to Shahid Najam, I would like to thank Atr un Nisa, a member of the BIPP staff, and Nauina Asim who has performed admirably as the report's editor.



Shahid Javed Burki

November 16, 2021

The Team

(in alphabetical order)

Authors

Atr-un-Nisa
Daud Ahmad
Farrukh Iqbal
Imtiaz Ahmed
Mahmood Ahmad
Rahmat Ullah Gill
Shahid Javed Burki
Shahid Najam

Report Coordinator

Atr-un-Nisa

Assisted By

Aiman Adnan

Editor

Nauina Asim Khan

Designing and Layout

Samra Naz

Supported By

Awais Khalid

About the Authors



Mr. Shahid Javed Burki

Mr. Burki is a prominent Pakistani economist and the Chairman of the Shahid Javed Burki Institute of Public Policy at NetSol (BIPP). He held high level prestigious positions during the course of his professional career with Government of Pakistan and the World Bank including the Finance Minister of Pakistan (1996-1997), Chief Economist, Planning and Development Department, Government of the Punjab, the first Director World Bank for the China Department (1987-1994) and the Regional Vice President for Latin America and the Caribbean during 1994-1999. He retired from the Bank in 1999. He has also been a member of the faculty at Harvard University, USA, and visiting fellow of Institute of South Asian Studies-National University of Singapore. Mr. Burki has authored books besides regularly contributing to international, national journals and newspapers.



Mr. Shahid Najam

Mr. Najam is the Vice Chairman of BIPP. He has four Masters including LLM and MSc. Public Policy from London School of Economics, UK and MSc. Rural Development from Wye College London. He has more than 40 years of experience with Government of Pakistan and the UN System in policy and strategy formulation; development planning and programming; and implementation of large scale programmes for sustainable development. He joined the Pakistan Administrative Services in 1974 and held important assignments including Commissioner Lahore Division (1999-2001), and the first Chief Operating Officer, of the Punjab Board of Investment and Trade (2009). Mr. Najam held senior positions with the UN System as FAO Representative, Iran (2007-2009) and Resident Coordinator/Resident Representative of the UN system in Turkey (2009-2013).



Dr. Daud Ahmad

Dr. Daud Ahmad has to his credit PhD in Civil Engineering (Hydraulics) from Colorado State University, USA. He is a senior development professional and practitioner who worked for nearly 35 years with the World Bank on large scale international development projects in different countries, mostly in Asia. Since his retirement from World Bank in 2000, Dr. Ahmad has been working as an independent International Development Consultant. He is also a member of BIPP's Board of Directors.



Dr. Farrukh Iqbal

Dr. Iqbal has more than thirty years of Research and Management experience in the World Bank across a diverse range of countries and sectors. He has worked on Korea, Philippines, Indonesia, China, Iran, Egypt, and the Gulf Cooperation Council (GCC) involving various aspects of economic development including growth, poverty, small and medium enterprises, trade and foreign investment, health insurance, local government development, and political economy issues. He has been the Executive Director of the Institute of Business Administration, Karachi since August 2016. He holds a Bachelor's degree from Harvard University and a PhD in Economics from Yale University, USA.



Dr. Mahmood Ahmad

Dr. Ahmad is internationally renowned expert on agriculture and water policy. He did his PhD from the University of Massachusetts in Resource Economics (1979). He carries an experience of around 40 years, including 24 years with the Food and Agriculture Organization of the United Nations, working in more than 15 countries. He led the formulation of FAO programmes on agriculture and water policy for the Near East countries; supported member countries in preparing agriculture strategies under water scarce conditions; spearheaded the World Bank assisted Regional Initiative on Water Scarcity of the FAO Regional Office in Cairo; and assisted in formulating the ECO national and regional food security policies and strategies. He is a member of BIPP's Advisory Council.



Rahmat-ullah Gill

Mr. Rahmat Ullah is a researcher from last 20 years in management with specialized focus on entrepreneurship, innovation and technology development.

Mr. Rahmat has published many papers in academic journals and presented many papers in national and international conferences. He has co-authored books, directories, video documentaries and a number of short articles on entrepreneurship, technology and research commercialization. He has diversified experience of providing trainings, managing survey projects, developing online portals, initiating academic publishing and executing funded projects of development nature.

He has credit of introducing numbers of research software in Pakistan, developing above 30 training modules of research methods and training research scholars in Pakistan and abroad.



Dr. Imtiaz Ahmed

Dr. Imtiaz Ahmad has vast teaching and research experience in international economics. He has done various research projects and consultancies for international development agencies, provincial and federal government, and private sector. He has also worked at various public and private sector research centers including Punjab Economic Research Institute, Special Monitoring Unit of CM Office (Punjab), and Tariff Policy Center (MoC). In the last few years, his work revolves around trade policies, export potential, policy uncertainties, tariff rationalization and its impact on Pakistan's economy. He has a PhD in Economics from National University of Sciences and Technology (NUST) with specialization in International Trade and currently working as assistant professor at department of economics at NUST.

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List of Acronyms

ACT	Access to Covid-19 Tools
AD	Anno Domini
ADB	Asian Development Bank
AML	Anti-Money Laundering
ASML	Advanced Semiconductor Material Lithography
BC	Before Christ
BECO	Batala Engineering Company
BIPP	The Shahid Javed Burki Institute of Public Policy at NetSol
BISP	Benazir Income Support Programme
BJP	Bhartiya Janata Party
BNU	Beaconhouse National University
BRI	Belt and Road Initiative
BSL	Biosafety Level
CAR	Central Asian Republics
CAREC	Central Asia Regional Economic Cooperation
CARs	Central Asian Republics
CBU	Complete Built Up
CDC	Center of Disease Control
CENTO	Central Treaty Organization
CFT	Combating Financing Terrorism
CKD	Completely Knocked Down
COAS	Chief of Army Staff
COVAX	Covid-19 Vaccines Global Access
Covid	Corona Virus Disease
CPC	Communist Party of China
CPEC	China Pakistan Economic Corridor
CPI	Consumer Price Index
CSP	Civil Service of Pakistan
DLTL	Drawback of Local Tax and Levies
DPS	Development Policy Staff

ECO	Economic Cooperation Organization
EEC	Ehsaas Emergency Cash
EFS	Enhance Financial Services
EU	European Union
EV	Electric Vehicle
FAO	Food and Agricultural Organization
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
FY	Fiscal Year
GDP	Gross Domestic Products
GEC	General Education Curriculum
GHG	Greenhouse Gas
GHO	General Head Quarter
GT	Grand Trunk
HEC	Higher Education Commission
HGV	Heavy Goods Vehicle
HIES	Household Integrated Economic Surveys
ICOR	Incremental Capital Ratio
ICS	Indian Civil Service
ICT	Information Communication Technology
ICU	Intense Care Unit
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IFRC	International Federation of Red Cross and Red Crescent Societies
ILO	International Labor Organization
IMF	International Monetary Fund
IMF	The International Monetary Fund
IP	Internet Protocol
IRS	Internal Revenue Service
IS	Islamic State
ISAF	International Security Assistance Force

ISAS	Institute of South Asian Studies
ISI	Inter-Services Intelligence
ISIS	Islamic State of Iraq and Syria
IT	Information Technology
KIAST	Korean Advanced Institute of Science and Technology
KIST	Korea Institute of Science and Technology
KKH	Karakoram Highway
KPEC	Khyber Pass Economic Corridor
KPK	Khyber Pakhtunkhwa
LNG	Liquefied Natural Gas
LTFF	Long Term Financing Facility
LUMS	Lahore University of Management Sciences
MIT	Massachusetts Institute of Technology
MW	Mega watt
NATO	North Atlantic Treaty Organization
NCAER	National Council of Applied Economic Research
NCDs	Non-Communicable Diseases
NCS	National Commission for Science
NCST	National Commission for Science and Technology
NGO	Non-Governmental Organization
NIH	National Institute of Health
NORC	National Opinion Research Center
NRDC	Natural Resources Defense Council
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
OECD	Organization for Economic Co-operation and Development
PASTIC	Pakistan Scientific and Technological Information Centre
PCSIR	Pakistan Council of Scientific and Industrial Research
PIA	Pakistan International Airlines
PIDC	Pakistan Industrial Development Corporation
PIDE	Pakistan Institute of Development Economics
PKR	Pakistani Rupee
PML (N)	Pakistan Muslim League (Nawaz)

PPE	Personal Protective Equipment
PPP	Pakistan's People Party
PRC	People's Republic of China
PTI	Pakistan Tehreek-e-Insaf
R&D	Research and Development
RNA	Ribo Nucleic Acid
SAARC	South Asian Association for Regional Cooperation
SARS	Severe Acute Respiratory Syndrome
SBP	State Bank of Pakistan
SDGs	Sustainable Development Goals
SDR	Special Drawing Right
SEAL	SEa, Air, and Land
SEATO	Southeast Asia Treaty Organization
SEZs	Special Economic Zones
SKD	Semi Knocked Down
TAPI	Turkmenistan-Afghanistan-Pakistan-India
TLP	Tehreek-e-Labbaik Pakistan
TTP	Tehreek-e-Taliban Pakistan
UK	United Kingdom
UN	United Nations
UN DESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNEP	United Nations Environment Program
UNESCO	United Nations Education Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
UNW	United Nations Women
UNWTO	The World Tourism Organization
US	United States
USC	Utility Stores Corporation
WB	World Bank

Executive Summary

The 2021 report, in addition to providing an objective overview of the economic situation of Pakistan and the pathway ahead pursuant to the consecutive waves of the Covid-19 pandemic, attempts to present analyses of the current issues of vital significance for Pakistan with a need for a “Reset” to respond to the emerging global political and economic order. The major issues include the evolving situation in Afghanistan and possible repercussions for Pakistan, the state of S&T governance in the country, the rising trade deficit, agriculture-food-health nexus, significance of China Pakistan Economic Corridor and the Covid-19 pandemic impact on economic and social sectors including a fundamental shift in the traditional context of decision-making and management. The pandemic has exposed the inadequacies, inconsistencies and contradictions of multiple systems –from health and financial to energy and education – more than ever before amidst a global context of concern for lives, and livelihoods. Governments find themselves at a historic crossroads, managing short-term pressures against medium- and long-term uncertainties.

The Report 2021 comprises ten chapters each produced by a sector expert. Major contribution as usual comes from Mr. Shahid Javed Burk. In his chapters, he provides a quick overview of the historical background that led to the founding of the Burki Institute of Public Policy (BIPP) and how it came to focus so much attention on the writing of the annual report on the state of the Pakistani economy. He also covers, based on his conversations and number of incidents, the three aspects of the Pakistani economy and society – their past, their present and their likely future since the country's birth on August 14, 1947. He recounts the paucity of resources at the time of independence, a number of

crises that the country had to struggle through for its survival, average Pakistanis' perception and perspective about their country, the current state of affairs and his optimism about the future. His chapter on Covid-19, briefly dwells on the historical evolution of pandemics and emphasizes the need to factor in the entirety of eco-system particularly the interaction between animals and human in the scientific endeavor to understand the genesis of pandemics and their repercussions. He also elaborates on the origin of Covid-19, Biden approach to contain it in the USA, how it arrived in Pakistan and how its impact was contained compared to other countries. Lastly, in Chapter 10, he gives a comprehensive analysis of Washington's twenty years' engagement in Afghanistan since the launch of Operation Enduring Freedom on October 7, 2001.

Dr. Farrukh Iqbal in his chapter “Pathway to Recovery”, provides an assessment about the state of the Pakistani economy in 2020 and gives an analysis of the management of health, social and economic consequences of Covid-19 pandemic impact in Pakistan. He, in particular, highlights the challenges of sustaining economic momentum in the wake of the enormity of public debt, lack of dynamism in private sector investment and uncertainty about medium-term macro-economic policy. In chapter 5, Mr. Shahid Najam presents a comparative analysis of the impact of Covid-19 on selected social sectors i.e., Education, health, poverty, employment and inequality and also enlists the challenges of the post Covid world along with some suggestions for the way forward. Chapter 6 by M/S Rahmat Ullah Gill and Shahid Najam investigates the status of S&T governance of Pakistan, an historical overview in a comparative context, the dynamism of the sector till about mid 1970s and thereafter its decadence and disconnect among government, industry and

academia The authors also present various scenarios to transform S&T sector from liability to an asset for the country both to create wealth and accelerate GDP growth as well as equitable and sustainable human development. Mr. Imtiaz Ahmad in his chapter covers the government's policy interventions and their efficacy in improving the trade deficit, the likely effect of current and post-Covid global economy, and the situation in Afghanistan.

Dr. Mahmood examines the disruptions in domestic and global supply chains -- shocks affecting global and domestic food production in chapter 8 while in chapter 9, Dr. Daud provides an overview of a close and steady relationship between China and Pakistan and the reasons why Pakistan was getting closer day by day to Beijing.

The Table below attempts to capture the key findings and recommendations of the 2021 Report.

Summary Findings and Recommendations

Key Findings	Recommendations
<p>Pakistan, with 220 million people, is the fifth largest in the world with a high population growth rate of 2 percent which is globally the third highest rate. The World's median population is 30.6 years which means that one-half of the population is below that age whereas Pakistan's median age is only 23.8 years or 78 percent of the global average. Pakistan with such a large and young population could become either a burden or an asset.</p> <p>Pakistan could also become South Asia's and the Muslim world's “miracle economy,” a term the World Bank had used in its study of the strategies pursued by the countries in East Asia to achieve rates of growth without precedence in history</p>	<p>The public policy must be designed in a way that the youth could add to the country's economic strength. Two sectors hold enormous potential i.e., the information technology and the small and medium enterprises as part of the global supply chains. Both need skilled and well-trained workforces. Pakistan needs to invest in developing institutions both in the public and private sectors to produce streams of such workers. The Pakistani diasporas, with good knowledge of the skills that the rich world needs in the wake of declining populations, could invest and guide the development of these sectors in Pakistan.</p> <p>Reform of the fiscal means through a taxation machinery that is efficient, clean and feared by the defaulters. The political leadership could motivate and inspire people's confidence in their future and in the country</p> <p>The agriculture sector needs to be restructured to respond to the climate change impact and contribute a higher share to the country's economy.</p>
<p>Pakistan faces key longer-term challenges e.g., high public debt, unresponsive private investment and uncertainty. Its economy has stagnated at a low average growth rate for the last three decades making it difficult for investors to take an optimistic view of future prospects because its private investment rate has stagnated at around 10 percent of GDP for the last thirty years.</p> <p>In FY20, the GDP declined by a modest 0.5 percent as against expected fall of 1.5 percent. The first</p>	<p>A stable domestic macro-policy environment; avoiding slippage of fiscal targets in the face of vested interests, ease of doing business; and in the short term, adherence to the ongoing IMF program need to be espoused.</p> <p>An increase in the domestic savings and investment rates; broadening tax base and modernization of the tax system and achievement of the revenue collection target of 0.7 percent of GDP through standard GST rate of 17% and minimization of</p>

nine months of FY21 show a strong rebound in industrial and service sector output owing inter alia to accommodative monetary policy measures e.g., loan deferments and rescheduling, new financing facilities, and a policy interest rate cut.

For FY 22, the expected economic growth is between 4 and 5 percent; inflation between 7 and 9 percent; current account deficit to remain manageable 2 to 3 percent of GDP; remittances resilient; foreign exchange reserves further improve in part from the disbursement of Pakistan's share of \$2.8 billion from a new global allocation of SDRs. However, the longer term outlook for Pakistan is clouded.

Pakistan has successfully managed the Covid-19 related health, social and economic consequences. This has been achieved through a combination of instruments including selective lockdowns, quarantines, testing, contact tracing, enforcement of preventive measures e.g., masks, social distancing and most recently, vaccination. The latest update of the “return to normalcy” index created by Economist magazine shows Pakistan at the third rank globally, behind only Hong Kong and New Zealand.

According to the 19 January 2021 interim report of the World Health Organization panel, lack of effective global response to Covid-19 was owing to the successive failures from the 'slow and cumbersome and indecisive' pandemic alert system to the years of preparedness plans that failed to deliver, to the disjointed and even obstructive responses of national governments.

To prevent a resurgence and emergence of new variants, vaccination of people has to be mandatorily enforced, especially in schools, colleges and universities and airlines. There is however inequity in the use of Covid-19 vaccines with poor nations largely shut out.

The Covid-19 pandemic will remain with the world for some time including the possibility of

preferential rates and exemptions are essential measures for the way forward for achieving sustainable economic momentum for the longer term.

Vigilance continues to be called for, especially in the face of continuing pressure from evolving variants.

Virological surveillance, immunology, vaccine development, and social policy, among other topics should be an integral part of public policy especially in the health sector, which should be dynamic, forward looking and flexible to make adjustments to new developments that come every day. The policy makers should remain alert and sensitive to the developments inside as well as outside the country. At the same time, they should promote and advocate a culture of civic responsibility e.g., in Britain, in the absence of rules, the government was urging people to use “personal responsibility” to ensure safety and prevention from the pandemic spread.

new virus strains to set back the effort to contain the disease. The new vaccines may not be fully effective to manage the strains. Much of the developing world including Pakistan continues to face infections, allowing the virus the opportunity to replicate with increased risk of more mutations and spread.

There is a growing consensus of a “new normal” to govern people's life.

Many of the problems we will face in the next decade will simply be more extreme versions of those that we already confront today.

Covid-19 had a massive impact on women e.g., loss of income and employment, widening of the inequality, diminution of access to health, education.

Health systems have been rigorously tested and often found extremely deficient especially in the low-income countries which, a priori, entails a serious effort to augment and strengthen the health care infrastructure to respond to the pandemics.

Education has been one of the worst affected sectors all around the world. More than 1.5 billion students and youth across the planet are or have been affected by school and university. It is estimated that over 100 million additional children will fall below the minimum proficiency level in reading as a result of the health crisis.

The entire institutional and operational arrangements and social safety nets need to be rehashed to efficiently and timely provide relief to the Covid-19 affected people.

The impact of Covid-19 could be mitigated, inter alia, through UNW and UNDP composite measures including (a) direct income support and cash transfer to meet daily essential needs and expanded family and child benefits for vulnerable women; (b) support for women-owned businesses and businesses with a large proportion of women workers by giving grants, subsidized loans etc., (c) implementation of gender-responsive social protection systems and bridging the gender pay gap etc.

The future global health system must provide for (a) virus screening as part of the check-up protocol for future viral outbreaks; (b) augmentation of the COVAX mechanism to reach the poor for sufficient share of the global vaccine supply.

At the country level, governments need to: (a) streamline the vaccine procurement system through collaboration with large corporate sector and the reputed non-governmental organization; and seek international donations including maximizing the COVAX facility; (b) expand the vaccination administration campaign; (c) control fake vaccination certification and resolve; and (d) address disparity under an already fragile health care system and expensive private health care facilities

The post Covid-19 education strategy and policy

The Covid-19 pandemic has brought to fore the inextricable connection between humans, animals and the environment.

Pakistan has lagged behind in S&T indicators after a good start in 1960s up until mid-1970s of which industrialization and green revolution is the eloquent testimony. Thereafter, the failure of S&T in Pakistan has been, inter alia, due to inactiveness of the National Council for Science and Technology, lack of nexus between government, industry and academia, policy and institutional fragmentation in the S&T sector and intra-ministerial and intra-organizational coordination dysfunction.

Covid-19 has particularly accentuated Pakistan's balance. The developments during the past two years have highlighted the need to check the growing trade deficit by achieving higher exports growth and reducing dependence on imports with a view to prevent the slowdown in economic recovery.

The spike in imports in the first three months of

must provide for a well-prepared education system to respond to the recurrent lockdowns, affordable and accessible online learning and ex ante finances to ensure smooth continuation of learning for all without unequal disruption.

The United Nations, the Bretton Woods Institutions and multilateral donors need to forge global cooperation to combat Covid-19 equitably especially its possible impact on SDGs 2030, Climate Glasgow Agreement, global safety nets, access to COVAX facility and debt relief to the developing countries., vaccine manufacturing facilities for the developing countries

At the same time, there is a need to develop, stimulate and accelerate especially the digital economy and e-commerce and facilitate hybrid work streams - tele-work combined on-premises work

This entails setting up of ambitious climate commitments for sustaining a healthy and green recovery.

Pakistan needs a compelling vision and operational framework: "Building Innovative Pakistan" with a view to integrating all the material stakeholders i.e., government, private sector/industry and academic and research organizations towards transforming Pakistan into a progressive and proactive S&T led country. This will lead to generation, dissemination and application of technology and innovation both for capital wealth creation and sustainable human development.

Government should not impose tariffs or non-tariff measures on raw-materials and intermediates. It should identify luxury consumer items to curtail imports.

The rapid implementation of new refinery policy, particularly the enhancement of refinery capacity, can also help in saving foreign exchange by

FY2021-22 is because of higher oil (a 7 years high) and LNG prices, and imports of wheat and Covid-19 vaccines. The monthly imports are likely to remain on higher side because of future vaccines and wheat imports during this fiscal year and may cross the \$70 billion figure during FY 2021-22. There is a huge untapped export potential to Afghanistan which needs to be harnessed

Covid-19 is exposing new global realities in terms of health, food and the way we live both for developing and developed countries with negative impacts varying from country to country and region to region although the full impact of Covid-19 on food security and agricultural food systems, according to FAO, is still not fully clear because of the unpredictability of virus and its interaction with agri-food system. The agriculture and food supply chain has been massively disrupted all around the globe.

Around 135 million people are facing acute food insecurity at the “crisis” level or higher in 55 countries and territories. More than 183 million people were facing a “stressed” level of acute food insecurity with a high risk of moving to the “crisis” level in case of additional shocks. The situation is particularly worrisome in light of the evolving nature of the Covid-19 pandemic.

Smallholders and large-scale farmers were affected – albeit in different ways – by disruptions to the food supply chain. Small-scale farmers faced challenges in producing and transporting their produce, ensuring timely inputs at a fair price, gaining access to markets and a fair selling price for their goods, and minimizing food losses along the supply chain; while large-scale farmers found it difficult to hire daily or formally-employed workers during the recent the lockdown

increasing the share of relatively cheaper crude oil instead of refined oil to meet local demand.

Economic engagement with Afghanistan at this point is necessary to avoid humanitarian crisis and for the development of long-term economic relationships.

Transformational action is required in every sector e.g., energy, transport, agriculture, infrastructure etc., coupled with a conscious shift to more nutritious, plant-based diets to reduce global emissions and ensure more resilient food systems to avoid up to 5.1 million diet-related deaths a year by 2050.

The small farmers most of whom are poor need to be protected and secured from the adverse impact of the pandemic. Two areas of policy are generally needed focus and attention (1) moving from global to local or regional value chains (2) moving from longer and inefficient local value chains to shorter, efficient and climate smart value chains.

Furthermore, two emerging issues need to be addressed and integrated into the planning and policy process (1) adopting practices that take into account the production of food, health and climate change nexus that provides solutions at much lower costs – in economic and health context and (2) the use of cost effective digital technology to provide much needed innovation in the production of food, health-care and to limit the negative effects of climate change.

The innovative approaches for addressing Covid and other natural hazards need to be formulated based on the analysis of damage and loss along the food value chain. The role of creating cost-effective storage at farm and market levels that can reduce transaction costs during times of disaster must be taken into account. Government should provide sustained investment, promote public private partnerships, and enact laws, policies and regulations for strengthening the sustainable crop

The China-Pakistan relations are underpinned by traditional geo-political and strategic interests. China views Pakistan as strategically unique and geographically important partner that could provide it a shorter route to the Persian Gulf and help to improve economic development in the relatively impoverished and restive Xinjiang province.

CPEC is a priority corridor of the global BRI, which aims to create a number of economic linkages of China with the rest of the world and create transport and trade opportunities.

For Pakistan, CPEC is intended to promote connectivity across the country with a network of highways, railways and pipelines accompanied by energy, industrial, and other infrastructure development projects to address critical energy shortages and boost Pakistan's economic growth.

China has so far pledged investment totaling well over 40 billion in Pakistan in the context of CPEC. These investments, besides creating 75,000 jobs, have vastly improved Pakistan's power production capacity, expanded the road network and operationalized the Gwadar Port.

While these large Chinese investments have resulted in improvements in the energy production and transport infrastructure of Pakistan, their projected economic benefits are not yet visible on the ground. This is partly because CPEC is a long-term and geographically broad undertaking.

The Americans trained Afghan security forces for twenty years, but they could not match the ideological fervor of the Taliban forces. Knee-jerk withdrawals from the Afghanistan could result in the country plunging into serious turmoil. The American departure is likely to be accompanied by the exit of a class of Afghan people, the country would need for advancing national integration, developing its economy and modernizing its society.

American departure could create some interesting and welcome opportunities for Kabul in the international field. Neighboring countries are

production intensification value chain. CPEC must enable Pakistan to become an integral part of the regional trade value chain; and enhance its exports to the regional markets. For the purpose, investments and outputs are required of industry and agriculture in the areas where Pakistan has a comparative advantage.

Opening up of the trade links with regional markets would happen through improved infrastructure and stream-lined transit logistics.

Greater political and social tolerance and inclusiveness is required to bring positive peace in Afghanistan where all peoples of all ethnic background are content and safe. This will stop to a great extent brain drain.

A more flexible and accommodative policy of the US and European countries to settle Afghan refugees could lessen the burden on the neighboring countries.

going to be exposed to the forthcoming refugee influx, draining them of their meagre resources, especially in Covid- stricken times of high unemployment, worrisome macroeconomic indicators, stressed social security nets, and distressed economies

The Americans had established an association named the “quad.” This represented an understanding among the four nations about military and economic underpinnings. In addition to Japan, the quad includes Australia, India, and the United States

Pakistan may become a front-line target of TTP threats, and is hence exposed to the perils of terror-financing, money-laundering and terrorist activities, inviting the ire of the already politicized FATF

Afghanistan may become a partner in a “quad” arrangement that would include along with itself, China, Iran and Pakistan and including Turkey in the configuration a “quintet” to respond to the changing global environment and challenges directly impacting Afghanistan after take over by Taliban.

The recent talks with TTP may lead to a satisfactory outcome based on mainstreaming the dissidents and taking action against those who committed horrendous terrorism related crimes.

Chapter

1

**A Different Approach to telling
the Story of the Year 2021**

A Different Approach to telling the Story of the Year 2021

Shahid Javed Burki

I will begin this chapter with a quick overview of the historical background that led to the founding of the Burki Institute of Public Policy (BIPP) and how it came to focus so much attention on the writing of the annual report on the state of the Pakistani economy. In recent times, a great deal has occurred and is occurring in Pakistan and the world outside the country's borders. Taking account of these developments means adopting a somewhat different approach in writing and presenting the 2021 annual report. This is the fourteenth report in the series that began in 2007 when the institute, then known as the Institute of Public Policy, was still affiliated with the Lahore-based Beaconhouse National University. The idea for establishing an institute dealing with the public policy was born at a lunch I had with Sartaj Aziz in Lahore. Aziz then was the BNU's Vice Chancellor. He was concerned by the progressive deterioration in the quality of work done by the Planning Commission located in Islamabad. He had spent several years at the Commission during the period of President Ayub Khan. He was a member of the team that included Mahbubul Haq and Moinuddin Baqai. He thought and I agreed that the gap that had been created by the lack of attention given to the Planning Commission by various governments that took office after President Ayub Khan stepped down, could be filled

by an institute of public policy in the private sector.

Affiliating such an entity with a university made sense since it could draw upon the skills available in a teaching institution such as the BNU. We agreed that the first task the institution would be assigned to do is to write an annual report on the state of the Pakistani economy. The report would be issued every year and in addition to dealing with the economic situation at the time of writing would also present analyses of the issues that should receive attention from the policy makers working in Islamabad as well as the provincial capitals.

The report would use the format Mahbubul Haq and I had developed while both of us worked at the World Bank. Haq was brought to the Bank by World Bank president Robert McNamara who was impressed with the work he had done at Pakistan's Planning Commission. He was largely responsible for the highly successful Second Five Year Plan that resulted in Pakistan's economy growing at one of the fastest rates in the developing world. The work done at the Planning Commission was lauded by several American scholars who worked at the institution as an advisor funded by the Ford Foundation. Among them was Gustav Papanek who, after completing his tenure at the Planning Commission, went back to

Harvard University's Economics Department and wrote *Pakistan Development: Social Goals and Private Incentives*, a book that became the standard text on the economic achievements made in the eleven year (1958-1969) when Ayub Khan was the head of the Pakistani state as Pakistan's first military president¹.

After serving well at the Planning Commission, Mahbubul Haq was offered a position at the World Bank and was appointed the Director of the Policy Planning Department at the development bank. This was a new department created to match Haq's skills and the Bank's needs. I joined the Bank from Harvard University in 1974 and was placed as a senior economist in the department headed by Mahbub. Within a year I was appointed to head the Policy Planning Division, one of two in the department. Mahbub and I thought that the World Bank needed to write a document that provided the world with the institution's view of the state of the global economy. In addition to providing the world the Bank's view of the global economy, we thought the annual report, which was to be called the World Development Report (WDR) should also examine in some analytical detail the institution's view of some aspect of development that deserved greater attention from policy makers.

Since the WDR was to be an annual document, the Bank needed to carefully follow what was happening to the global economy and to review it and analyze its several aspects. During the McNamara years, the Bank had made an impressive amount of investment to build its research capabilities. Initially, most economists, as well as people well-versed in finance, were brought in. In McNamara's later years, the president was of the view that "development" meant more than GDP growth and finding financial resources to develop the economies. What was also needed was for the Bank staff as well as the people they worked within the countries where the institution did development

work to also study the way societies worked. To pursue this aim, the Bank recruited sociologists, historians and anthropologists. This is how Afghanistan's former President Ashraf Ghani, an anthropologist, entered the Bank. This cluster of skills was located mostly in the part of the Bank known as the Development Policy Staff, (DPS). McNamara persuaded Hollis Chenery, a well-known professor of development economics who taught at Harvard University's Economics Department, to join the Bank and lead the DPS. Hollis had made a name for himself by developing what came to be called the "two-gap" model which specified that growth in much of the developing world was constrained by limited access to domestic and foreign savings. A combination of the two was required for economies to grow.

The World Bank devoted a fair amount of its resources to research the topics covered in the WDRs. The cost of producing the document including the salaries paid to the staff working on the reports ran into millions of dollars. A team of about six to eight people was chosen every year from within the World Bank staff to research and write the report. In the almost 50 reports the Bank has produced since the program was begun in 1974, only one Pakistani economist, Shahid Yusuf, was selected to head the WDR team. His 1999-2000 report, titled *Entering the 21st Century*, focused on globalization, urbanization, and fiscal decentralization².

In writing the BIPP's annual reports we have followed the WDR format. The first part of the report is a brief analysis of how we see the Pakistani economy at the time of writing with some reflection on what we think might happen in the immediate future. Since the medium- and long-term is almost impossible to predict, our analysis of the future is limited to the very short-term. The special subjects we have included in the annual report are mentioned in the box included in this chapter.

The BIPP has only half a dozen permanent staff, well short of what is needed to write and discuss the annual report. However, to write the report we have reached out to the group of Pakistanis who have retired from some of the international institutions where they worked for long periods of time and developed skills in a number of areas. They have written on the issues that are important for Pakistani policy makers to reflect on. Some of these people are located in Washington and had worked at the World Bank while some have returned to Pakistan. Included in the latter group is Shahid Najam who has worked as Vice Chairman at the BIPP for several years. He was a senior member of the Pakistan civil service and served in several important positions including as the Commissioner of Lahore. After spending more than a couple of decades working for international organizations, he returned to Lahore and accepted my invitation to serve as BIPP's Vice Chairman.

Our initial intention for the 2021 report was to follow on the brief analysis of the Covid-19 pandemic that we covered in the previous year's report. As I said at the beginning of this chapter, a lot more than the pandemic has happened since last year's report was written and presented to the public. Rather than focus on only one policy subject as we have done in the past, this report will cover a good deal of ground. In a chapter that follows this introduction, I will provide a quick overview of Pakistan's economic and social history since the country's birth on August 14, 1947, and follow it by one on the state of the economy contributed by Farrukh Iqbal who after spending three years as the Director of Karachi based Institute of Business Administration, has returned to Washington. I will update the write-up on the Covid-19 pandemic we included in the 2020 report, detailing how it spread in the country and why Pakistan's performance was much better than that of India. This discussion will be followed by a chapter written by Shahid Najam on the pandemic's impact on social sectors and the poor

and less advanced segments of society.

Low levels of domestic savings and insufficient access to foreign capital have meant that the country does not invest as much as it should to have a reasonable and sustainable rate of economic growth and social change. I will illustrate the lack of attention paid to the need for increasing the amount invested by both public and private sectors and a succession of governments by recounting a conversation I had in the spring of 2006 with the President Pervez Musharraf. I had interviewed the general for the book I was writing on his period of governance. This was for the Woodrow Wilson Institute I had joined as a Senior Visiting Fellow after retiring from the World Bank. I was positive about the military leader's contribution to developing the Pakistani economy. However, over time, I had become less positive and when the general asked me about the date of publication of the book – “Will your book come out before mine,” he asked – I said that I had put it on the backburner. It needed to be revised since his government had not encouraged investment in the economy. I said to him that both he and Shaukat Aziz, his prime minister, had made statements that the country had achieved a sustainable rate of growth of 7 to 8 percent a year. That, I said, could not be right. He asked me to explain why I thought the rate of GDP growth was much lower than he and his prime minister was claiming to be the case.

I then explained to him the main elements in the Harrod-Domar model – Sir Roy Harrod was my teacher at Christ Church, Oxford – in which the economy's sustainable rate of growth could be calculated by dividing the rate of proportion of national income investment in economy by a constant they called the incremental capital output ratio (ICOR) The ICOR was a good indicator of an economy's efficiency. I said Pakistan's ICOR was around 4; dividing the investment rate by this number meant a sustainable rate of growth of about

3.5 percent a year; half of what the senior leaders were saying. The rate of growth could be increased by investing a higher proportion of GDP and by improving the economy's efficiency. Pakistan under Musharraf had done neither of these two things³.

The fairly large Pakistani diasporas in the Middle East could help themselves and the country by investing in what was once their homeland. Those who have moved abroad have left the country came from two very different social and economic backgrounds. The ones who have temporarily migrated to the oil-exporting countries in the Middle East are mostly from underprivileged backgrounds with few skills. They go on fixed term contracts and are obliged to move back to their country after their terms of employment are over. This group of people has already made impressive contributions to society. The money they have sent back improved the status of the families to which they belong from poverty to the low middle-class status. The remittances they have sent home have eased to some extent the country's foreign exchange constraints. The other class of migrants has skills needed by the West as the countries in that group have begun to go through significant demographic change. There are now large Pakistani diasporas in North America, Britain and Australia. A significant number of these have reached the age of retirement and are looking for avenues in which investment would provide them with a steady flow of income that would take care of their needs in old age. I have a chapter in this report that looks at the formation of the Pakistani diaspora in the United States and the role it could play in developing the country from which its members have come.

We have two chapters on the story of COVID-19 pandemic in Pakistan. In one of the chapters, I provided an account of the arrival of the Covid-19 in Pakistan, how it was contained, and an analysis of why Pakistan has done so much better than neighboring India in managing the pandemic. That

notwithstanding, the poor were still hurt by the disease and how the disease had a greater impact on the country's poorer regions and social sector. The author of this chapter is Mr. Shahid Najam, BIPP's Vice Chairman.

As discussed by me in the opening chapter of the report, Pakistan's demographic situation could be seen in two ways. A large and rapidly growing population as revealed by the latest Census carried by the government in 2017 could be viewed as a burden on the economy which it will need to carry for a long time – at least to the time when the rate of human fertility begins to decline as it has done in India and more remarkably in Bangladesh. Or the young in the population could be educated and trained to acquire the skills a modernizing economy requires. We have included two chapters on the economy of Pakistan one is written by Farrukh Iqbal who provided his assessment about the state of the Pakistani economy in 2020 and explained how the arrival of the Covid-19 pandemic affected Pakistani economy in particular on the rate of growth in GDP. The other chapter is written by Imtiaz Ahmed who covered the government's policy interventions and their efficacy in improving the trade deficit, the likely effect of current and post-covid global economy, and the situation in Afghanistan. We have also included a chapter about S&T Governance that highlights the need to develop and resuscitate S&T governance in Pakistan to respond to the emerging dynamics of S&T advancements in the world, this chapter is authored by Rahmat Ullah Gill.

Again, picking up a theme touched upon in the report's Second Chapter on the Pakistan Story where I suggested the sector of agriculture could be restructured to provide a higher input into the country's economy. Mahmood Ahmad who served at the United Nations Food and Agricultural Organization, FAO and then returned to Pakistan after retiring from the organization is the author of the chapter. The British administration in India brought surface

irrigation to Punjab and upper Sindh by tapping the waters of the Indus River system. The aim was to grow food grains for the perennially food-short provinces in the east in their Indian colony. That is the cropping pattern Pakistan inherited but did not adapt according to it. It is expensive to grow food grains on irrigated land. The United States, the world's largest producer of food grains grows them on rain-fed land. Changing the cropping pattern in Pakistan could increase the share of agriculture in national income and also produce high-value products for export.

At one point in the report writing cycle at the Burki Institute of Public Policy, we had thought of devoting the 2021 document to analyzing Pakistan's economic relations with the world outside. However, some domestic developments persuaded us to keep that subject on the shelf for the time being and to have a limited coverage of external relations in this year's report. A review of China-Pakistan Economic Corridor investment program is covered in the 2021 report and authored by Daud Ahmad, who has written on this subject now for a couple of years. The CPEC has domestic consequences; for one, it will improve the connectivity of some of the less developed regions of the country with those that are relatively more advanced. Daud Ahmad, formerly of the World Bank has been watching for the BIPP developments related to the CPEC ever since the Chinese government launched the program in Pakistan and then made it an important part of what Beijing calls the Belt and Road Initiative (BRI). He does the same this year in the chapter titled, 'China's Rise and Pakistan's move into its Orbit.'

Following the chapter on CPEC, I wrote on the developing situation in Afghanistan. The formal date for the complete pullout of American troops from that long-troubled country was set for September 11, 2021 by President Joe Biden. That date was chosen since it would be the 20th anniversary of the

Al-Qaeda attack on New York and Washington that took 3,000 lives. The attack was planned by the Al-Qaeda that was given space in Afghanistan's south. Even before that date arrived, the Americans had taken their troops out of Afghanistan leaving a small contingent of 650 security personnel to protect the country's embassy in Kabul as well as Kabul's International Airport. The massive Bagram Airport base was shut down, with all troops and equipment taken out at night. There was a widespread belief among senior American commanders in Afghanistan that the United States pullout would result in a civil war in the country and generate another wave of refugees, some of whom are bound to head to Pakistan. Surprisingly, this did not happen. CNBC reported on Aug 16, 2021 that there was, "Intelligence failure of the highest order" and Afghanistan fell to the Taliban. The writeup further states, "few expected a takeover this swift, with so little resistance from the Afghan government and the Afghan National Army. The latter of which was funded and trained with \$ 89 billion from the U.S taxpayer." At the time of this writing the Taliban do not see themselves as a 'single group' but as the 'future government.' Even though the Taliban are averse to the idea of an inclusive government, yet they have conceded that gender-segregated classes, with a strict dress code will be allowed in universities. Women medical staff, accompanied by male chaperone is allowed to work and patients are, 'segregated according to sex.' But what really happens in Afghanistan remains in the realm of speculation.

One of the critical developments of which Pakistan should take cognizance is in neighboring Afghanistan where most knowledgeable observers see a civil war brewing in which the nations' several ethnic and religious groups, as well as the militias loyal to several warlords will fight with one another to gain control of the country – if not total control but then to compete for influence in the evolving system of governance.

Chapter

02

**The Pakistan Story:
The Beginning, the Present,
and the Likely Future**

The Pakistan Story: The Beginning, the Present, and the Likely Future¹

Shahid Javed Burki

This Chapter cover what I call the “story of Pakistan” by recounting a number of incidents and conversations in which I was personally involved. I do that since not much has been written about the country and its history. Since the written word is not readily available to be used as a source, I rely on my personal recollections to cover some parts of the Pakistani story. Even though Pakistan at the time of this writing is almost 74 years old, the country has seen a great deal. Some of its history was covered in the 27 essays included in *Pakistan at Seventy*, a book I co-edited at the invitation of the National University of Singapore's Institute of South Asian Studies². A companion volume was sponsored by the ISAS on India.

Time does not stand still; that is the case in particular for Pakistan where change both, domestic and in the world in which it exists, has been a constant companion in history. *The Pakistan at Seventy* is about two years old but there have been some spectacular changes both inside and outside the country which we did not cover in the book. The book, for instance, did not discuss of developments in Afghanistan and yet as the year 2021 unfolds, the country to our north west is going through exceptional turmoil which is extraordinary even for a state and a nation as unsettled as Afghanistan. As already indicated, we

will devote a chapter to Afghanistan in this report with the knowledge that developments in that country would have moved along in some unexpected directions once the report reaches its intended readers.

In this chapter, I will be covering three aspects of the Pakistani economy and society – their past, their present and their likely future. But before I get into my main subject, I will recall briefly how my interest has developed studying the economy of the country whose creation I saw as a child and then saw it struggle through several difficult periods. I have been a student of the Pakistani economy for six decades and have written half a dozen books looking at different aspects of the subject. My first book, *Pakistan Under Bhutto, 1971-77*, was published by New York's St. Martin's press jointly with Macmillan of London. It appeared in 1980 and was promptly banned by the government of President Ziaul Haq, the country's second military president³. The government acted not because of the book's content but because of the picture on the cover. It showed Bhutto riding in the horse-drawn official carriage, accompanied by a general in uniform and two other senior military officers sitting in front of him. He was on his way to be sworn in as Pakistan's president in December 1971. The Zia government, having

executed Bhutto in April 1979, wanted to distance the military from the deposed prime minister. When, at his invitation, I went to see President Zia at his Rawalpindi residence, he said that he had read some good reviews in the Indian press of a book I had written about Bhutto. He sent his people to the bookshops in Rawalpindi and Islamabad but they couldn't find the book. "Why is the book not available in Pakistan?" he asked. I said the book was not available because his government had banned its sale in Pakistan. "Why did we ban it," he asked. "How would I know," I replied. He should ask his government. I write about this incident as an illustration of why it has been difficult to write and get read about Pakistan in Pakistan.

While I was at the World Bank where I spent 26 years holding a number of senior positions, my direct involvement with Pakistan was in 1996-97 when the then President Farooq Leghari persuaded me to take leave of absence and serve as Minister of Finance in the interim government. The government, headed by Prime Minister Miraj Khalid, took office after the dismissal by the president of the cabinet headed by Prime Minister Benazir Bhutto. Leghari was concerned about the level of corruption that the prime minister was tolerating. Asif Zardari, the prime minister's husband, had come to be known as "Mr. Ten Percent" since that was reported to be the share of the deal his wife's government needed to approve. In addition to pervasive corruption, Leghari was also not satisfied with the way the economy was being managed. In a call he made to me from Kazakhstan, a country he had traveled to on a state visit, he asked me if I could check with the people who were working on Pakistan at the World Bank whether they too felt that the Bhutto administration was on the wrong track. My discussion at the Bank confirmed the impression Leghari had about the state of the Pakistani economy and the quality of management by the Bhutto government. I called Leghari back after forming some impression about the state of the economy but by then he was back in

Pakistan and did not want a discussion on the telephone. He was afraid – in fact certain – that the government headed by the prime minister was tapping his telephone and recording his conversations. He wondered if I could travel to Pakistan and brief him about the views of the World Bank staff working on the Pakistani economy.

I went to Pakistan and had detailed conversations with the president. He asked me whether it would be prudent for him to remove Prime Minister Bhutto and bring in a caretaker administration to prepare the country for another election and also steady the economy. The Constitution of 1973 amended by President Ziaul Haq, Pakistan's second military president, had inserted the infamous clause 58.2(b) into the document that gave the president the authority to remove the prime minister for several reasons. These reasons were broadly worded; the only constraint on the president was that exercised by the Supreme Court which would inevitably be approached to pronounce on the legality of the president's move. I told him that I did not have enough knowledge of the political situation in Pakistan to advise him about this matter. He then surprised me by requesting that I meet with General Jahangir Karamat, Chief of Staff of the Army, COAS, and inform him of the World Bank's reading of the Pakistani economic situation and ask him whether President Leghari should fire the prime minister. I had never met the general, but the president went ahead and arranged for me to see him. I went to the General Head Quarter, GHQ, in Rawalpindi and had a long talk with the COAS. He was troubled by what I told him about the economic situation as seen by the experts in the World Bank. He was visibly shaken and asked me if a change in the government would help to improve the situation. I said it would certainly help to bring in some technocrats who could take the needed steps to steady the economic situation. Would he support such a move by the president I asked? He said he would do whatever the president thought was in

order. I wrote a few sentences and read them out to him as a report of our conversation, saying that I would use them in briefing Leghari. He agreed with my summary.

My short tenure as Finance Minister revealed a number of things in vivid detail that I had little awareness of even though I had been studying Pakistan my entire working life. The most important revelation was the sharp deterioration in the quality of governance. Widespread corruption in the government was one aspect of this development. The other revelation was about how little we saved both as a nation and as individuals. This had made the country heavily dependent on foreign largesse. My most notable achievement during my tenure was to save the country from bankruptcy by getting a five hundred-million-dollar deposit made by the Government of China into our account at the Federal Reserve Bank, New York. That is an interesting story by itself which I have discussed in some detail in my forthcoming memoirs. The Chinese government, then headed by Prime Minister Zhu Rongji, was prepared to help since I had at one point in my directorship of China saved the country from taking a deep economic plunge. This would have happened because of the punishment the West had decided to inflict on Beijing on account of the way it had handled the protesters who had occupied Tiananmen Square in the heart of the Chinese capital. The United States wanted the World Bank to pull out of China, but I refused to comply. This almost led to my dismissal from the Bank.

I have remained involved in Pakistan affairs following the founding of the Burki Institute of Public Policy, the BIPP. I head the institution based in Lahore. It is named after me since I am the main contributor to the endowment fund whose income is used to finance its activities. As discussed in the opening chapter of this report, the BIPP issues every year its assessment of the state of the Pakistani economy with a focus on one subject on which we

have done the research. The subject in the 2020 report was the Covid-19 pandemic and how it had affected Pakistan in particular and the world in general. The subject the year before was China Pakistan Economic Corridor, the CPEC and the contribution it is likely to make to Pakistan's future.

Following this brief introduction, I will get into the main points I will cover in this chapter and discuss the evolution of the Pakistani economy over the last seven and half decades; its present situation and where the economy could go with the adoption of the right set of policies. As discussed earlier, *Pakistan at Seventy*, a book I edited for the Institute of South Asian Studies at the National University of Singapore, traces the evolution of Pakistani society, its political structure, and its economy since the country's birth on August 14, 1947. It has contributions from a score of individuals with deep knowledge of various aspects of Pakistan's history.

Pakistan's Difficult Birth

I will begin with a short discussion of the difficulties faced by the Pakistani leadership right after the creation of their country. It is worth remembering that Pakistan did not have a government infrastructure of the type that India inherited from the British when they governed the country. New Delhi was a functioning seat of government with properly staffed government ministries and departments; Pakistan, on the other hand, had to create an entirely new capital in Karachi, then a relatively small port-city, distant from the rest of the country. Its government personnel had to move into new ministries and departments. There was no central bank to manage the new country's monetary affairs. The banking system was small and primitive. Everything was new and untested in the new country. Even the senior leadership of the Muslim League that worked for the creation of Pakistan did not live for long after the country's birth. Muhammad Ali Jinnah, Pakistan's founding father, was dying of tuberculosis when he

took oath as the country's first Governor General. At that time, this disease was incurable and invariably proved to be fatal. This fact was kept a secret since there was fear among the leaders of the Muslim League that if the British and the Hindu leadership had known that Jinnah was a dying man, they would have waited him out. Jinnah died thirteen months after Pakistan's birth. Liaquat Ali Khan, the country's first prime minister, was gunned down by an assassin four years after taking office. This was on October 16, 1951, while the prime minister was addressing a rally in Rawalpindi's Company Bagh. The assassin's motives have remained a mystery to this day. The Park was renamed as Liaquat Bagh and was also the place where Benazir Bhutto, then the country's prime minister, was killed in December 2007. On the other hand, Jawaharlal Nehru, India's first prime minister, served in office for 17 years. India had continuity while Pakistan went through several changes at the top of the political pyramid. Relative stability came to Pakistan only after General Ayub Khan, Army's commander in chief, staged a coup and removed the prime minister and became president. That was in October 1958. The military president stayed in power for eleven years.

Going back to the country's early years, when the British left India in August 1947, their colony – the crown jewel of the British Empire, as it had come to be called – had a population of 400 million of which 100 million were Muslims. There were two areas of Muslim concentration. One was in the northwest of what is now Pakistan with a population of 32 million people, the other was in the northeast of what is now Bangladesh with 35 million people and the remaining 33 million were dispersed over various parts of what became independent India. Eight million of those who did not live in the areas that came to Pakistan moved to the new country while six million Hindus and Sikhs went in the opposite direction – from Pakistan to India. This was the largest mass movement of people in human history. In 1951, when Pakistan conducted its first population census,

one out of four citizens of what was then West Pakistan was born outside the country.

Over the last seventy-five years, South Asia's Muslim population has increased almost six-fold. The region has 570 million Muslims or 32 percent of the world's total of 1.8 billion. Pakistan with 212 million Muslims has the largest number of people of this faith in South Asia, followed by 207 million in India and 154 million in Bangladesh. Pakistan's population today is seven times its size when it gained independence.

Pakistan's strange geography was one of the several problems the country faced at the time of its birth. Although Jinnah said that what he had been given was a “moth eaten country,” what the British had left him was a country divided into two wings, East Pakistan, and West Pakistan, separated by a thousand miles of often hostile Indian territory. The pursuit of common religion proved to be less of glue than language and culture. Jinnah's suggestion that Urdu should be Pakistan's national language on his first and only visit to East Pakistan led to what history remembers as the “language riots.” That set the stage for the later split of the country and the emergence of East Pakistan as the independent state of Bangladesh. As I will discuss later, it is now recognized that countries with considerable ethnic diversity find it difficult to develop a political system that has popular support.

Some of the problems Pakistan has had to deal with are the result of the initial Indian attitude towards its Muslim neighbor. It was with great reluctance that the leadership of the Indian National Congress accepted the creation of a predominantly Muslim state in the northwestern and northeastern parts of British India. Having accepted the idea of Pakistan, the Indian government did everything it could do to kill the new Muslim nation at birth. This included pushing eight million Muslims from India to take up residence in the newly created state; blocking Pakistan's access to the funds Britain had left for

Pakistan in India's central bank; stopping the flow of electricity to Lahore from the power station that was now located in the Indian Punjab; and cutting off all trade with Pakistan in 1949 when the Government of Pakistan refused to devalue its currency with respect to the American dollar. The last move was made by all members of what was called the "Sterling Area." Pakistan refused to follow on the ground that the demand for raw jute, its principal export, did not depend on its price. The demand for the fiber was not priced elastic. The first and the last actions were the biggest blows that could have led to the collapse of the Pakistani economy and for the leadership of the new country to seek readmission into the economy of the Indian Union. This is what Prime Minister Jawaharlal Nehru and Home Minister Sardar Vallabhbhai Patel had hoped would happen. But Pakistan was able to deal with the series of crises.

But in a story still not fully told, a group of a few rich Muslim families from the western part of the British Indian colony, saved the country from collapse. Jinnah had persuaded them to migrate to the country he had founded. He called the heads of three families – the Dawoods, the Habibs and the Adamjees – to meet him at his residence. They were told that the government did not have the funds to pay its employees and needed financial assistance. In response, the heads of the three industrial houses wrote him a blank check since Jinnah did not know the amount his government needed. They provided funds from their private accounts to finance the Government of Pakistan.

With India having pulled down the trade curtain in 1949 that stopped all trade with Pakistan, the new Muslim state had to quickly develop its own industry. Pakistan had to establish several consumer goods industries to provide vital goods of daily consumption that had come from India to what was now Pakistan. The industrial drive was led by the financial houses that had provided Jinnah with the funds he needed to run the government. They

invested in developing consumer industries in Karachi that laid the foundation for the city to become the country's industrial and financial hub. The patrons of these industries became what Mahbubul Haq when he was working a Chief Economist at the Planning Commission, mistakenly identified as the "twenty-two families" that not only controlled the country's economy but also its political structure. However, I am getting ahead of the story I want to tell here.

These Indian moves had lasting effects. They forced Pakistan to quickly industrialize and move away from being an economy that was entirely dependent on agriculture. They also created a gulf between India and Pakistan that has widened over time. Had the Indian leadership been more accommodating towards its neighbor, Pakistan today would be a vastly different country. It would have remained dependent on the much larger Indian economy. This is one of the interesting "What Ifs" of Pakistan's colorful history. The Indian effort to kill the Pakistani baby at birth made it possible for the infant to stand on its feet and learn to walk.

Pakistan's Struggle through a Number of Crises

This was not the only time when Pakistan had to wrestle with existential crises. It has never been free of difficulties but despite them, it has managed to reach the point at which we can hope for a good future. Crises have covered three areas: lack of financial resources the government could use to develop the economy; a weak government that could not properly guide the economy; and neglect of development of the country's large human resource. It was General (later Field Marshal) Muhammad Ayub Khan who did the most to put the Pakistani economy on a relatively solid foundation. This he did by providing public sector policymaking a sound institutional base, encouraging the private sector to invest even more in the economy and by following a

foreign policy that made it possible for the country to access public funds from abroad. One of his important contributions was the building of the Planning Commission into a sound institution that could give him good advice on both policy matters as well as selecting the projects in which the government could put its own limited resources. “It was wrong to call me a dictator,” he said to me when I had a conversation with him at his residence in Islamabad a few months before his death. “I followed expert advice on all matters received from real professionals in various areas,” he said. With Ayub Khan prodding, the Planning Commission carried out serious policy work. One of its world-recognized contributions to development was the strategy that underpinned the highly successful Second Five Year Plan (1960-65). The strategy was detailed in a book published in 1966 by Mahbubul Haq who was the Planning Commission's Chief Economist and was the plan's principal architect⁴.

My reading of Pakistan's economy suggests that it was Zulfikar Ali Bhutto who set back the Pakistani economy and the weakening of the quality of governance. He acted in ways that made Pakistan deviate from the correct course on which Ayub Khan had placed the economy. He weakened private enterprise by nationalizing large industries, finance and commerce while simultaneously weakening the capacity of the government to handle expanded responsibilities. Bhutto's temperament was such that he did not tolerate any dissent or challenge to his authoritarian ways. He was jealous of the enormous power wielded by the members of the elitist Civil Service of Pakistan, the CSP. He dissolved the Service, leaving an administrative vacuum that has not been filled to this day. He bought Mahbubul Haq's “22 family” thesis and had the state take over their assets.

However, Bhutto's one positive contribution was to steer Pakistan towards China and distance itself from Washington. I will have more to say about this

later in the chapter.

How Pakistanis See their Situation?

Before getting to the discussion of Pakistan's current situation, I would like to mention the way the country is viewed by its own citizens. Several years ago, I had two conversations with two persons who shook me by telling me how negative a number of influential Pakistanis were about their country. The first conversation was with L.K. Advani who had served as Deputy Prime Minister of India under Prime Minister Lal Bahadur Vajpayee. A meeting with him was arranged by Arun Shourie who was a Division Chief in the Planning and Review Department as I was. The department was headed by Director Mahbubul Haq. Shourie resigned from the Bank, move bank to India and after serving as the Chief Editor of the newspaper, The Indian Express, joined politics and rose in the ranks of the Bhartiya Janata Party, the BJP. During one of my visits to India, he suggested that I meet with former prime minister Lal Bahadur Vajpayee and former Deputy Prime Minister Lal Krishna Advani. In the meeting with the latter, he asked me the following question: “Why is it that while we Indians love India, you Pakistanis don't like Pakistan.” He said that he had formed that impression by reading what Pakistanis write about their country. He had also tested that impression by saying something a little negative about their country when some of them called on him. “In response to my suggestion, they go ten steps ahead of what I had said.” The second conversation was with Pamela Constable of The Washington Post. We had lunch in Washington several years ago to discuss her coverage of Pakistan for her newspaper. She said that she had been told that her writings about Pakistan were extremely negative. “I am a reporter and I report on what I hear. I get invited to a number of gatherings in Islamabad and I don't hear many positive things being said by Pakistanis about their country,” she told me. She was then living in Islamabad.

I am not suggesting that we should be unreasonably positive about Pakistan and become propagandists for the country. However, we should reflect a little bit more before we pronounce our judgments. This is particularly important for the members of the Pakistani diasporas. Several Pakistani administrations have attempted to draw funds from the people from Pakistan who have made good progress in the foreign lands in which they have settled. Some of them have accumulated savings and are identifying the areas in which they should invest their savings in order to have adequate incomes when they retire. The rates of returns available from investments in Pakistan are attractive. Anecdotal evidence suggests that physicians from Pakistan have been attracted to the country of their origin to make investments in health facilities. Doctors of Pakistani origin have set up clinics and hospitals that provide world-class healthcare in a country that has yet to develop a health system that could adequately provide needed healthcare to various segments of the population. The diasporas could do much more by investing in health education and healthcare facilities. This brings me to my next subject: Pakistan's current situation.

Pakistan's Current Situation

In talking about the country's current situation and suggesting why we could be positive about what lies ahead, I will cover three areas: politics, society and the economy. Beginning with politics. I believe that Pakistan is a rarity in the Muslim world, in particular the western part of the geographic space the adherents of Islam inhabit. This space stretches from Morocco in the west to Bangladesh in the east. With Erdogan's Turkey moving towards authoritarianism and that country's president's efforts to bring religion into the structure of the government, Pakistan is the only Muslim country in the western part of the Islamic world that is succeeding in developing a representative form of government. The only uncertainty is the role of the military in governance.

Pakistan has been successful in using the electoral system for moving power from one political party to another. This has happened three times – in 2008, 2013 and more recently in 2018. On each occasion, the party in power gave way to the one in opposition. In 2008, the political party that had supported the military government headed by General Pervez Musharraf handed power to Pakistan's People Party, the PPP, founded by Zulfikar Ali Bhutto in 1967. In 2013, the PPP yielded power to Pakistan Muslim League (Nawaz), the PML(N). In 2018, the Pakistan Tehreek-e-Insaf, PTI won the election and assumed control of the federal government as well as those in the provinces of Punjab and Khyber-Pakhtunkhwa. I consider PTI, to be politically more developed than the other two mainstream parties, the PPP, and the PML(N). Both PPP and the PML(N) have dynastic structures whereas the PTI appears to be more democratic in the way it operates.

PTI's electoral base is more representative than that of the other two parties. We have not developed the discipline of psephology that can correctly read the politics that support political organizations. I believe that the PTI has the support of the urban youth which is the fastest growing segment of Pakistani society. Pakistan is urbanizing more rapidly than other large countries in the developing world. The aspirations of urban populations are very different from the patron-client relationships that is the base of support for the other two parties. Some of what Prime Minister Imran Khan has done after entering office was meant to satisfy what his supporters want from the public sector.

Pakistan has succeeded in keeping religion out of mainstream politics. There are several small parties that have not made much headway in the political system. The most recent manifestation of this is the Tehreek-e-Labbaik Pakistan, the TLP, which has concentrated its attention on maintaining the Ziaul Haq era's blasphemy law. These groups remain on the margins of the Pakistani political society.

However, they try to challenge the writ of the government when they have the chance. This is done by spreading rumours through their social-media accounts, show of force through agitation and the use of violence as was witnessed towards the end of October this year. Some of them are armed with sophisticated firearms and do not hesitate to use them. The group and a small band of their supporters tried to block the main GT Road and when confronted by the police they killed 4 policemen and managed to injure almost 250 people. The government has decided not to acquiesce to their outrageous demands and “Rangers were called out in Punjab as marchers run riot.” (The Express Tribune, 28th Oct 2021). The decision to deploy Rangers was taken in a federal cabinet meeting. The Interior Minister, Mr. Sheikh Rashid said that the paramilitary is being deployed for 60 days.

It is not religion that has posed a nation-building problem for Pakistan. It is an ethnicity that has stood in the way of nation-building, a subject I covered at length in a book I wrote and published some years ago under the title of *Pakistan: A Nation in the Making*⁵. It was the inability to accommodate ethnicity in the political structure that led to the departure of Bangladesh in 1971. Ethnic tensions remain in today's Pakistan and they manifest themselves in different places and in different ways. It is an ethnicity that has been created in Karachi that is often described as the world's most violent megacity. Ethnicity is also responsible for the province of Baluchistan from becoming and remaining restive. If Afghanistan collapses into ethnic fiefdoms as some of those who watch the country suspect might be the outcome of the American withdrawal, there is bound to be negative consequences for the Pashtun belt on the Pakistani side of the border including those who live in Baluchistan.

I will now briefly say a word about the economic situation. The country's primary problem has been

the inability to raise domestic resources for financing development. The Tax-to-GDP ratio remains low and this means excessive reliance on foreign flows. Also, Pakistan is one of the world's largest countries that has remained poorly integrated into the global economy. The most important indication of this is the low ratio of export to national income.

Finally, a word about the quality of governance at this time in Pakistan. Starting with the Bhutto period (1971-77), the quality of governance has steadily deteriorated. Corruption now is rampant, in particular in the large public sector enterprises. Various administrations in the last half century have used large government-owned entities to employ their political supporters. This has badly damaged the working of these organizations. There are number of examples of the poor performance of these entities. The Russian financed Karachi Steel Mill has been shut down because a large number of politically recruited employees were not able to perform productive roles. The same is true for Pakistan International Airlines and the Pakistan Railways. Like a number of other large enterprises in the public sector, the railway system also became a source of employment for the supporters of politicians who governed the country once the military had stepped aside. This made the system inefficient. These inefficiencies showed up as repeated accidents; one occurred on June 7, 2021 when one express train derailed and was a little more than a minute later was struck by another. Forty people were killed and another one hundred persons were injured, some of them seriously. In 2020, 22 people died when a passenger train crashed into a bus carrying Sikh pilgrims in eastern Pakistan. In 2019, a train fire killed at least 73 people. The country's worst train disaster occurred in 1990, when a packed passenger train plowed into a stationary freight train killing 210 people.

Why be Positive about the Situation?

Despite of a low domestic savings-rate, we can still

be positive about Pakistan's economic future. This is for four reasons: the country's geographic location; its well-endowed agricultural sector; human skills that in some areas (metal and leatherworking, for instance) have resulted in developing small-scale enterprises that could become important components in the international supply chains that now dominate modern sectors; and a young and large population that can be turned into an economic asset rather than become an economic and social burden. It is geography and demography that are the most important pointers towards a happier future for the country.

Geography provides a vital link between China's western provinces and the world outside. This is one reason why Beijing is spending billions of dollars in developing what is called the China-Pakistan Economic Corridor, CPEC, which is likely to turn Gwadar into one of the more important ports in the world. We discuss the progress CPEC is making in a later chapter of the report. If Afghanistan settles down, the CPEC could be extended through it to the resource-rich countries of Central Asia. Better regional connectivity could provide Pakistan's well-endowed but poorly developed agricultural system opportunities for switching towards the export-oriented sector of agriculture.

In the late nineteenth century, the British rulers of India brought irrigation to the virgin lands in Punjab and upper Sindh to generate grain surpluses for feeding the people in the food-deficit provinces of Bengal, Bihar and Orissa. These provinces had lost hundreds of thousands of lives because of recurrent famines and the British, still living with the memory of the mutiny of 1857 which they had put down at the cost of many more lives, did not want a new source of local resentment. They did not want another rebellion against their rule. London appointed a succession of Famine Commissions, the last of which recommended using their colony's land not yet committed to agriculture to produce additional

food grains. Following the Commission's recommendations, the British administration in India tapped the waters of the Indus River system to turn this bit of geographic space into the granary for their colony. This is the system of irrigation and agriculture Pakistan inherited upon becoming an independent state. However, it is bad economics to use irrigated land for producing grain and fibers. Pakistan has continued to do that. It should now move towards the production of high-value crops and animal products. China could become a major market for these items.

Demography is another reason for rethinking Pakistan's economic priorities. The country stands out in the world that is now witnessing rapidly declining birth rates. There are now 14 countries that have more than 100 million people each. Pakistan, with 220 million people, is the fifth largest. Of the 14 largest, Pakistan with a population growth rate of 2 percent a year is growing at the third highest rate. Only Nigeria and Ethiopia at 2.6 percent a year rate of population increase have higher growth rates. A birth rate sustained over a period of time means a very young population. The World's median population is 30.6 years which means that one-half of the population is below that age. Pakistan's median age is only 23.8 years or 78 percent of the global average.

These numbers mean that for Pakistan such a large and young population could become either a burden or an asset. To be the latter, public policy must be designed in a way that the youth could add to the country's economic strength. Youth's involvement in two sectors can produce this result. One is the development of information technology. The other is the development of small and medium enterprises that could enter global supply chains. Both need educated and well-trained workforces. Pakistan needs to invest in developing institutions both in the public and private sectors designed to produce streams of such workers. The members of the

Pakistani diasporas, with good knowledge of the skills the rich world needs but can't fully meet because of declining populations, could invest and guide the development of such institutions in Pakistan.

What I have proposed here is a significant shift in the country's development paradigm. This involves increasing domestic savings and investment rates. It also means improving connectivity with the countries and regions in the neighborhood. The state should aim to increase the export of non-traditional products, in particular from the sector of agriculture. A serious attempt needs to be made to produce information and communication technology products for domestic as well as international markets.

The World Bank in its latest assessment of the state of the Pakistani economy expects the country's GDP growth rate to increase to 3.4 percent in 2021-22. This would mean a complete turnaround from a decline of 0.4 percent in 2020-21. That decline was because of the unexpected arrival of the Covid-19 pandemic. According to the Planning Commission, the economy will grow at 3.94 percent in the year 2020-21. The government's growth projection for the year 2021-22 is 5 percent as indicated in a statement submitted to the national assembly by the government. According to Finance Minister

Shaukat Tarin, the government is drawing up a plan that would cover the short-, medium- and long-term which would require action by the state as well as the mobilization of the citizenry so that the people begin to will and work for bettering their future.

With the strategy I have proposed, Pakistan could achieve a sustainable growth rate of 7 percent a year. Unlike the previous growth bursts, this could be sustained over a long period but that would happen if larger proportions of national income is invested in the economy. This will need to be done by both the government and the citizenry. For the government, the bulk of the needed investment should be financed by fiscal means and that requires a taxation authority that is efficient, clean and feared by the people. The United State's Internal Revenue Service, IRS, is a good example of an institution that is both efficient and feared. To increase private investment, people must have faith in the country's as well as the economy's future. Political leadership could motivate people to have confidence in their future and in the country, with these changes in public policy. Pakistan could become South Asia's and the Muslim world's "miracle economy," a term the World Bank had used in its study of the strategies pursued by the countries in East Asia to achieve rates of growth without precedence in history.

Chapter

3

The Path to Recovery

The Path to Recovery

Dr. Farrukh Iqbal

At the time of this writing (September 2021), Pakistan finds itself in a curious position reflecting both positive economic momentum and anxiety about the path ahead. Over the past two years, significant progress has been made in coping with fiscal and external imbalances and in managing the health, social and economic consequences of successive waves of the Covid-19 pandemic. The economy has rebounded from negative growth in FY20 to a provisional 3.9 percent growth in FY21 while remaining within tight fiscal and monetary parameters. Nevertheless, the path to a sustained high growth trajectory remains uncertain. While the fourth wave of the pandemic is moderating, globally as well as in Pakistan, much remains to be done with regard to vaccinating more of the population. In addition, key longer-term challenges are posed by high public debt, unresponsive private investment and uncertainty about the path of economic policy.

Managing the Pandemic During 2020-2021

Managing the Health Consequences of the Pandemic

Despite three surges over the last eighteen months, Pakistan has escaped the worst aspects of the

pandemic that many other countries, both developed and developing, have experienced. As of September 2021, Pakistan had recorded about a million cases and 22,000 deaths, placing it at the 29th and 25th global ranks for cases and deaths respectively. This is much lower than could have been expected from the fifth most populous country in the world with a public health infrastructure generally thought to be underfunded and weak. The principal control instruments used include selective lockdowns, quarantines, testing, contact tracing, masks, social distancing and most recently, vaccination. These measures were applied to varying degrees in different locations and time periods and appear to have been effective in avoiding mass breakouts and in allowing for a relatively quick resumption of economic activity. The September 2021 update of the “return to normalcy” index created by Economist magazine shows Pakistan at the third rank globally, behind only Hong Kong and New Zealand. Nevertheless, vigilance continues to be called for as the coronavirus continues to evolve and mutate. While vaccination rates have improved over time, the current rate of 18.7 percent in Pakistan (according to Our World in Data, October 2021) indicates that a large proportion of the population continues to be at risk.

Managing the Social Consequences of the Pandemic

In the early months of the pandemic in 2020, many were concerned about a possible substantial increase in social distress due to the disruption of economic activity. In the event, these concerns were eased by the fast resumption of economic activity and substantial help provided to low income groups. Such help has involved expanding the scope and generosity of the long-running Benazir Income Support Program of cash transfers to poor households as well as emergency cash stipends offered to almost 15 million low-income households under the broader social protection initiative known as Ehsaas. The overall effort has drawn praise from international observers (Delivery Associates, 2020). No data are available yet to show how these measures have affected actual poverty trends but there are strong reasons to believe that the consequences would have been much worse in the absence of these measures¹.

Managing the Economic Consequences of the Pandemic

The economic consequences of the pandemic have been less detrimental than originally feared. In FY20, the GDP declined by a modest 0.5 percent though a fall of as much as 1.5 percent had been expected initially. Preliminary data for the first nine months of FY21 show a strong rebound in industrial and service sector output. Most leading indicators of industrial and consumer demand, such as power generation, cement dispatches, car sales and consumer financing, showed upward momentum while inflation, fiscal and external balances remained within bounds. Consumer price inflation declined from 11.5 percent in FY20 to 8.3 percent in FY21. Despite additional outlays for pandemic-related spending, the fiscal deficit stayed on track due to reduced spending on other accounts. The current account deficit was on track to decline

substantially from the levels seen just a few years ago, primarily on the back of strong remittances. The international reserves position improved in part because of the improvement in the current account as well as some interest payments relief on external debt under the internationally-arranged Debt Service Suspension Initiative.

The recovery is attributable in part to accommodative monetary policy measures introduced by the Government in early 2020. These included loan deferments and rescheduling, new financing facilities, and a policy interest rate cut (from 13.25 percent to 7 percent). The SBP estimates that these liquidity support schemes had a cash flow impact of close to 5 percent of GDP. Recovery was also assisted by an improvement in the external demand for Pakistan's key exports and a rise in remittances.

Based on these trends, the projected outcomes for the full year FY21 show an economy (see Table 3.1) that has successfully overcome the precarious macroeconomic situation of the two previous years and the impact of the pandemic that started in 2020. An economic growth rate of 3.9 was provisionally estimated for FY21 at the most recent review of national accounts data by the Ministry of Planning.

A recent Monetary Policy Committee statement (SBP, 2021b) provides a positive official outlook for FY22. Economic growth is expected to rise to between 4 and 5 percent. Inflation is expected to remain between 7 and 9 percent. The current account deficit is expected to be larger than in FY21 but still at a manageable 2 to 3 percent of GDP. While remittances will be resilient, import demand will rise due to higher levels of economic activity. The foreign exchange reserves position is expected to improve in part from the disbursement of Pakistan's share of \$2.8 billion from a new global allocation of SDRs recently approved by the IMF. Unexpected pressures on reserves are expected to be managed through continued flexibility in exchange rate

TABLE 3.1**Key Macroeconomic Developments**

Macro indicator	FY18	FY19	FY20	FY21*	FY22*
Real GDP growth (percent change)	5.5	1.9	-0.5	3.9	4.0-5.0
Inflation (percent change in CPI)	3.9	7.3	10.8	8.9	7.0-9.0
Fiscal deficit (percent GDP)	6.4	9	8	7.1	6.3
Current account deficit (percent GDP)	6.1	4.9	1.1	0.6	2.0-3.0
International reserves (\$ billions)	9.8	7.3	12.2	17	
External debt (percent GDP)	30	37.5	41.3	42.1	
General govt. debt (percent GDP)	76.2	90.7	92.8	92.9	

Source: refers to provisional estimates for FY21 and projections for FY22 reported in the Monetary Policy Committee statement of July 27, 2021 (SBP, 2021b).

management and recourse to tighter monetary policy.

The Challenge of Sustaining Economic Momentum

Despite the positive developments noted in the previous section, the longer-term outlook for Pakistan is clouded. To begin with, the risk of pandemic-related disruptions continues to threaten economy and society. While previous surges have been managed well, a large proportion of the population continues to be vulnerable until vaccination rates improve substantially. In addition, key challenges to sustained economic growth in the long run are posed by high public debt, the unresponsiveness of the private investment rate and uncertainty about the path of economic policy. These challenges are discussed below.

Sustainability of the Public Debt

Both external and total public debt has risen sharply in recent years: the former from 30 percent of GDP in FY18 to 42 percent currently and the latter from 76 percent of GDP to about 93 percent. While the medium-term framework of the IMF program shows

both ratios declining over the next few years, this expected trend is contingent on assumptions about domestic and external factors that may prove too optimistic. Regarding external debt, if oil and gas prices spike in international markets, external borrowing needs would also spike. For Pakistan, energy imports are close to being non-discretionary. If exports do not increase as assumed because of weak growth in global markets or for domestic reasons, similar pressures on borrowing could emerge. In addition, Pakistan faces external financing risks related to the assessment of the Financial Action Task Force of the country's compliance with its AML/CFT commitments. With regard to the overall public debt, if fiscal targets are not met due to policy slippage in the face of vested interests, domestic borrowing needs would rise, threatening sustainability.

While forecasts have to be based on certain assumptions, the national debt is now so high that missing forecasts by even modest amounts can have large consequences. This is why, in its latest program review (see IMF, 2021), the IMF team considers risks to the outlook to be “substantial.”

Lack of Dynamism in Private Investment

While macroeconomic stabilization is important to prepare an economy for sustained growth, the growth itself must come from investment, especially private investment. This is an area of great concern for Pakistan because its private investment rate has stagnated at around 10 percent of GDP for the last thirty years. To put the matter in perspective, consider that the private investment rate in India and Bangladesh, South Asian countries with comparable institutional contexts and facing similar external environments, has been more than twice as high for much of the past three decades (see Figure 3.1). What accounts for Pakistan's stagnation when private investors in neighboring countries have been so dynamic?

An important, though hard to measure, determinant of private investment is the presence of investment opportunities. Where opportunities are lacking, investors have little to put their money in. One could argue that such opportunities are more likely to arise in growing economies than in stagnant ones. Pakistan's economy has stagnated at a low average growth rate for the last three decades making it

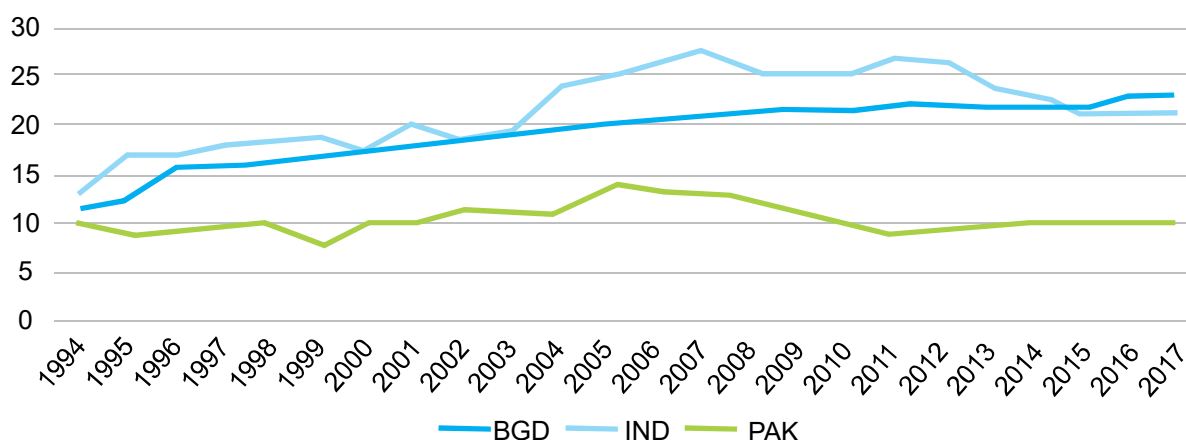
difficult for investors to take an optimistic view of future prospects. However, one must be mindful of the possibility of reverse causation as well: the economy may have grown at a low rate because of investor pessimism.

What is clear is that variations in policy have not stimulated much of a response from Pakistani investors. Normally, one would expect private investment to change in response to changes in monetary policy variables such as the supply of credit or the cost of credit. While these factors have fluctuated a lot over the past thirty years, they have not elicited any statistically significant and sustained response in investment. Nor have Pakistani investors responded to changes in the business climate. For many years now, donor-supported programs have helped to reduce the costs of doing business. These improvements do not appear to have had a noticeable effect on the private investment rate.

The reasons for Pakistan's investment stagnation may lie in more complex areas. First, it is possible that Pakistan's security history of the past four decades has discouraged investors. Constant tensions on its borders and a fraught domestic

FIGURE 3.1

Long Term Trends in Ratio of Private Investment to GDP



Source: BGD, IND and PAK refer to Bangladesh, India and Pakistan respectively and data are taken from the World Development Indicators database. In addition, more recent data for Pakistan from the Pakistan Economic Survey (see Ministry of Planning, 2021) show no change in the trend for private investment. The rates for 2017-2021 were 10.1, 10.5, 10.5, 10.6, and 9.8 percent, respectively.

security environment with periodic incidents of terrorism and crime (such as the kidnapping of businessmen) may have led many to believe that it was safer to invest abroad rather than domestically. Pakistani citizens have had the legal ability, on and off since the early 1990s, to convert rupees into foreign currencies without significant restrictions. This may have encouraged them to move funds offshore when confronted by domestic security risks. Recent developments in Afghanistan involving the assumption of power by the Taliban do not as yet have clear implications for the trajectory of security in Pakistan over the medium-run. Second, the domestic policy environment has been relatively unstable. Pakistan has undertaken adjustment programs with the IMF at the average rate of one every three years since 1990. It has abandoned all but one of the programs with policy conditionality in mid-course, making political choices to not persist with fiscal austerity or not pursue structural reforms in the face of resistance from vested groups. Such policy instability may have persuaded investors to consider policy changes as being short-term in nature and likely to be reversed or modified in a few years. Such a mind-set discourages long-term investment.

Uncertainty about Medium Term Macroeconomic Policy

There is uncertainty about whether or not the Government will continue to adhere to the ongoing IMF program. A sixth quarterly review of the program is due but has not yet been scheduled. Meanwhile, there has been discussion in the media and at policy-making levels about the need to accelerate growth through measures that would relax the current parameters of the IMF program and allow higher public spending, a more accommodative monetary policy and a lower tax burden on the private sector. Such discussion is normal for a democratic country halfway through a program of fiscal and monetary austerity and is even more

understandable in a situation where the economic threat of the pandemic is not yet over. However, some commentators (Khizar, 2021) have noted that certain factors make it risky for Pakistan to give up the discipline of the IMF program quite yet. Among these are the facts that Pakistan's debt burden is substantial, its annual debt servicing and external financing needs are high, and external relations have evolved in a way to reduce the number of bilateral partners who could provide emergency foreign exchange support should the country need it. In any case, Pakistan's past history with abandoning IMF programs mid-course is not encouraging: the loss of discipline in pursuing stabilization and structural reform typically leads to an external payments crisis within a few years. Such a policy cycle is unproductive and should be avoided².

An important element of periodic fiscal stress in Pakistan is the deficit incurred on power and gas transactions. Despite making progress on the overall fiscal balance, the government has failed to enable full and sustained cost-recovery in the power and gas sectors. Price adjustments have been delayed, payments have been deferred, technical losses have not been reduced, and new, though temporary, subsidies have been granted. As a result, the stock of arrears in the power sector rose by 0.4 points to 5.6 percent of GDP by the end of calendar 2020 and those in the gas sector are projected to rise by 0.1 points to 0.6 percent of GDP by the end of FY21. The circular debt problem of the energy sector has not been resolved with the end June 2021 stock standing at PKR 2.3 trillion which is roughly double the level of three years ago.

Another important determinant of recurring fiscal shortfalls is the inability of the tax system to generate adequate revenues from a broad base of persons and economic activities. The government is committed to doing this via measures to broaden the tax base, reduce informality, and simplify and modernize the tax system. It is expected that measures will

be implemented in FY22 to achieve an increase in collections of about 0.7 percent of GDP. Such measures are to focus on (i) the general sales tax system, where a standard rate of 17 percent is to be introduced while preferential rates and exemptions are to be minimized and (ii) the personal income tax

system, where various tax credits and allowances are to be rationalized and new taxpayers brought into the tax net. Previous governments have committed to similar targets and measures but failed to deliver. Will the current government deliver?

Chapter

4

The Covid-19 Pandemic

The Covid-19 Pandemic

Shahid Javed Burki

I will begin this chapter with a description of the point the United States has reached at the time of this writing – mid-July 2021. The United States experience has some relevance for Pakistan. A year and a half into the pandemic, the United States Center for Disease Control and Prevention issued new guidance according to which millions of Americans who had been vaccinated against the coronavirus that caused the dreaded Covid-19 disease could once again embrace some of the long-denied freedoms. People had been discouraged from freedoms such as gathering in small groups at home without masks. They were discouraged from going to stores or visit the homes of relatives and friends. The new guidance was more relaxed. Vaccinated adults could have mask-free dinners with vaccinated friends. Vaccinated grandparents could entertain at home or visit friends in their homes even if the children had, as yet to be vaccinated. As one newspaper reported, “the new recommendations are intended to nudge Americans onto to more cautious path with clear boundaries for safe behavior while acknowledging that most of the country remains vulnerable and many scientific questions remain unanswered¹.” What had changed most remarkably was the availability of effective vaccines in most parts of the world. They were developed first in the United States and then in China, India and Russia.

What was impressive with this effort was the speed with which it happened. Unlike several previous efforts at developing vaccines which took years – even decades – the corona vaccines became available within a matter of months.

Just as the Americans were making preparations to go back to normal life, data about the rapid spread of the delta variant caused a pause in the government's thinking about the future.

Along with scientists from various disciplines, historians have also been at work trying to understand how pandemics have evolved in the past, the way they spread and how they were conquered. Of the several historians researching and writing on global pandemics is Kyle Harper, a professor of classics and letters at the University of Oklahoma. His most recent book is *Plagues Upon the Earth: Disease and the Course of Human History*. We inevitably bring our anxieties and sensibilities to the study of the past. We also bring new tools and techniques to help us make sense of it,” he wrote an article on the work that currently engaged him. “The result is that even the most turned-over pages still tell us things we had not expected. Today, we rightly worry that our ecologically reckless ways will have repercussions, and it sensitizes us to perceive

dimensions of history that we had missed before, or passed by in much haste². One dimension previous examinations of past pandemics had missed is the interaction between animals and humans. There is a growing consensus among scientists that the coronavirus came from bats and somehow was picked up by human beings.

Most historians begin their stories with what has come to be called the Antonine Plague which was not a plague in the sense that it took heavy tolls later in human history. It was possibly a variant of smallpox caused by a virus belonging to a family of microbes that infected small mammals like rodents. The Romans believed that the disease was brought by their soldiers from the areas that make up the modern state of Iraq. It was, in other words, a case of collision between animals and human beings. The Roman “plague” had one more aspect common with the Covid-19 pandemic: it also took 2,000 lives a day which was the toll reached by the current pandemic when it reached its peak in the summer of 2020.

It all began in Wuhan and then went Global

What caused the Covid-19 pandemic, the disease caused by coronavirus, to surface in Wuhan, an industrial city of 11 million? The city is on the banks of the Yangtze River as it leaves the Three Gorges Dam and heads towards the Pacific. That is where the disease began is no longer debated. That the Chinese government was able to control the intensity of the disease in the large city is also accepted. What is not clear is the source of the disease. For months, the Chinese resisted world pressure to allow a team of foreign experts to travel to Wuhan, meet with local scientists, and interview some of the people who were struck by the disease and were admitted to scores of health institutions in the city. Beijing finally relented. A WHO team of 14 experts assembled from several countries who had expertise

in the field arrived in the city in January 2021 and spent 27 days researching. The team was assigned the task of determining the cause of the disease a year after it appeared and began to spread, first in China and from China to the rest of the world. “Some of the big questions, such as where the virus came from and how it was transmitted between species, have remained unexplained despite months of studies and investigations,” said Liu Jia, a doctor in the infectious diseases department at Wuhan Union Hospital. “It takes a lot of time and effort, and maybe a stroke of luck to find the answers,” he said³.

The team members were generally satisfied with their visit as were the Chinese authorities after a press conference in which the WHO scientists said that it was possible that the disease may have come from frozen food consumed by the city's population. According to one press report, “the team members considered the trip as a win mostly because they feel there is enough goodwill that talks and studies will continue. But they acknowledged there is too little information so far to answer critical questions.” The report quoted Peter Daszak, a member of the WHO team and the president of EcoHealth Alliance, who said that the trip was “emotionally draining, as he and the team came to terms with the trauma of the early days. The world doesn't realize, you know, that they were the first people to get the thing and they didn't know how bad it was⁴.”

The Spread of the Disease

The global death toll from Covid-19, the disease caused by coronavirus crossed the two million landmark by Friday, January 15, 2021, just over a year after the virus was first detected in the central Chinese city of Wuhan. The carnage was spreading faster by the middle of 2020 than at any other time in the course of the pandemic. It took more than nine months for the world to cross the mark of one million deaths in late September 2020. The United Nations Secretary General called the death-toll “mind

numbing” and an “agonizing milestone.” In just over three months the disease had claimed another million lives. And as the virus spreads it continues to evolve. One variant called the “Delta” was more contagious than the original and spread quickly around the globe. “Delta variant tightens its grip: U.S. infections up nearly 70% in one week,” headlined a report in *The Washington Post* published on July 17, 2021⁵.

The question of what went wrong with the global response to the pandemic was asked while the death rate was still rising. Laying out a yearlong cascade of failures, a World Health Organization convened a panel to find an answer. It was headed by Helen Clark, a former prime minister of New Zealand and Ellen Johnson Sirleaf, a former president of Liberia. It issued an interim report on January 19, 2021, a day before Joe Biden was sworn in as the United States president. According to one account the interim report of 34 pages “describes one failure leading to another, from the 'slow and cumbersome and indecisive' pandemic alert system to the years of preparedness plans that failed to deliver, to the disjointed and even obstructive responses of national governments.” The panel underscored its view that “despite decades of predictions that a viral pandemic was inevitable and years of committees, task forces and high-level panels aimed at preparing the WHO, reforms were slow to come.” The report also faulted public health officials for responding slowly to early evidence that people without symptoms could spread the disease. The panel found that countries that responded quickly and forcefully to the pandemic fared better even as the global economy lost more than \$7 trillion in output. “The interim report suggests that its final document will address more systemic changes facing the WHO, which operates by consensus of national governments and has no authority to enforce its rules. The report said there was a wide chasm between what was expected of the organization and how much money it receives.” Various government institutions

collaborated to produce a documentary, “Wuhan Days and Nights” which premiered nationwide on January 22, 2021 to mark the anniversary of the report on the appearance of the virus in the city. On January 20, 2020, China formally recognized that the virus was spreading between humans and closed down Wuhan three days later just before the Lunar New Year holiday. But an estimated 5 million people had already left the city for holidays. Wang Fei, a 43 year old driver from Wuhan, was the first casualty of the disease which was only diagnosed as having been caused by a SARS-like virus after he was approaching death.

According to an account in *The Washington Post* to mark the first anniversary of the discovery of the virus in the city, “experts say that by refusing to examine mistakes, authorities risk bungled responses to future crises. More sensitive questions remain unanswered, including whether the official death toll, of about 3,800 in Wuhan is correct. In December 2020, the Chinese Center for Disease Control and Prevention released the results of a survey in April 2020 that showed 4.4 percent of residents in Wuhan had antibodies for the virus, suggesting that about half a million people were infected. Authorities have only reported 50,000 infections in the city⁶.

Among the many hypotheses about the origin, two were inviting expert attention. Many scientists have speculated that the virus leaped from animals such as bats to humans, perhaps with an intermediate stop in another animal. This kind of zoonotic spillover has occurred before, such as in the West Africa Ebola outbreak in 2014. “But there is another pathway, also plausible, that must be investigated,” advised *The Washington Post* in an editorial. “That is the possibility of a laboratory accident or leak. It could have involved a virus that was improperly disposed or perhaps infected a laboratory worker who then passed it to others. Wuhan, with a population of 11 million, is a major center of virus studies in China,

with at least six facilities with BSL-3 laboratories for handling infectious agents. Published papers show that some of these institutions have been very active in coronavirus research. The most active is the Wuhan Institute of Virology where Shi Zhengli leads a research team that has extensively studied and experimented on bat coronaviruses that are very similar to the one that ignited the global pandemic.” Dr. Shi has conducted what is called “gain of function research.” This involves modifying virus genomes to give them new properties such as the ability to infect a new host species or transmit from one host to another more easily. Such research is controversial—a gain function experiment can create a danger that did not exist before. But the research might also help predict how a virus might evolve toward spillover, enabling the development of effective counter measures such as broad coronavirus vaccine. All the key virus databases managed by WIV went offline, starting on September 12, 2020. “We don't know where the pandemic began,” continued the Post's editorial. “But a major step toward finding the answer is to examine all the relevant databases and laboratory records, including those of the Wuhan Institute of Virology and elsewhere, and the clues they may hold⁷.”

Determining the origin of Covid-19 inevitably invited conspiracy theories. The one that gained a fair amount of traction was by a Chinese dissident, Li-Meng Yan. Educated in China where she received a Ph.D. she went to Hong Kong and from there she sought refuge in the United States. In September 2020 she published an explosive paper claiming that China had created the deadly coronavirus in research lab which she claimed would be used as a bio-weapon. The work was posted to the scientific research repository Zenodo without any review on September 14, 2020. It exploded on Twitter, YouTube and far-right websites with the help of such conservative influencers as Stephen K. Bannon who repeatedly pushed it on his online show “War Room:

Pandemic.” According to Craig Timberg, writing for The Washington Post, scientists from John Hopkins, Columbia, MIT, Harvard University and other leading American universities moved with rare speed and concluded that that the study was deeply flawed⁸.

All viruses accumulate mutations over time; most of the mutations disappear, but those that confer an advantage to the virus—greater contagiousness, for example -- may take root and spread. A more transmissible variant, in particular, is likely to spread quickly through a population. Several variants now are being urgently studied as some have been shown to be even more infectious than the one that, at one point, forced about a billion people to shelter at home and observe some form of social distancing. The variant called B.1.1.7 was first identified in Britain where it became the primary source of infections, accounting for more than 80 percent of new cases diagnosed in London and at least a quarter of cases elsewhere in the country. According to one account, “one variant that stymied efforts to contain outbreaks in Britain in the fall is now responsible for a flood of patients that is stretching the nation's hospitals to the breaking point⁹.” According to the World Health Organization, the variant to the original virus-form was detected in 22 European states. More than 230 million people across the continent had come under full national lockdowns. If the variant were about 50 percent more contagious, as suggested by the data from Britain, it would become the predominant source of all infections in the United States. As already mentioned, another variant named “Delta” had spread quickly and by the middle of July 2021 was reversing the declining trend of the spread of the disease in the United States.

There were noticeable differences in the impact of the virus in different parts of the world. The response of the populations was influenced by the policies adopted by their governments. The United States,

with 400,000 recorded deaths by the middle of January 2021 had the worst record, followed by Brazil and India. By the middle of 2020, the Indian death toll was estimated at 152,000. The number of dead in Pakistan was estimated at 10,908; 4,387 in Punjab, 3,769 in Sindh, 1,773 in Khyber Pakhtunkhwa, 450 in Islamabad and 190 in Baluchistan.

As was the case for most countries, the burden of deaths in the United States had not fallen equally across racial, ethnic lines and geographic regions and there was concern that vaccines will not reach the hardest hit communities, where access to health services was limited and distrust is rampant. One of the social consequences of Covid-19 will most likely be reversing the recent trends in reducing the incidence of poverty. Not only will it push more people into poverty but also markedly increase the disparity. In densely populated states of South Asia, urban-rural income gap would widen.

The use of facial masks and social distancing were two of the most effective ways of containing the spread of the virus. These practices were hard to follow in societies where culture and religion presented serious obstacles. In early and mid-January 2021 hundreds of thousands of Hindu pilgrims gathered on the banks of the Ganges River as part of the Kumbh Mela, an annual pilgrimage. The Indian state now drifting rapidly towards the adoption of Hindutva as the ideology of governance could not interfere with the observance of the mela. Contrary to this, the Saudi Kingdom which observes Islam and its practices as the most important elements in the way it governs, found it possible to ban foreign attendance at the annual haj pilgrimage in 2020 and allowed a highly restricted entry in the summer of 2021.

The availability of vaccines developed mostly in the United States and Britain but also in China and India gave the governments around the world a new tool to

deal with the pandemic. The Donald Trump administration in the United States would provide an interesting case study to future historians of how one of the world's most advanced nations could bungle the response to such a national emergency as the Covid-19 pandemic. Its approach was marked by logistical confusion, shortage of doses at a number of critical hotspots, unequal distribution, bureaucratic hurdles, and politicization of some aspects of the response. In the past year, even the decision of whether to wear a mask became politicized. A woman arrested following her participation in the January 6, 2021 insurrection at the United States Capitol, the home of the United States Congress, had made her opposition to the wearing of the mask her signature political issue. It was that took her to the Capitol. The wearing of masks was opposed by such politicians as Senator Ted Cruz from Texas.

The arrival of the variant became a real worry in the United States as President-elect Joe Biden prepared to take the oath of office on January 20. The Center for Disease Control and Prevention made a dire forecast that the nation was in an urgent race to vaccinate as many people as possible before the variant spreads across the country. According to one assessment, “the worrisome warning—hedged by limited data about just how prevalent the variant has become—landed at the end of a week when the nation's nascent vaccination campaign appeared to be scattershot and still disappointingly elusive for most Americans. It was hampered by confusion over eligibility for people beyond frontline health workers, miscommunication over increasingly limited supplies as demand grew and by bungled rollouts from state to state¹⁰.”

CNN reported in mid- October 2021, that hospitalization has decreased and Covid-19's Delta variant deaths have lessened. When asked if the Covid pill developed by Merck, 'Molnupiravir', can be a substitute for vaccination, Dr. Fauci replied that so far the pill has worked better than a placebo. But the

data is still inconclusive.

He further stated that to prevent a resurgence, people will have to get vaccinated and it has to be mandated, especially in schools, colleges and universities and airlines. Otherwise, a new variant can emerge and pose a major threat. When asked if Merks' pill can be a substitute for vaccination, he replied in the negative. As for a “mix and match booster”, FDA is looking at the data and a regulatory decision by CDC is expected sometime in November 2021.

Covid-19: The Biden Approach

In a wide-ranging address by President-elect Joe Biden, the attack on the pandemic figured prominently. He promised to spend \$1.9 trillion on reviving the economy. Of this, more than \$400 billion will be spent to combat the pandemic and accelerate vaccine distribution. By January 2021, between one and two percent of the world population had developed Covid-19 symptoms and perhaps as many as 5 percent more had asymptomatic infections. Covid-19 tends to strike certain groups more severely, including African Americans, Latinos, people with certain blood types, and people who were overweight or diabetic.

Covid-19 pandemic affected the citizens in many different ways. Among them was hunger and famine. Because of the pandemic the World Food Programme, the branch of the United Nations responsible for delivering lifesaving food assistance, was expected to need to serve 138 million people in 2021 -- more than ever in its history. The rise in hunger is “due to what I call the three Cs—'conflict, Covid and climate'—said Steve Taravella, a WFP spokesman. We don't talk about the word 'famine' loosely but with famine looming in several countries at once, we're facing a genuine crisis “The Agency was expected to raise only half of the \$15.1 billion it projected it would need in 2021¹¹. Hunger resulted from Covid-19 was not confined to

poor nations. In the United States, Census Bureau data from mid-November 2020 showed that about 26 million adults reported did not have enough to eat. This was because of lockdowns in various places in the country that caused job losses. Emily Farr who works on food security issues at Oxfam said that her organization warned in 2020 that more people could die of hunger globally than from coronavirus infections.

Even after it had been around for more than a year, Covid-19 is not well-understood disease. One aspect that interested and worried the experts was its likely impact on the brain and possibly cognitive decline. In a paper published on January 5, 2021, The Journal of the Alzheimer's Association announced the launch of a study that would follow 40,000 survivors aged 60 and above who had become ill but survived from the disease. “Abnormal brain imaging has emerged as a major feature of Covid-19 from all parts of the world,” wrote the authors of the paper. According to one account, “the first pandemic in modern times in which scientists noted the long-term effects of a respiratory illness on the brain was the 1918 flu epidemic. From the 1920s to the 1960s, they observed an increase in encephalitis lethargica, a brain affliction; Parkinson's disease; cognitive decline; and psychosis¹².” The planned study will collect information over next two to three years, with initial results expected in early 2022.

Not satisfied by the work done by the WHO in investigating the origin of the pandemic, President Biden asked his country's intelligence agencies to study the matter once again. A statement was issued by the White House on May 26, 2021 according to which the president said he had “asked the Intelligence Community to redouble their efforts to collect and analyze information that could bring us closer to a definitive conclusion, and report back to me in 90 days. As part of that report, I have asked areas for further inquiry that may be required, including specific questions for China. I have also asked this

effort to include work by our National Labs and other agencies of our government to augment the Intelligence Community's efforts. And I have asked the Intelligence Community to keep Congress fully appraised of its work. The United States will also keep working with like-minded partners around the world to press China to participate in a full, transparent, evidence based international investigation and provide access to all relevant data and evidence.”

Tackling the Disease in a Diverse World

A study commissioned by the International Chamber of Commerce and made public on February 1, 2021 came to some very disturbing conclusions about the inequity in the use of Covid-19 vaccine around the world. In the most extreme scenario—with rich countries almost fully vaccinated by the middle of 2021 and poor nations largely shut out—the global economy would suffer losses exceeding \$9 trillion, a sum greater than the annual output of Japan and Germany combined. About half of this loss would be absorbed by wealthy countries. According to the most likely scenario, developing nations would have half their populations vaccinated by the end of 2021. In that case, the world economy would still need to absorb between \$1.8 trillion and \$3.8 trillion. More than half of the main economic loss would be concentrated in rich nations. “Clearly all economies are connected,” said Selva Demiralp, an economist at Istanbul's Koc University and one of the authors of the study. “No economy would be fully recovered unless the other economies are also fully recovered. This was the logic behind a global philanthropic initiative known as the ACT Accelerator which is aimed at providing pandemic resources to developing countries and has secured commitments for less than \$11 billion toward a \$38 billion target. At the center of the study is the globalization of international trade. Trade now involved not only finished products but parts that go into them and are made in several countries. Of the

\$18 trillion worth of goods that were traded in 2020, intermediate goods represented \$11 trillion. The study found that the worst industries would be automotive, textiles, construction and retail where sales could decline by more than 5 percent. Labor-exporting developing countries such as the Philippines, Pakistan and Bangladesh would be hurt as the economic downturn resulted in a sharp decline in the price of oil. A significant proportion of these workers are in the labor-short, oil exporting countries.

Developing countries were hit by the pandemic when they were already faced with a serious debt crisis, both internal and external. One way out would be to have institutions such as the IMF and the World Bank provide relief. But the promised amount did not materialize in part because of the lack of interest by the former Trump regime. This changed with the Biden administration. “No economy, however big, will be immune to the effects of the virus until the pandemic is brought to an end everywhere,” said John Denton, secretary general of the International Chamber of Commerce. “Purchasing vaccines for the developing world isn't an act of generosity by the world's richest nations. It is an essential investment for governments to make if they want to revive their domestic economies¹³.”

In a meeting of G20 in 2020 there was agreement among nations to increase IMF's SDR reserves to provide additional financial support to less developed countries. The initiative had the support of 189 IMF member countries but was blocked by the previous Trump administration on the ground that 70 percent of the increase would find its way to rich nations. Established as an international reserve, the SDRs can be converted into five major currencies, including the dollar or Japanese yen. Janet Yellen, Treasury Secretary in the Biden administration was not enthusiastic about following the thinking of her predecessor, Steven Mnuchin in the Trump administration. In an attempt to force Yellen's hand, Democratic Senators Richard Durbin

and Bernie Sanders pushed legislation to increase the amount of SDRs in circulation by 2 trillion or \$2.9 trillion. Additional IMF aid could help some of those suffering the most from the Covid-19 pandemic and its economic consequences. The Senators sent a letter to Secretary Yellen to provide the help that would “solve the urgent crises of poverty, hunger and disease being experienced by hundreds of millions of people worldwide.” UNICEF estimated that 2 million children younger than five could die in 2021 because of lack of health care and nutrition with more than 140 million being added to the ranks of the global poor because of economic deterioration caused by Covid-19. Growing indebtedness the world over poses a problem that could affect future world growth, in particular of the countries in the developing world.

Covid-19 in South Asia

As a region, South Asia was less affected by the Covid-19 pandemic than other areas in the developing world. The disease's impact was not as severe as was the case in several parts of Africa and Latin America. Nepal was the first South Asian country to report a confirmed case of Covid-19. This was a man who returned from Wuhan on January 2020. As of July 2020, at least one case of the disease was reported in every South Asian country. Some of the South Asian governments instituted various levels of restrictions on international travel; some completely sealed off their land borders and some grounded most international flights. In the middle of May 2020, India overtook China in terms of the number of Coronavirus cases. On June 4, Pakistan became the second South Asian nation to follow China, subsequently, nine days later Bangladesh pursued the same course. As I will discuss in the sections on India and Pakistan, public policy played a large role in how the disease developed in South Asian nations. But there was also an attempt to coordinate government responses among the countries of the region. The South Asian Association

for Regional Cooperation, or SARRC, was used as the mechanism for coordination. On March 15, 2020, Narendra Modi, the Indian prime minister proposed a joint emergency fund to deal with the pandemic and pledged to provide seed money amounting to \$10 million. Sri Lanka followed with \$5 million, Pakistan with \$3 million, Bangladesh with \$1.5 million, Afghanistan and Nepal each with \$1 million. These contributions funded the SAARC Covid-19 Emergency Fund. The main aim of the emergency fund is to mitigate the risks associated with the pandemic in the region. South Asia is one of the most densely populated regions in the and is considered highly vulnerable to any large-scale outbreak of an infectious disease such as Covid-19.

The Indian Situation

Travelers brought Covid-19 to India. Some of those who were initially the victims of the disease had returned from China. Some had come back after pilgrimages or having attended large religious gatherings such as the one organized by the Indian Tableeghi Jammah in Delhi. By May 2, 2021, the country's total of 26.8 million infections but still lagged the United States with more than 33 million although it was catching up with America. Public policy was largely responsible for the country's poor performance. When it appeared that the disease had begun to take a heavy toll in the country, Prime Minister Narendra Modi, shut the country down completely. This action was taken on March 22, 2020 by the prime minister. In a dramatic televised address to the nation, Indians were given a few hours to adjust to the economic and travel restrictions that were being imposed. Most economic, commercial, and financial enterprises were shut down and the railway and bus systems were suspended. The pain inflicted on the people was enormous and had no precedence in history. Since several sectors in major economic centers in the country such as Mumbai and Delhi relied on migrants to provide labor, millions of people were left without jobs. Since there

is no formal job security, unemployment meant a total loss of income for millions of migrant workers. The only available option was to return to the villages from where they had originally come. Hundreds of thousands of people hit the road and with means of transport having been shut down, that meant going on foot, often hundreds of miles, to reach the homes they had left to get employment in the major centers of industry, commerce finance. Future research would show whether the action taken by the Modi government helped contain the spread of Covid-19 pandemic but it played havoc with the Indian economy. Numerous rating agencies downgraded India's GDP projections for 2021 financial year to negative figures signaling a recession, the severest since 1979. In 2020, the rate of GDP growth was estimated at -7.3 percent compared to 4.2 percent in 2019 and 6.1 percent in the year before. The recession was attributed to the two-month long lockdown of the economy in the spring of 2020.

While the official count of the number of deaths that could be attributed to the pandemic was 400,000, a study document released by the Washington-based Center for Global Development placed the number of deaths at 3 to 4 million. “The deaths are likely to be in the several million, not hundreds of thousands, making this arguably India's worst human tragedy,” said its authors one of whom is a former chief economic adviser to the government of Prime Minister Modi. The study was released July 20, was authored by Arvind Subramanian who after leaving the Modi government is a senior fellow at Brown University. Abhishek Anand and Justin Sandefur are the study's coauthors. “The spirit of this paper is not to privilege any one estimate but simply to lay them out with transparency,” said the authors. “Given all the difficulties getting at the true estimate will be difficult and only by piecing data from different sources will we improve our understanding of the reality of the pandemic¹⁴.”

Vaccinating the people was recognized as the most

effective way of controlling the spread of Covid-19. Washington, for instance, had rolled out a wide vaccination campaign that had sent new infections plummeting. India was way behind the United States and was lagging behind many countries in the developing world. Only about 3 percent of the country's population had received two vaccine doses. The Modi government had made several mistakes in handling the crisis including the failure to sign advance purchase agreements to buy vaccines in bulk. Politics also played a role in worsening the Indian situation. Prime Minister Modi and several of his associates addressed large election rallies in the spring when several Indian states went to the polls. Individual states did not work out their approaches in consultation with the federal authorities. According to one newspaper account, “in late May, the Delhi government was considering relaxing its Covid-19 restrictions six weeks after a devastating coronavirus surge rocked the Indian capital, with a pledge to ramp up vaccinations to protect the city's more than 20 million people from another wave¹⁵.”

On January 16, 2021 India launched the world's largest inoculation drive that was meant to reach most of the country's 1.3 billion people. The drive began with 300,000 health workers taking the vaccine manufactured in Pune, the city that housed the world's largest vaccine maker. Two manufacturers in the city were involved in producing the vaccines: the Serum Institute of India was making the vaccine developed by AstraZeneca and Oxford University while the National Institute of Virology was manufacturing a locally developed drug – Covaxin, a vaccine developed by Bharat Biotech, a local pharmaceutical company. The data from the trials of the local brand was not revealed, creating serious doubts about its efficacy. One state—Chhattisgarh—refused to accept the vaccine shipments but the government led by Prime Minister Narendra Modi was taking great pride in what the country had achieved. India aimed to do nothing less

than “save humanity,” Modi said in an online address to the Indian diaspora at the time of the launch. The Serum Institute promised to provide 200 million doses to Covax, an international health group that had negotiated vaccine purchases for less wealthy countries. Serum's chief executive Adar Poonawala aimed to distribute a billion doses by the end of 2021 to be given to people in poor nations¹⁶.

The Situation in Pakistan

The administration headed by Prime Minister Imran Khan in Pakistan looked at the way the Covid-19 situation was handled across the border in India and drew several lessons. The most important of these was not to shut down the economy and discourage the movement of people. The prime minister was under considerable pressure to follow the Indian example but in two televised speeches given in the spring of 2021, he argued that closing the economy would hurt the very people such an approach was supposed to help. Poor people needed jobs; enforcing unemployment as a way of tackling the spread of Covid-19 would make the poor poorer. His government adopted the opposite approach. It adopted a program aimed at providing the poor with jobs by giving subsidies to those who employed people with low incomes and low levels of skills. A major tree-planting program that had been successfully launched in the Province of Khyber-Pakhtunkhwa Khan's party had managed for several years was adopted nationwide. It created tens of thousands of jobs in addition to reducing the emissions of greenhouse gases.

The second lesson drawn from the Indian experience was to rely more on local administrations to manage the pandemic rather than follow the Modi government's use of the authority granted by the Indian Constitution to the central government located in New Delhi. Islamabad worked closely with the governments in the provinces; the latter in turn relied on the officials working in the districts. Imran

Khan also made effective use of the military in enforcing some of the measures that were known to work to limit the impact of the pandemic. The security forces were deployed in large cities to discourage people from congregating, especially during religious holidays.

Pakistan's economy did not suffer as much as that of India as the country dealt with the pandemic. There was a slowdown but it was less severe than was the case with India. The government is expecting a reasonable rate of economic growth in 2021 and the years beyond.

However, there was a consensus among those who watched Pakistan, that it needed to invest more in improving healthcare. According to a report in The New York Times, “many poorer countries manage to have better health outcomes than Pakistan by focusing on primary care and strengthening their public health capacities. Allocating resources strategically and prioritizing hard-to-reach areas and marginalized groups can help ensure that access to services is not determined by geography or income. Active disease surveillance and prevention can blunt outbreaks, or at least stop health systems from becoming apathetic and dysfunctional when crises do occur. The vexing failure that can follow these steps is nowhere more visible than it is Ratodero,” the Times journalist wrote after she visited the city in Sindh to collect material for this long article. “As of November 30, an astonishing 1,132 children in the city and its environs were H.I.V. positive, most of them under age 13. To put this in perspective, the equivalent figure for the United States is less than 2,000; the American population, 330 million, is a thousand times that of Ratodero metropolitan area.” To the list of efforts indicated by the Time's correspondent, I would add special attention to women in particular those living in the countryside. Bangladesh has done well demographically by improving the status of women in society. The situation concerning to women

remains poor. According to Zahid Hussain, a journalist and an author, writing recently stated, “around 14,850 kidnapping cases involving women had been reported in Punjab in one year. Figures for three years from 2014 to 2017 also showed that several women had been kidnapped with a vast majority being raped. Some were also killed. The countrywide numbers were similarly atrocious.” Research has shown that low status of women results in high population growth rates. Bangladesh and Pakistan have treated their women differently. At the time Pakistan was born and Bangladesh was the country's eastern wing, its population at 40 million was 40 million, 25 percent more than West Pakistan's 32 million. Now more than 70 years later, Pakistan at 221 million is 34 percent larger than Bangladesh's 165 million.

Vaccines to the Rescue

It would certainly help if the relatively more advanced countries in the developing world were able to develop and produce their vaccines. Both China and India were working on doing that; the Chinese seemed more advanced than the Indians, although the latter had the world's largest vaccine-manufacturing facility in the city of Pune. Since early in the course of the pandemic, Xi Jinping, the Chinese president, pledged that China would help the developing world to recover from the scourge. In a speech at the World Health Assembly, the Chinese promised that his country would promote global vaccine cooperation. However, its leading contender CoronaVac, produced by the Beijing-based Sinovac, was reported to have done less well than expected. It was used in a number of developing countries including Brazil and Pakistan. Its efficacy was reported at only about 50 percent. The Chinese fought back. Hu Xijin, The Global Times editor, wrote an article published to coincide with the first anniversary of the discovery of the virus in Wuhan that the western media was out to destroy the reputation of the Chinese vaccine and China needed

to fight back. The article was followed by state outlets publishing pictures of world leaders including Joko Widodo, the Indonesian president, and Dubai's Shiekh Muhammad bin Rashid al-Maktoum receiving Chinese vaccine. The Russians also came up with their own vaccine which, like the Chinese version, was developed by using inactivated dead viruses unlike the messenger-RNA vaccines made by Pfizer-BioNTech and Moderna. “The Chinese experts' warnings were mild compared with state and influential social media where continuous reports and theories gained traction,” wrote Gerry Shih in a story in The Washington Post. “Chinese factories have been contracted to produce millions of doses of Pfizer-BioNTech's vaccine, and it is still possible that China could buy the vaccine to inoculate elderly citizens because the Chinese vaccines have not been tested on people over 59 years¹⁷.”

There were differences in country and regional responses to the use of vaccines to deal with Covid-19. The Lunar New Year, 2021 was the second time that the state took action to reduce the number of people who traveled to be with their families during the Lunar New Year. According to one account, “for months, officials have discouraged travel during the festival by handing out cash subsidies, free phone data usage, and cash for coveted residence permits for cities. China's State Council instructed officials 'to guide the public' to celebrate 'on the spot' rather than crisscross the country.” This year's travel rush was expected to be the quietest in more than a decade. Transport officials expected 1.2 billion trips, compared with 3 billion in 2019 and drop of more than 20 percent from 2020. The restrictions imposed by authorities were more demanding in the countryside. “This remarkable ability to centralize—of top-down control—also means that local governments are always uncertain as to what the center wants,” said Joe K. Yasuda, an assistant professor at Johns Hopkins University who focused on regulation and bureaucratic politics in China. “The central-local relationship tends to swing to extremes pre-and-

post crisis. Post crisis the incentives are all such that being risk averse is better for your political survival¹⁸.”

Covid-19 Pandemic and Reshaping of the International Order

Although Covid-19 originated in the Chinese city of Wuhan in late 2019, it quickly spread across the globe. By the early spring of 2021 it had reached almost all parts of the globe. Its intensity differed among countries; the data collected and disseminated by the Johns Hopkins University showed enormous differences among nations. Generally, the developed world suffered more than those that were generally referred to as countries in the developing world. Siddhartha Mukherjee, an India-American oncologist who wrote *“The Emperor of all Maladies”*,¹⁹ contributed an article to an early March 2021 issue of The New Yorker which described living conditions in Dharavi, a highly congested slum in Mumbai, on India's western coast. “A million residents live in shanties, so packed so together that they can hear each other across the walls that separate them. Conditions of life in the slum met all the circumstances which epidemiologists in the West had identified as causing the spread of the pandemic. These findings had influenced the making of public policy for dealing with Covid-19. The United States government and those in Europe advised – sometimes mandated – the wearing of facial masks. Frequent washing of hands was recommended as was social distancing. The latter meant maintaining a distance of at least six from other people. When effective vaccines appeared, the guidance issued by agencies such as America's Center of Disease Control and Prevention encouraged people even if they were vaccinated to observe the old guidelines. The CDC was of the view that “herd immunity” was the only way of stopping the spread of the disease. That would happen only when some 80 to 90 percent of the population had been vaccinated or exposed to the virus.

“And there lies an epidemiological mystery,” wrote Mukherjee in The New Yorker article. “The usual trend of death from infectious diseases – malaria, typhoid, diphtheria, H.I.V. – follows a dismal pattern. Lower income countries are hardest hit, with high-income countries the least affected. But if you look at the pattern of Covid-19 deaths reported per capita – deaths, not infections – Belgium, Italy, Spain, the United States, the United Kingdom are among the worst off. The reported death rate in India, which has 1.3 billion people and a rickety, ad-hoc public health infrastructure, is roughly a tenth of what is in the United States.” Mukherjee had some explanations. The age structure of the population may be one reason since the young are less affected than the old. “The Covid-19 pandemic will teach us many lessons – about virological surveillance, immunology, vaccine development, and social policy, among other topics. One of the lessons concerns not just epidemiology but also epistemology: the theory of how we know and what we know²⁰.”

Since Covid-19 had easily crossed international borders, it was inevitable that nations would work together to come up with solutions that needed cooperation. Promoting and guiding cooperation among nations was the main responsibility of the World Health Organization that operated out of Geneva. The effectiveness of the WHO was compromised when former President Donald Trump first stopped funding it with the American share to which it had committed and then pulled out of it altogether. President Joseph Biden, Trump's successor in the White House, brought the United States back into the organization and resumed its funding. He also used the need for collective action to promote an organization among four nations to contain the spread of the disease.

On March 11, President Biden invited the heads of governments of Australia, India and Japan to attend a “virtual” meeting with him to write a program that

would provide the four countries to work to prevent the spread of the pandemic. Until the Arrival of Biden in the White House, this arrangement among the four countries was informal. It went under the name of the “Quad.” President Biden made the arrangement more formal. It was stated that the main reason for the four leaders coming together virtually was for them to work together to prevent the Covid-19 from doing more damage to the global system. However, it was obvious that the more important reason for the get together was to contain the spreading influence of China. The only official communication issued after the meeting was an article written by the four leaders for publication by the newspaper, The Washington Post. In the article titled “Our four nations are committed to a free Indo-Pacific region,” the leaders recalled the crisis and stated, “In December 2004, the continental shelf of the coast Indonesia shifted two meters, creating one of the largest tidal waves in modern history and nearly unprecedented humanitarian crisis in the around the Indian Ocean. With millions displaced and hundreds of thousands killed, the Indo-Pacific region sounded a clarion call for help. Together, our four countries answered it²¹.”

With climate change and a raging pandemic hitting all parts of the world, the Quad leaders once again called for close collaboration among them. Although they did not mention what they saw as a threat posed to them by China, it was clear that its rise was in their mind and collective consideration. “Over these past months, each of us had grieved the suffering that our people and the world have endured. But in this dark hour, our partnership offers a spark of hope to light the path ahead. Our foundations of democracy and commitment to engagement unite us. We know we can provide for the safety and prosperity of our people at home by confronting global crises together with purpose and resolve. We summon from tragedy the strength and resilience to unify and overcome. And we recommit ourselves, once again to an Indo-Pacific region that is free,

open, secure and prosperous” concluded the Quad leaders in their newspaper article.

If Beijing was hoping for a lighter touch in relations with America under President Joseph Biden compared to the one applied by Donald Trump, his predecessor, that was not happening. The new president brought focus to Asia as the cornerstone of America's approach to the world adopted by President Barack Obama. Trump's “America first” approach meant going alone. Biden is using the opportunity created by the Covid-19 pandemic to walk in step with allies in Asia. To this end he followed the Quad virtual meeting by sending his Secretaries of State and Defense to Japan and South Korea. From there the Defense Chief was to go to India. These visits were in anticipation of high-level meeting with the Chinese at Anchorage, Alaska.

Vaccine Politics had International Consequences

While the European Union stumbled in the approval process, Russia's Sputnik and China's Sinovac vaccines were looking to manufacture their products in Europe. Speaking to the Atlantic Council on February 5, 2021 French President Emmanuel Macron called China's vaccine efforts a clear “diplomatic success” which is a little bit humiliating for us”. He and German Chancellor Angela Merkel expressed their openness to using vaccines from Moscow and Beijing if the E.U. regulatory approval is granted²². There were many differences among rich nations in the way they approached the Covid-19 crisis. Britain was an interesting case study about how the government approach changed over time. Prime Minister Boris Johnson's handling of the crisis was “riddled with bluster, broken promises, and devastating results,” wrote Samuel Earle, a British journalist. More than 120,000 people have died here, the highest total in Europe and, per capita, one of the worst death rates in the world.” After making all these mistakes, the Johnson administration got

right the politics of vaccines. The British government was prompt in ordering the Pfizer and Astra-Zeneca vaccines and the country's national regulator was the first in the world to approve both²³.

Conclusion

To understand where Pakistan is today with respect to the Covid-19 pandemic, we should look around the world. This needs to be done not only to draw lessons from what was done right and what was done wrong by policymakers in different parts of the world. We need also to be aware of what science and scientists are telling us about the future of disease. This is the case in particular about understanding the behavior of the virus's "Delta" variant. That said, I would like to note that the Pakistani government has done well compared to what has occurred across the border in India. A recent report prepared by some scholars of Indian origin – one of them had held the position of Economic Advisor to the government of Prime Minister Narendra Modi – has calculated that the number of deaths associated with the virus in India is ten times of what has been reported by the government. The virus killed 3 to 4 million people rather than 300,000 as claimed by the Indian authorities.

The Covid-19 pandemic will remain with the world for some time. As I write this in end July 2021, new virus strains have appeared that have set back the effort to contain the disease. It is not clear whether the vaccines that are being used to manage the crisis will be fully effective against these strains. While the global economy has begun to recover from the shock delivered to it by the disease in 2020, it is hard to predict what would happen in the future. Scientists now worry that their expectation that by the end of 2021, the pandemic may be heading towards an end may not turn out to be the case. Francis S. Collins, director of the National Institute of Health is not surprised by the rise of infections not just in the United States but across the world. Coronavirus

infections in the United States rose nearly 70 percent in a single week in the middle of July 2021.

Several states were rethinking their strategies for dealing with the pandemic. One good example of this is the state of Singapore. "Our people are battle weary," wrote a group of Singapore ministers in an opinion essay in *The Strait Times* in June. "All are asking: When and how the pandemic ends²⁴?" Singapore has fully vaccinated 49 percent of its population and has cited Israel, which is further ahead, as a model. Israel has focused on severe illness, a tactic that officials have called "soft suppression."

There is a growing consensus around the globe that people should not expect life to return to normal. Scientists still do not fully understand what is called the "long Covid" – the long-term symptoms that hundreds of thousands of previously infected patients are still grappling with. They are also uncertain about the duration of the immunity provided by vaccines and how well they protect against the variants to the virus that struck a year and a half ago. Much of the developing world – and that includes Pakistan – continues to face rising infections, allowing the virus the opportunity to replicate, which then increases the risk of more mutations and spread. Only 1 percent of people in low-income countries have received a vaccine dose, according to the *Our World in Data* project. Several countries have decided to give up on what is called the zero-Covid approach.

Examples of appropriate public policy could be found from the way different countries are making adjustments to new developments that come every day. In Britain, for example, in the absence of rules, the government was urging people to use "personal responsibility" to ensure safety. Health Secretary Sajid Javid – who tested positive for the coronavirus in the middle of July – said that the country needed to "learn to live with the virus." That is despite polls

suggesting that the public prefers a gradual approach to reopening. It is important for policymakers to remain alert and follow developments inside their countries as well as outside.

Chapter

5

**A Comparative Analysis of the
Impact of Covid-19 on Selected
Social Sectors**

A Comparative Analysis of the Impact of Covid-19 on Selected Social Sectors

Shahid Najam & Atr-un-Nisa

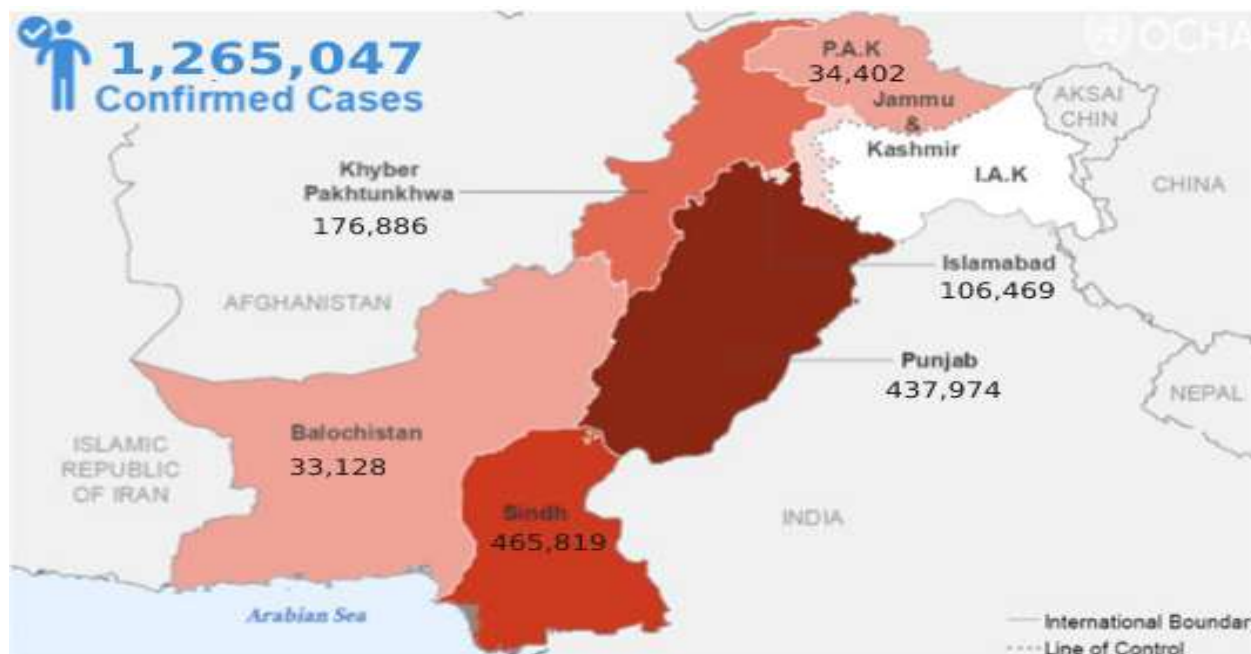
Introduction

The Covid-19 pandemic has inflicted a heavy blow on humanity worldwide causing a dramatic loss of human life and unprecedented challenges to public health, food systems, the job market and overall human development. The economic and social disruptions of the pandemic have been devastating widening multiply the incidence of inequality, pushing another 131 million people to abject poverty¹ and enhancing the number of undernourished people from current estimates of nearly 690 million to around 822 million by the end of the year². Millions of enterprises faced existential threats while close to fifty percent of the 3.3 billion global workforce is likely to lose their livelihoods. The daily wage earners and workforce in the informal economy particularly suffered due to recurrent lockdowns and fragility of social safety nets and poor health care infrastructure.

The pandemic originated from China in late 2019 and rapidly spread from its epicenter in Wuhan to other countries, resulting in over 4.87 million deaths as of 15 October 2021. The total number of confirmed Covid-19 cases globally has exceeded 239 million with more than 6.49 billion doses of vaccines administered. The US (44.7 million), India (34.03 million) and Brazil (21.59 million) continue to be the most affected countries in the world in

confirmed Covid-19 cases followed by UK (8.31 million), Russia (7.92 million), Turkey (7.57 million), France (6.85 million), Iran (5.75 million) and Argentina (5,26 million)³.

Pakistan has been inflicted by a surge of various waves and strains of Covid-19 virus since the inception of the pandemic in February 2020. During the third wave, the daily Covid positive cases reached a peak of 6,127 on 17 April 2021 with 149 deaths and the mortality ratio as high as 2.38 percent. The third wave tapered off towards end June with daily confirmed cases as low as 735 and 23 deaths on June 28. The fourth more deadlier wave was triggered by the British Alpha variant, South African Beta Variant, Indian Delta variant and California Epsilon variant of the virus. On 6 August, the National Command and Operation Centre's data showed a sharp rise in the positivity rate at 8.24⁴ percent. The fourth wave reached a peak on 11 August with 4,935 daily confirmed cases and 102 deaths. As of 18 October 2021, the total number of infected cases in Pakistan is 1,265,047, while 28,280 people have lost their lives fighting the deadly disease and 1,210,897 have recovered. As is evident from Figure 5.1, the highest number of cases were reported in Sindh (465,819) followed by Punjab (437,974) and Khyber Pakhtunkhwa (176,886).

FIGURE 5.1**Incidence of Coronavirus in Pakistan**

Source: <https://covid.gov.pk/> accessed on 18th October 2021

The incidence of the pandemic is tapering off as is evident from the daily affections of 663 and 11 deaths on 17 October 2021. In the proximate regions including South Asia and the Middle East, the delta variant engendered a significant surge in coronavirus outbreaks affecting 15 out of 22 countries (WHO's Eastern Mediterranean Region). India and Bangladesh in South Asia also witnessed a major rise after a declining trajectory of the third wave.

The spread of the new variants is impacting the countries most that are experiencing dangerously low levels of vaccination coverage and inequitable vaccine administration.

Vaccination Drive

The vaccination drive is globally underway in order to contain the spread of the pandemic. There are,

among others, 12 varieties of vaccines in use as of September 2021 as depicted in Table 5.1 which also gives a comparative analysis of the type, dosage and storage requirements of these vaccines⁵:

Most of the developed countries have either met the vaccination targets or are steadily progressing to achieve the same. The situation in the majority of the developing countries, however, is alarming. For example, at the time of writing this Chapter (Oct 2021), the U.S. has already started the rollout of even booster shots while the vaccination rate in low-income countries stands at 2.2 percent⁶. A number of African countries, from Libya to Burundi and Tanzania to Madagascar, continue to remain short of supplies. The same is the situation in Central Asia and countries such as North Korea, Cuba, and Bosnia and Herzegovina⁷.

Apart from availability, the other challenges which

hamper these countries to the launch of effective vaccination campaign include resource constraints, fragile health systems, poor logistics infrastructure

and dysfunctional policy and institutional apparatus to reach especially the most vulnerable populations. Added to this is the misinformation campaign in

Table 5.1

COVID-19 Vaccines Comparison

 COVID-19 Vaccine Comparison									
	Country	Type	Doses	Effectiveness	Storage Temp.	EST. Cost	WHO Approved	Approved in Children	Booster Approved
Pfizer/ BioNTech		mRna	2x	95%	-70 C	\$19.5	✓	✓	✓
									
Moderna		mRna	2x	95%	-20 C	\$32-\$37	✓	✓	TBD
Oxford/ AstraZeneca		Viral Vector	2x	90%	2-8 C	\$3-\$4	✓	TBD	✓
									
Sputnik V		Viral Vector	2x	92%	2-8 C	\$10	TBD	TBD	TBD
CoronaVac		Inactivated Virus	2x	65%	2-8 C	\$13.6-\$60	✓	✓	✓
									
Sinopharm		Inactivated Virus	2x	78%	2-8 C	\$75	✓	✓	✓
Johnson & Johnson		Viral Vector	1x	66%	2-8 C	\$10	✓	TBD	TBD
									
Novavax		Subunit Vaccine	2x	90%	2-8 C	\$16	TBD	TBD	TBD
CanSino BIO		Viral Vector	1x	66%	2-8 C	TBD	TBD	TBD	TBD
									
ZAFIVAX		Subunit Vaccine	3x	TBD	2-8 C	TBD	TBD	TBD	TBD
Covishield		Viral Vector	2x	62%	2-8 C	\$3.3	✓	TBD	TBD
									
Covaxin		Inactivated Virus	2x	78%	2-8 C	\$3.8	TBD	TBD	TBD
									

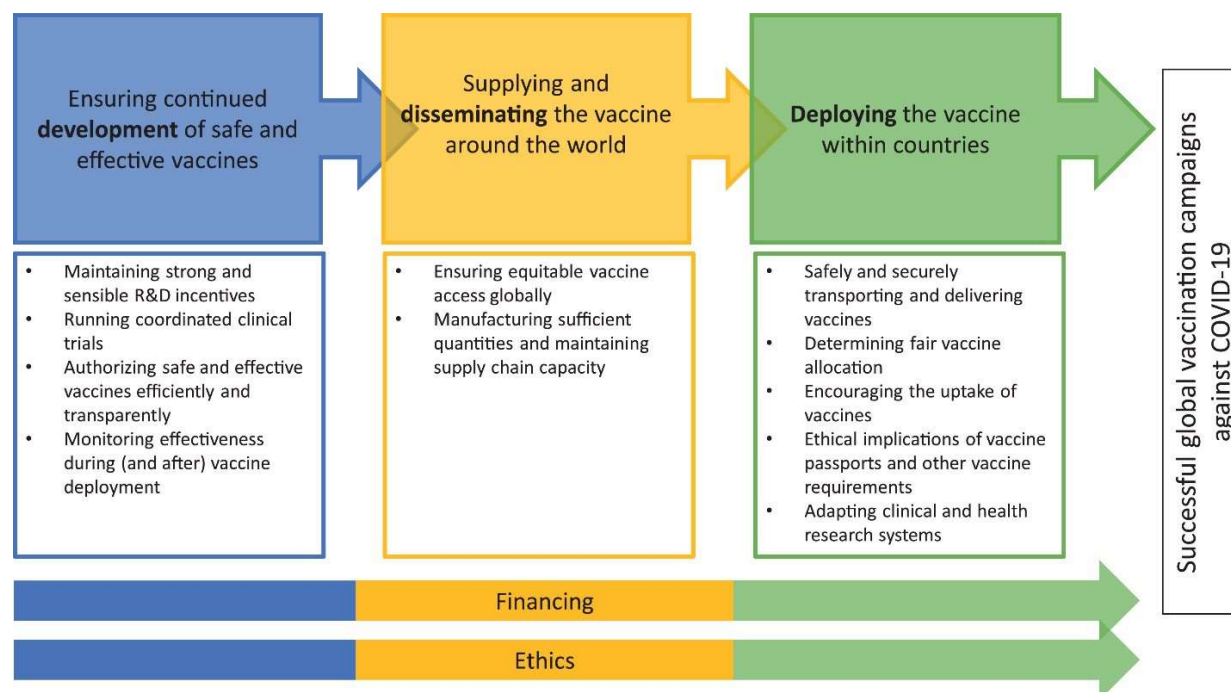
Source: National Jewish Health Organization

social media to taint people's trust in immunization. Figure 5.2 captures the various dimensions of major challenges and the measures needed globally to ensure successful conduct of vaccination drive.

achieved unless high-income countries, which have already exceeded these targets, are willing to donate vaccines to the poor countries⁸.

FIGURE 5.2

Covid-Major Challenges



Source: Health Policy, Volume 125, Issue 5, May 2021

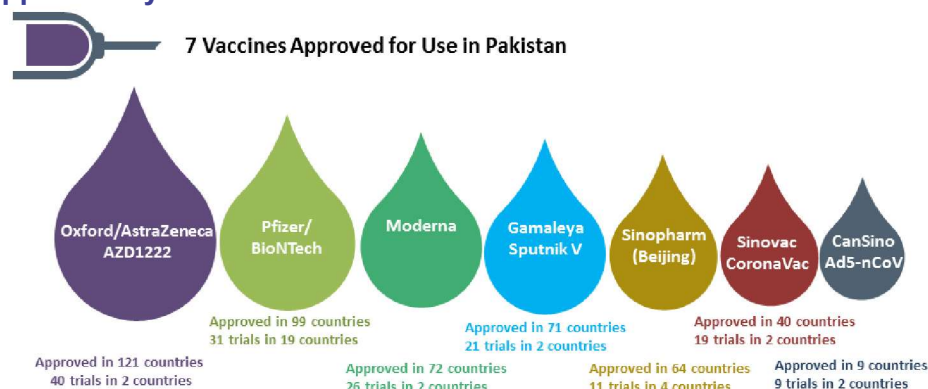
WHO has set a target for 10 percent of the population of all countries to be fully vaccinated by September, 40 percent by the end of 2021, and 70 percent by mid-2022. This target will not be

As for Pakistan, the government has approved seven Covid-19 vaccines as shown in Figure 5.3.

The front-line health workers were initially covered

FIGURE 5.3

Vaccines Approved by Government



Source: BIPP's Team Computation

fully as a matter of priority. At present all 12+ citizens are being targeted through just walk-in arrangements to the vaccination centers. Only Pfizer vaccine is being administered to the age group 12 to 18 years. The procurement of vaccination has been a mammoth challenge which after initial hiccups, seems to have been streamlined through imports by the government and private sector, donations from China, USA etc., and the WHO COVAX facility. The National Institute of Health (NIH) Islamabad, Pakistan also launched the single-dose Pakvac Covid-19 vaccine, locally produced with the help of Chinese experts in June 2021. Initially, some 118,000 doses of Pakvac have been produced⁹.

As of 17 October 2021, a little more than 93.5 million doses have been administered including 64.94 million people with the first dose and around 34.80 million fully vaccinated out of a population of over 220 million¹⁰. This constitutes 15.8 percent of the fully vaccinated population and does not compare favorably at the global level where 6.65 billion doses have been given across 184 countries including 2.64 billion people fully vaccinated which represents 33.9 percent of the fully vaccinated population.

To make the vaccination drive more effective, the government has taken strict measures for unvaccinated people e.g., restrictions on travel; entry to restaurants, shopping malls or educational institutes; and even to purchase petrol for the cars. People have, however, resorted to obtaining fake vaccine cards. For example, from February to September 2021, Punjab administered 46 million doses of which 9,717 entries (0.02 percent) were found to be faked. Though this is a small percent, the government has adopted three broad measures to control this criminal activity: (a) posting of oversight watchmen at centers; (b) launching of a two-factor authentication system which on logging into the system, generates an authentication code on the operator's phone for verification before proceeding

further (access of only authorized persons to the system to prevent fraudulent activity) and (c) conduct of ongoing audits to match the details of every vaccinated person to the unique identification number listed on the vaccine bottle. This has effectively controlled the issuance of fake vaccination certificates¹¹. Reportedly, this problem is not unique to Pakistan. There are 29 countries, including the United States, United Kingdom, France, Spain, Germany, Italy, Portugal, Belgium, Netherlands, Greece, Finland, Romania, Russia, Bulgaria, Switzerland, Austria, Poland, Czech Republic, Latvia, Ireland, Malta, India, Singapore, Indonesia, Thailand, and Australia confronted with the problem¹².

Comparative Analysis of the Covid-19 Impact on Selected Sectors

This section provides an analytic overview of the Covid-19 impact on critically important sectors pertinent for sustainable development i.e., education, health, income, employment and poverty.

Impact on Global Education System

Education has been one of the worst affected sectors all around the world. More than 1.5 billion students and youth across the planet are or have been affected by school and university closures due to the Covid-19 pandemic¹³. United Nations Education Scientific and Cultural Organization (UNESCO) estimates that over 100 million additional children are expected to fall below the minimum proficiency level in reading as a result of the health crisis.

Most countries opted for the closure of educational institutions to restrict the spread of disease¹⁴ which created serious disruptions in the education system. According to UNESCO, during the pandemic peak in March 2020, 166 countries decided to close the educational institutions which globally affected 1,480.3 million (84.5 percent) learners¹⁵. As of 23 September 2021, 17 countries were still enforcing

school closures affecting 127,959,411 learners (7.3 percent of the total enrolled worldwide)¹⁶. The duration of Schools' closure varied from country to country depending upon the pandemic severity. India with a duration of 51 weeks was the worst affected followed by Uganda and Iraq 50 weeks each, South Sudan 49 weeks, the USA and Bolivia 47 weeks each while Pakistan with 33 weeks duration¹⁷. The greatest impact of closure has been on the learning assessment since in the absence of vital examinations, the examination boards were skeptic about the fairness of grading¹⁸. The empirical analysis shows that educational institutions' closure postpones the virus peak by seven to fourteen days and reduces the case-load by 25 percent, and hence considered a necessary action¹⁹.

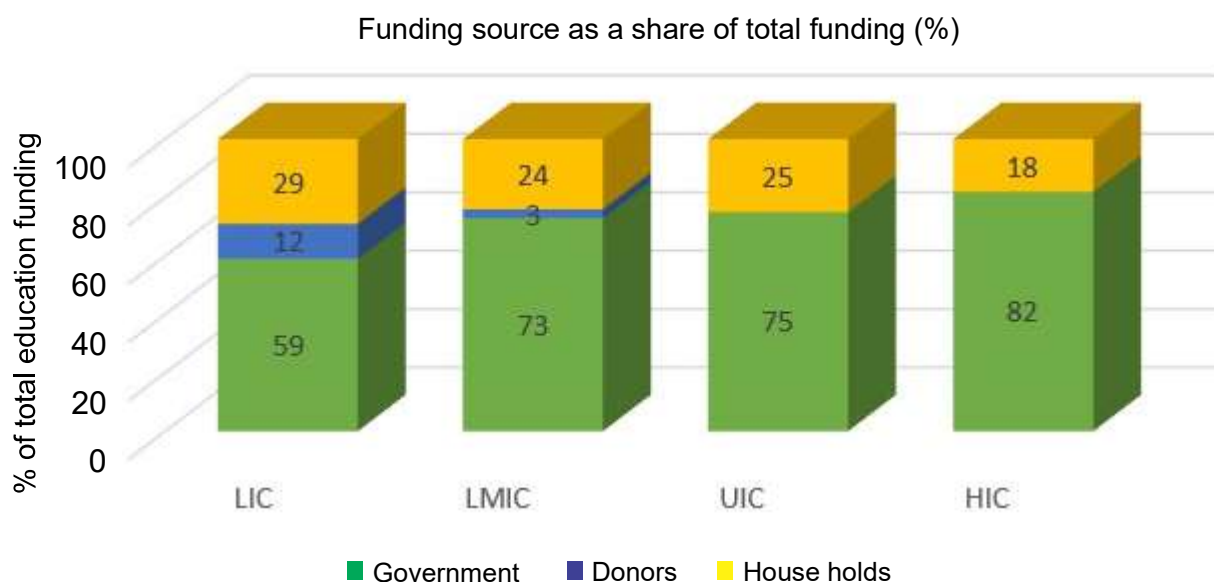
The unforeseen closure caused unprecedented problems for the students, families, staff, educators and private and public sector managers. In Asian countries and UK, the emergence of the pandemic was in the middle of the academic year which defied the end of year assessments and gradation of

students²⁰. In countries like Australia, the pandemic spread at the start of the new academic year which posed a number of challenges e.g., future uncertainty, students' admission, plight of the international students and financial sustainability of the institutions.

Covid-19 has also adversely affected education financing which is generally funded by the governments, households and development partners. Their contributions differ significantly across country income groups as is evident from Figure 5.4.

Overall, the low-income country governments would generally invest about US\$1,300 on the average child's education, while the average high-income country would spend about US\$110,000. Covid-19, it appears would widen these gaps in spending due to possible reprioritizing of the budgets towards health and social protection in the short run. The education budget is expected to fall by 10 percent. The declines in poor household income with far greater spending on health will particularly

FIGURE 5.4
Funding Source of Education



Source: THE IMPACT OF THE COVID-19 PANDEMIC ON EDUCATION FINANCING" World Bank MAY 2020

lead to a reduction in education investment. This will increase dropout ratio and impact enrollment both in terms of lesser admission and a shift from private schools to public schools with further pressure on public education budgets. For the developing countries, the decline in aid volume because of economic recession in the donor countries will also impact the education budget²¹.

Regarding online learning as an alternate to the traditional teaching methodologies, the technological remedies are not adequate and efficacious substitutes for education since most students at the base of the pyramid do not have access to necessary learning technology. Then educational institutions serving the rich class endowed with state of the arts learning technology further accentuated the inequality and imbalance required for a fair education system²².

The pandemic also posed immense challenges to academic and professional staff e.g., increased workload, lack of digital skills, the continuity of functioning of the education system and delivery of quality education at all tiers in such a stressful time²³. Recent data published by the UNESCO's International Task Force on Teachers and the Global Education Monitoring revealed that 81 percent of primary and 86 percent of secondary teachers possessed only bare minimum qualifications required for online education and were ill-prepared to handle the alternative learning challenges. Over 63 million teachers worldwide were impacted because of lack of training and psycho-social preparation for distanced learning mode²⁴. The online shifting of exams and tests also proved to be a massive hurdle as the procedure for administering, monitoring and grading exams, projects and assignments were not adequately defined. The current career staff was offered various options to continue working: (a) remote work; (b) change in the scope of work and concomitant reduction in the salaries; and (c) leave options in casework could not

be accomplished remotely or due to other constraints. Most of the staff, however, had to proceed on unpaid leaves because of the lack of experience working online and the reduced government funding for education²⁵.

Impact of Covid 19 on Pakistan's Education System

Pakistan also enforced the closure of educational institutions in order to deal with the public health emergency caused by Covid-19. The educational institutions especially the higher learning institutions were accordingly advised by the Higher Education Commission (HEC) to equip themselves with cutting-edge e-learning management system²⁶. However, compared to the developed countries such as the United States, where institutions offered 89 percent of courses online and more than half of those offered full degree programs entirely online, the situation in Pakistan was rather bleak as only a few open universities were partially offering such programs during the pre-Covid-19 period²⁷. HEC had to embark on developing an online education system to reach every student's home and made some strides, such as formulation of "Online Readiness Policy Guidance Note and Policy Guidelines for Universities on Covid-19"²⁸. Despite these guidelines, universities are still experiencing a variety of obstacles and difficulties e.g., lack of preparedness of teachers and students for online instruction, inadequate technological infrastructure (internet, mobile androids, laptops) and absence of facilities for online learning of technical or analytical subjects and laboratory work²⁹.

More specifically, a survey conducted among students in Pakistan revealed that 51.5 percent of students reported lack of a good internet connection for online education, 11.1 percent reported high costs of internet services, 30 percent of students lacked sufficient skills to use a computer/laptop while around 40 percent expressed dissatisfaction

with digital communication and online classes. Furthermore, 67.5 percent students, observed a huge difference between online and traditional learning methods. Only 10.3 percent of students felt that they were more motivated for online learning than conventional learning. Most higher university students reported that they were unable to complete entire courses online and faced immense difficulty in learning concepts and doing group assignments digitally. An alarming 78.6 percent of students voted in favor of face to face contact with teachers for affective learning³⁰.

Impact of Covid 19 on Global Healthcare Sector

The Covid-19 pandemic exerted immense pressure on the health care infrastructure around the globe which was not designed to deal with the enormity of the unpredictable and massive crises that affected the whole population. Even the Personal Protective Equipment (PPE) for healthcare workers was in short supply and alternative strategies such as telemedicine, quarantine facilities, safe behavioral norms etc., were rudimentary to help decrease the lethal effects of the pandemic.

One study revealed that in the United States, nearly 15 percent of doctors did not have access to N95 respirators, over 20 percent lacked access to gloves, approximately 12 percent did not have access to face shields, and roughly 50 percent did not have full suits/gowns available to them. Approximately 7 percent of physicians reported being forced to care for Covid-19 patients without proper PPE, and over 80 percent reported reusing elements of PPE. There were widespread shortages of ICU beds and ventilators and limited healthcare to test, identify and isolate infections³¹. These shortages were exacerbated as lockdowns around the globe disrupted supply chains. As for Pakistan, only 37.4 percent workers had access to N95 respirators, 34.5 percent to gloves, 13.8 percent to face-shields or goggles,

and 12.9 percent to full suits/gowns. These numbers were even lower in Jordan, where according to one study, 18.5 percent of doctors reported having access to all necessary PPE³².

The management of non-Covid-19 illness also became a casualty. A WHO survey of 155 countries found that prevention and treatment services for non-communicable diseases (NCDs) were severely disrupted due to reassignment of the staff and resources to treat Covid-19 patients to the neglect of even emergency procedures. The severance of public transport prevented many suffering from deadly diseases like cancer, diabetes, and cardiovascular to travel for their scheduled appointments and accessing critical services and medicines³³. Similarly, a study of seven slums in Bangladesh, Kenya, Nigeria, and Pakistan revealed a lack of adequate access to preventive and diagnostic healthcare services e.g., antenatal and immunization programs, vector-borne diseases etc. The increase in the cost of healthcare and decrease in household incomes further aggravated the situation for the low-income segments³⁴.

The deficiencies exposed by Covid-19 in the healthcare infrastructure have, however, prompted the healthcare related policy makers and professional entities around the world to devise new and innovative ways to provide uninterrupted essential care to the patients during pandemics or emergencies in the future. For example, alternative strategies such as telemedicine have quickly taken hold to offset the toll that the pandemic has taken on the care of NCDs³⁵.

Covid 19 Impact on Pakistan's Health Sector

The health system and infrastructure in Pakistan already suffered from a lack of basic facilities, gross policies' deficit especially in pandemic management, institutional inertia, weak governance and an

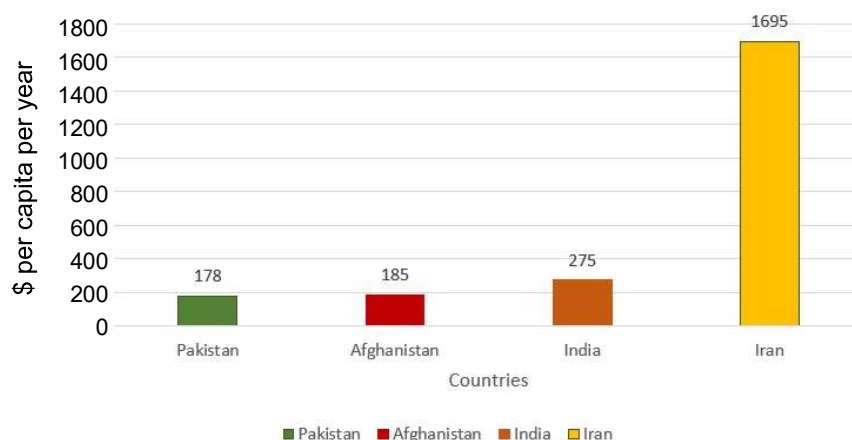
indifferent attitude of the public towards general hygiene and protective measures when Covid-19 struck the country. According to WHO data, the annual per capita expenditure on health care in Pakistan was \$178 in 2018 compared to neighboring countries including Afghanistan, India and Iran which had relative figures of \$185, \$275, and \$1695³⁶ as depicted in Figure 5.5.

The frail health system in Pakistan was accordingly not ready to cope with Covid-19 pandemic

especially when there was an exponential increase in case-load during May–July 2020. The government had to rapidly strengthen the healthcare system including the establishment of quarantine facilities and new laboratories, augmenting and improvising the Covid-19 wards in the hospitals and provision of ventilators, testing kits and PPEs for health professionals. The situation has since improved considerably and at present, the province-wise statistics of medical and testing facilities are presented in Table 5.2.

FIGURE 5.5

Per Capita Expenditure on Health



Source: BIPP's Team Computation

TABLE 5.2

Province	Quarantine facilities (beds)	Isolation wards (beds)	Testing (per day) capacity Public	Testing capacity Private
Punjab	10,948	955	5500	8960
Sindh	2100	151	6380	5600
Baluchistan	5897	534	1550	
KPK	2760	856	2950	1800
Islamabad	350	10	2050	5300
Gilgit Baltistan	972	126	400	
Azad Kashmir	530	310	700	
Total	23,557	2942	19,530	21,660

Source: Global Health Expenditure Database. Data Explorer. World Health Organization

Impact of Covid 19 on Global Poverty

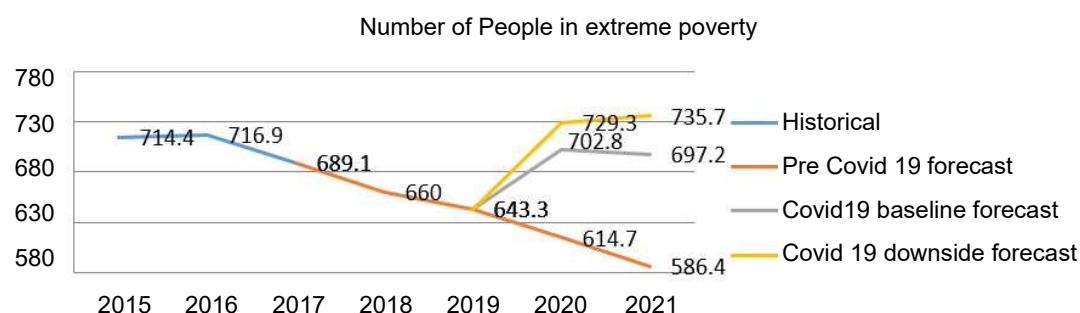
The pandemic has harmed poor the most. In the year 2020-21, the steady gains made over decades to reduce the number of people living in extreme poverty on less than \$1.90/day poverty threshold, have been reversed as is evident from Figure 5.6³⁷.

living on less than \$1.90 a day — including 47 million pushed into poverty as a result of Covid-19³⁹.

The largest share of the “new poor” will be in South Asia” with Sub-Saharan African close behind. The latest Poverty and Shared Prosperity report shows that “many of the new poor are likely to be engaged

FIGURE 5.6

Incidence of Extreme Priority



Source: Reversals of Fortune: poverty and share prospects; World Bank Group

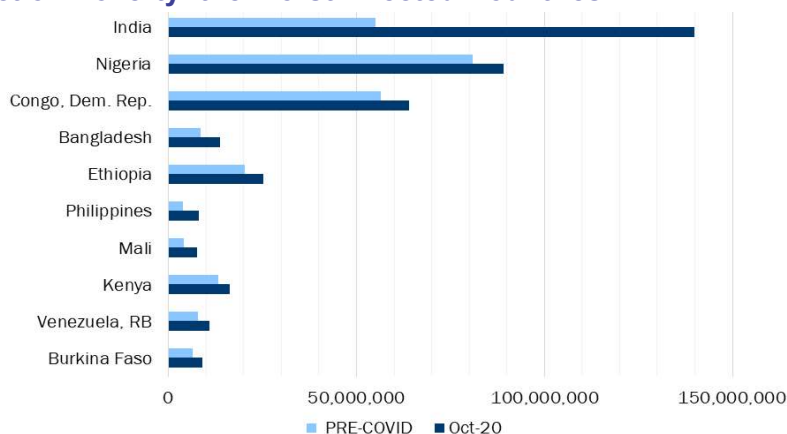
An additional 88 million people have been pushed in extreme poverty during 2020³⁸ with the total expected to rise to 150 million by the end 2021, depending on the severity of the economic contraction. Overall extreme poverty is likely to affect between 9.1 percent and 9.4 percent of the world's population in 2020. Women will be the worst affected. UN Women and UNDP estimate that by 2021 around 435 million women and girls will be

in informed services, construction, and manufacturing the sectors in which economic activity is most affected by lockdowns and mobility restrictions⁴⁰. The top 10 countries where extreme poverty is likely to rise the most is shown in Figure 5.7.

The biggest impact is likely to be felt due to, inter alia, a very significant fall in India's Gross Domestic Product (GDP) which contracted 7.3 percent in

FIGURE 5.7

COVID-19 Impact on Poverty- the Worst Affected Countries



Source: Calculations based on IMF World Economic Outlook October 2020 and World Bank data

2020-21⁴¹. However, there have been better than expected signs of economic recovery in India. The National Council of Applied Economic Research (NCAER) on 25 June 2021 estimated India's GDP to grow 11.5 percent in the first quarter and 8.4 to 10.1 percent for the current financial year 2021-22⁴².

The countries in Africa could have the deepest, long-lasting impact of Covid-19 on poverty. The Asian countries that appear in Figure 5.7 i.e., Bangladesh, India, and the Philippines are projected to have better recovery and growth rates trends to reverse the impact on poverty.

Covid Impact on Pakistan's Poverty

Pakistan already suffers from widespread incidence and intensity of poverty which was estimated in 2015-16 around 24.3 percent of the population. Another 19.87 percent of the population was considered vulnerable to slip below the poverty line due to external shocks. As such, 44 percent of the population was potentially at risk at the onset of the pandemic. The containment measures including lockdowns led to a collapse in the economic activity during the final quarter of FY20 with a GDP growth

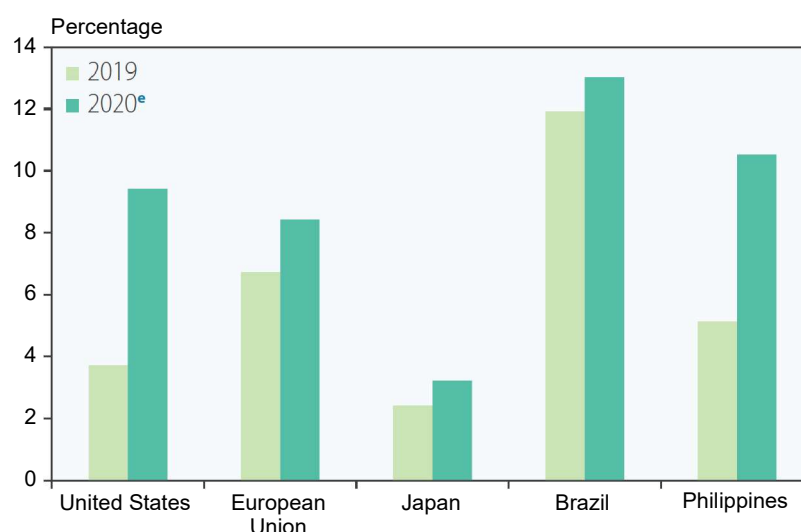
contraction by 1.5 percent in FY20. Half of the working population saw either job or income losses, with informal and low-skilled workers employed in elementary occupations facing the major brunt. The poverty incidence is estimated to have increased in FY20 from 4.4 to 5.4 percent, as per the international poverty line of \$1.90 PPP (2011) per day. While more than two million people fell below this poverty line, 40 percent of households suffered from moderate to severe food insecurity. Women, children, the elderly and the people with disabilities who already constitute the bulk of the poverty-stricken citizens in Pakistan have been disproportionately affected by Covid-19.

Impact of Covid 19 on Global Employment

The Covid-19 pandemic has triggered one of the worst jobs' crises since the Great Depression. By April 2020, full or partial lockdown measures had affected almost 2.7 billion workers, representing about 81 percent of the global workforce. ILO estimated that four out of every five workers were unable to work because of lockdowns while the expected working hours declined by 7 percent in the

FIGURE 5.8

Unemployment rates in selected economies



Source: South Asia Economic Focus; Spring 2021: South Asia Vaccinates; World Bank Group

second quarter of 2020 equivalent to the loss of at least 195 million jobs worldwide (ILO, 2020). For example, in Bangladesh, 1 million garment workers were laid off or furloughed as a result of factory closures and the cancellation of export orders. As of mid-April 2020, the unemployment rate in the US was 12.4 percent, equivalent to 18 million people⁴³. According to UN DESA, in the European Union, the average unemployment rate was estimated 8 percent (lowest level since 2008); Japan around 3 percent (the lowest rate in 27 years); Brazil around 13 percent and the Philippines around 10 percent (see Figure 5.8).

Women have been hit particularly hard by the pandemic (women's employment is 19 percent more at risk than men-ILO/UNW) as they make up more than 50 percent of the workforce in labor-intensive service sectors, such as retail trade, hospitality and tourism, where working remotely is often not an option⁴⁴.

Covid Impact on Pakistan Employment

The major adverse effect of the pandemic has been on the informal sector which accounts for 72 percent of employment and daily-wage workers in the formal sector who constitute five percent of the total workforce⁴⁵. Retail, transport, hospitality and tourism sectors which constitute a large proportion of the informal labor force and the self-employed workers were worst-hit by the crisis. These are predominantly low-income, less educated workers who comprise the bulk of Pakistan's 58 percent vulnerable labor force⁴⁶. In the urban areas, the unemployment rate increased by 42 percent due to Covid while 38 percent in the rural non-farm economy with the corresponding impact on average income to the tune of 48.7 percent and 47.2 percent respectively⁴⁷.

Even the projected growth of the economy (3.9

percent) has almost excluded the informal sector in which three of every four people lost their livelihoods between April and July 2020 as the prime focus of the government was on sustaining and accelerating the growth momentum. According to a report titled "Special Survey for Evaluating Socio-economic Impact of Covid-19 on Wellbeing of People", the labor market of Pakistan shrank by 13 percent in the April-June quarter of 2020, rendering 20.7 million people jobless with the gravest impact on the informal segment. The deep rooted structural inequities in the labor market, education, housing and healthcare are the major causes for this disproportionate impact. This calls for massive adjustments in the public policies from the transformation of corporate centric to people-centric paradigm⁴⁸.

Covid- 19 Impacts on Global Income inequality

The Covid-19 has had a devastating impact on income inequality and per capita incomes especially in the poor countries which were already performing bleakly on health-related SDGs. The resources diverted to combating the pandemic depleted their ability to respond to the economic shock and aftermath to the great detriment of the poor. The pandemic has thus exacerbated their deprivations and vulnerabilities by pushing inequality higher⁴⁹.

According to the Inequality Virus Report by Oxfam (based on global survey conducted of 295 economists from 79 countries), the economic inequality in almost all the countries has enormously widened ever since the inception of the pandemic. Half a billion more people could be living in poverty on less than \$5.50 a day in 2030, than at the start of the pandemic. Rising inequality means that it could take at least 14 times longer for the number of people living in poverty to return to pre-pandemic levels⁵⁰. Women are hardest hit being edged out of the workplace thus reversing decades of progress with an extra 112 million women are at risk of losing their

jobs or income.

Covid 19 Impact on Pakistan's Income Inequality

Inequality in Pakistan manifests itself in all its facets e.g., income, gender, digital, spatial- inter and intra provincial etc. Although authentic official estimates are not available, the Gini coefficients demonstrate historically a periodic downward and upward movement on the inequality scale. At present, Pakistan has a Gini coefficient of 30 percent which is indicative of overall low inequality but this low value seems to stem from Gini coefficient's lack of sensitivity to the entire income distribution and possibly under reporting by the country's richest quintiles in the Household Integrated Economic Surveys (HIES). The poorest 1 percent of the population holds only 0.15 percent of national income, compared to the richest 1 percent, which held 9 percent of national income in 2018–2019. Pakistan has an adjusted Palma ratio of 4.7, meaning that the richest quintile has 4.7 times the income of the poorest quintile⁵¹. The widening wealth inequality and lack of access to services and employment exert a long-term negative impact on human development. The inflationary pressure and decrease in the purchasing power is relegating even the middle class to the bottom of the pyramid.

The huge philanthropic sector in Pakistan and the government's Ehsaas programme do contribute to the redistribution of resources to benefit the poor. For example, the government distributed through Ehsaas Emergency Cash (EEC) Rs. 144 billion as Covid response to help 16.9 million households with a lump sum of PKR12,000 which constitutes around 34 percent of the average monthly household income. This covered 56 percent of estimated income losses during the 46-day general lockdown; 55 percent of significantly impacted informal workers; and 74 percent of the population with multidimensional vulnerability to Covid-19

including those outside the social registry and without previous access to social protection.

Challenges for the Post Covid-19 World

Suzanna Arundhati Roy, an Indian author and human right activist averred: *“Historically, pandemics have forced humans to break with the past and imagine their world anew. This one is no different. It is a portal, a gateway between one world and the next.”* The pandemic crisis has alarmingly exposed the fragility and vulnerability of the human situation and unfolded several new and unfamiliar dimensions. The external shocks of Covid-19 inflicted unprecedented suffering to many countries especially those without universal social protection, robust public health systems, and sustainable economies. The world today is more unequal and poverty has stricken as before Covid-19. The failure of the international community to launch a coordinated response in the wake of “my country first” to the great detriment of the poor and low income countries has not only brought out the lack of collective will and consensus but also highlighted the need to address the unjust and weak political and economic global order.

It appears that many of the problems we will face in the next decade will simply be more extreme versions of those that we already confront today⁵². What is needed is a fundamental change at the country and global level to take collective action and exhibit collective resolve to deal with the crisis of this nature and scale. Some major interventions will be required to strengthen humanity's response to the enormity of future pandemics and catastrophes. This would, a priori, entail, inter alia, reshaping, reforming and prioritizing the social sectors investment and safety nets both at the global and country levels. Some of these are:

- The role of the United Nations, the Bretton

Woods Institutions and indeed multilateralism and global cooperation has been tested immensely during the Covid-19 pandemic which, inter alia, unmasked the gross inadequacy of the collective action of humanity to the great detriment of the poor countries. The global economic downturn, record capital outflows, tightening of the financial conditions, reduction of foreign aid and investment, a significant drop in the remittances and debt driven vulnerabilities accentuated not only their humanitarian crisis but also public health and social safety needs. Then, efforts to implement the 2030 SDG Agenda, the Paris Agreement and the plan to reach net-zero carbon emissions by 2050 seem to have been diluted. There has to be international commitment and solidarity spearheaded by the UN system to establish a new inclusive and resilient post Covid-19 global order to rectify the inequities and imbalances with social and safety net as an integral part along with market-friendly reforms incentives for private investment. An order which recognizes and secures the rights of the two-thirds of the world's population who reside in the Global South⁵³. The enormity of the debt issue for the developing countries should be addressed through a relief process focused on the SDGs and enduring economic growth for every country⁵⁴.

- At the same time, there is a need to develop, stimulate and accelerate especially the digital economy and e-commerce and facilitate hybrid work streams - telework combined on-premises work. This is critical given the rise of digital behavior such as remote working and online learning, videoconferencing, telemedicine, and delivery services. The post Covid-19 economic recovery model and the labor market should aim at reducing workers' vulnerability as to their jobs and role security; development of new skills mix in the wake of rapid expansion of gig work; workers' ability to adapt to occupational transi-

tions; efficiency versus resilience, rationalization of wage policy, collective bargaining; public investment in the care economy, education, and low-carbon infrastructure. The post Covid-19 labor market must be flexible to adopt versions of Germany's Kurzarbeit (short work) subsidy during the pandemic to keep workers employed at reduced hours and pay, with the government compensating some of the shortfalls in wages.

- Health systems have been rigorously tested and often found extremely deficient especially in the low income countries which, a priori, entails a serious effort to augment and strengthen the health care infrastructure to respond to the pandemics. The entire institutional and operational arrangements and social safety nets to target and support the poor and needy need to be rehashed to efficiently and timely provide relief. The future global health system must also provide for virus screening as part of the check-up protocol and detection of future viral outbreaks and create herd immunity against the new virus strains including among people living in the remotest corners of the Earth. The COVAX mechanism should be a significantly augmented to reach the poor and deprived enabling them to access sufficient share of the global vaccine supply. "My country first" which has deluded the common aim of ensuring efficient and equitable distribution of vaccines (restrictions imposed on exports or procurement of bulk supplies in advance e.g., India, USA, EU) should be effectively shunned to promote global solidarity.
- A waiving of the Covid vaccine patents is required to allow all companies across the world able to produce vaccines. This should be accompanied by a rigorous effort for the relevant technology and technical-know how transfer to ensure swift global rollout to combat the pandemics. In due course, countries need to develop the local vaccine production as part of their Aid

package by donors.

At the country level, governments need to: (a) streamline the procurement system to: speed-up public sector imports; incentivize procurement by the private health sector through collaboration with the large corporate sector and the reputed non-governmental organization; and seek international donations including maximizing the COVAX facility; (b) expand the vaccination administration campaign by making it incumbent on the multi-nationals, the banking sector, the private corporate sector to compulsorily finance the vaccination of their employees; (c) control fake vaccination certification and resolve the associated challenges like vaccine hesitance through more rigorous mandatory enforcement; and (d) address disparity under an already fragile health care system and expensive private health care facilities⁵⁵.

- The post Covid-19 education strategy and policy across the globe must provide for a well prepared education system (staff, infrastructure, admissions, examinations etc.) to respond to the recurrent lockdowns, affordable and accessible online learning and ex ante finances to ensure smooth continuation of learning for all without unequal disruption. UNESCO convened a high-level ministerial meeting in March 2021 to prioritize education recovery and adapt education systems to avoid a generational catastrophe particularly for vulnerable and disadvantaged communities. For the purpose, the Global Education Coalition with more than 175 members from the UN family has been instituted to mobilize and support learning continuity around three central themes: Gender, Connectivity and Teachers. A rigorous effort is required to pursue and fully finance the GEC implementation framework.
- The logistic difficulties unfolded by Covid-19 as a result of lockdowns and transit and travel

controls initiated the deglobalization era with a shift away from global just-in-time supply chains. The resurgence of “my nation first” politics coupled with these disruptions is likely to push companies to localize business operations that favor national and regional supply chains. There is also a likelihood of the adoption of new business models for the private corporate sector and multi-national companies to re-shore segments of their production or pursue greater automation of their processes and service delivery systems. This process and trend should not exclude the poor and least developed countries in the post Covid economic recovery paradigm to help them address human and social development deficits.

- The Covid-19 pandemic has brought to fore the inextricable connection between humans, animals and the environment which entails setting up of ambitious climate commitments for sustaining a healthy and green recovery. The post Covid-19 resolve of the international community should be to mitigate the climate impacts especially on the most vulnerable populations of the extreme weather conditions on people's lives and health, water- and vector-borne diseases as also food security. A transformational action is required in every sector e.g., energy, transport, agriculture, infrastructure etc., coupled with a conscious shift to more nutritious, plant-based diets to reduce global emissions and ensure more resilient food systems to avoid up to 5.1 million diet-related deaths a year by 2050⁵⁶.
- Covid-19 had a massive impact on women e.g., loss of income and employment, widening of the inequality, diminution of access to health, education etc. There is an urgent need to mitigate the impact, inter alia, through UNW and UNDP composite measures including (a) direct income support and cash transfer to meet daily essential needs and expanded family and child benefits for

vulnerable women; (b) support for women-owned businesses and businesses with a large proportion of women workers by giving grants, subsidized loans etc., (c) implementation of gender-responsive social protection systems and bridging the gender pay gap etc.

- There is still a lack of complete understanding of the challenge posed by the virus which is

constantly mutating into new strains and variants. The unintended and unpredictable consequences of the pandemic including those of the response measures need to be kept under meticulous scrutiny to make constant adjustments to the emerging “new normal” in all facets of human activity.

Chapter

06

**S&T Governance of
Pakistan- Turning Liability
into Asset**

S&T Governance of Pakistan- Turning Liability into Asset

Rehmat Ullah Gill & Shahid Najam

Introduction

Pakistan stands amongst a few countries that have a large number of S&T institutes and a large R&D infrastructure. It is also an early entrant into S&T programs as it established its patent office back in 1949 just two years after independence. Pakistan inherited only three labs, one university, few colleges and hardly 10 percent of total manufacturing industries of India. Now Pakistan has more than 200 universities, offering graduate and post graduate programs, around 300 R&D organizations in every major field, S&T policy institutes, more than 100 policy study institutes and around 20 centers of excellence. The country has a large base of industry from small to medium and large scale organizations as also reasonably good road infrastructure, the best canal irrigation system, diverse weather, and availability of solar, wind and sea waves that can be harnessed to generate energy. Pakistan has mineral reserves, a vast agriculture base, mountain peaks, a coastal belt, a deep sea port and connectivity to all around Asia and beyond. Its strong defense industry is exporting the defense equipment to many developing countries. It is a relatively young country as the median age in Pakistan stands at 22.8 years, according to worldometers.info.

This strong asset base of Pakistan has produced

significant results back in 1950-60s. Pakistan was ranked among the fast growing countries in Asia. Pakistan's export, GDP and many other development indicators were comparatively ahead of its counterpart countries (Roth, I. J. (1971). Pakistan's five years' plans model was followed by many countries. The country produced the first Nobel laureate- Dr. Abdul Salaam in 1979 and gave human develop index to the world through the efforts of Dr. Mehboob ul Haq. As part of the green revolution, it gained self-sufficiency in its staple food- wheat.

There were significant efforts of S&T related developments till mid-1970. The scientists were in close connection with the government and got due attention and funding with the Science Society of Pakistan was proactive and proved to be a driving force for Pakistan's S&T development. The foundation of Nuclear Defense Program led by the Atomic Energy Commission later on was the hall mark of those days. Thereafter, political instability, low priority to S&T and social unrest, inter alia, caused the diversion from S&T lead growth (Nadeem, M. A., et., al., 2020). The nationalization of industries further denuded the S&T capacity and its demand in the country.

However, defense related industries continued to

observe consistent and sustainable R&D and produced significant results. The Atomic Energy Commission, successfully developed nuclear technology to strengthen the defense capability of the country. Pakistan also entered into a group of countries exporting defense products. The potential of civilian use of nuclear technologies does not seem to have been fully harnessed though energy, agriculture and health sectors have to some extent benefited from the advancements.

The State of S&T Led Growth

Pakistan experienced a golden period of S&T led growth in the first two decades after its independence despite inheriting a very rudimentary S&T infrastructure i.e., only one university, three labs and few colleges. It, however, established patent office, Pakistan Council for Scientific and Industrial Research (PCSIR), food and agriculture research council and university grant commission in just a few years after its independence. This shows a high level of commitment by the scientist and visionaries of that time. The following Figure 6.1 briefly captures the S&T journey of the country over the decades and decadence in the S&T sector from high ranking in 1960 to a low ranking in 2019 on various indicators.

FIGURE 6.1

Emergence, Divergence and Convergence of S&T Led Growth

	1960	1970	1980	1990	2000	2010	2019
FDI Ranking		75 th	79 th	83 rd	151 st	150 th	147 th
Export Ranking as per GDP Percentage % Ranking	55 th	89 th	110 th	120 th	156 th	165 th	167 th
Capital Investment as per GDP percentage % Ranking	41 st	68 th	94 th	95 th	124 th	156 th	145 th
Manufacturing value added Ranking	10 th	16 th	26 th	33 rd	47 th	49 th	44 th
HDI index			101 st	118 th	137 th	145 th	139 th

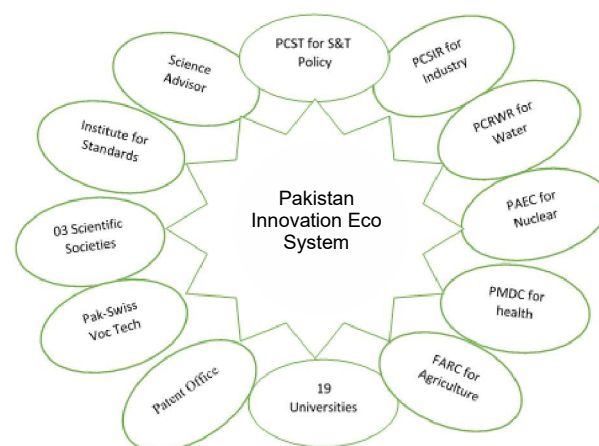
Source: www.theglobaleconomy.com

S&T Led Growth in 1950

Dr. Saleem-um-Zaman Siddique, a renowned Muslim scientist who was a true entrepreneurial scientist and believed in the power of science and technology for economic and industrial growth, established PCSIR to play much needed key role in the industrialization of the country. He was the first 'Advisor Science' for the Government of Pakistan (Akhtar, M., 1996, Technology Time Oct 19, 2011). Pakistan under his stewardship became the hub for technological innovation as depicted in Figure 6.2.

FIGURE 6.2

Pakistan Innovation Eco System



The six powerful research councils emerged as a complete innovation eco-system of Pakistan. These were: 1) Pakistan Council for Science and Technology as a premier body to govern the innovation ecosystem of Pakistan, 2) Pakistan Council for Scientific and Industrial Research to supply technology to industry, 3) Pakistan Medical Research Council to regulate and govern healthcare advancements, 4) Pakistan Council for Research in Water Resources to govern water planning and research, 5) Pakistan Atomic Energy Council for nuclear research and 6) Food and Agriculture Research Council. Pakistan has 19 universities in this era for higher education, setup Swiss Vocational Training institute, setup PASTIC to supply scientific

literature and developed forestry research institute (Naim, T., 2001). Three community-related science bodies served as powerful lobbying organizations that were, Pakistan Academy of Science, Scientific Society of Pakistan and Pakistan Association of Advancement in Sciences. Many top level scientists manned these organizations, mobilized scientific communities and advised Government to take right measures. These organizations were active and very dynamic. The Batala Engineering Company (BECO) setup by CM Latif was a globally recognized engineering company, producing diesel engines and aircraft components. The German and Japanese engineers used to work in BECO. Chinese Prime Minister Chou en Lai visited BECO in December 1956. He showed interest in sending Chinese engineers to BECO for training (Ahmed Masood, 2012). This era indeed represented the golden period of S&T under Dr. Saleem-us-Zaman Siddique.

Pakistan launched its five year planning programs with an aim to industrialize the country and bring technology to Pakistan through very visionary projects like steel mill and various other similar projects. For this purpose, Pakistan Industrial Development Corporation (PIDC) imported many industrial plants and later through reverse engineering locally reproduced many of them e.g. rice processing plant. This was an excellent example of technology diffusion and adoption in Pakistan's early technology history. In Asia, the rate of industrialization in Pakistan was second only to Japan (Roth, I. J. (1971).

S&T Led Growth in 1960

The S&T decade of 1960 started under the scientific leadership of Dr. Abdu Salaam as an advisor for science who further strengthened the innovation eco-system developed during the early 1950s (Hasham Cheema, 2018) to accelerate the pace of industrialization for wealth generation. Pakistan's

economy was ranked highly competitive in Asia and was ahead of many counterparts. Pakistan's five years plan was replicated by many countries including South Korea and Indonesia for economic growth and industrialization. Pakistan International Airline (PIA) emerged as a model airline to provide services to other newly established airlines.

Dr. Salaam gave first innovation policy to Pakistan in 1960 and developed a national commission for science (NCS) headed by prime minister of Pakistan (Hasham Cheema, 2018). This NCS is the prime custodian of S&T in Pakistan and responsible for policies and advancement of S&T in Pakistan. Pakistan setup around 150 R&D organizations in this decade and provided a strong technology base for the country (Naqvi, I.B., 2011). The agreement to develop steel mill feasibility was also signed in 1969.

The second and third five years' plans put high emphasis on S&T advancements, industrialization, private investment and GDP growth. Pakistan achieved self-sufficiency in wheat through the green revolution technology wheat (Mohammad, F., & Aslam, M. M., 1986).

The innovation ecosystem of Pakistan successfully combined the twin factors of S&T supply and S&T demand for technology adoption and diffusion in the two decades of 1950 and 1960 adequately resourced by the five years plans to build and sustain the 'innovation eco-system'. The private investment was mobilized to bring foreign technology in Pakistan and spill over for local diffusion. The banking sector through conducive environment created by the government also helped private investment to support the expansion of existing industries and give loans to new manufacturing units.

Post 1970 S&T landscape

The significant efforts to develop S&T related developments continued till mid-1970. Political

instability, low priority to S&T and social unrest, inter alia, however, caused the diversion from S&T lead growth. The nationalization of industries further wiped out the need for indigenous production and hence its demand. The government, private sector and academia consequently started working in isolation. Despite these constraints, considerable progress was made especially in the defense, health and banking sectors to make use of S&T developments.

The Way Forward

There is now a need to bridge the gap between academia, industry and the government and ensure a coordinated and integrated effort among various development players to integrate their development plans. This could be achieved through a compelling S&T led growth vision with a focus on policy, institutional and operational arrangements includ-

distributive justice and poverty reduction.

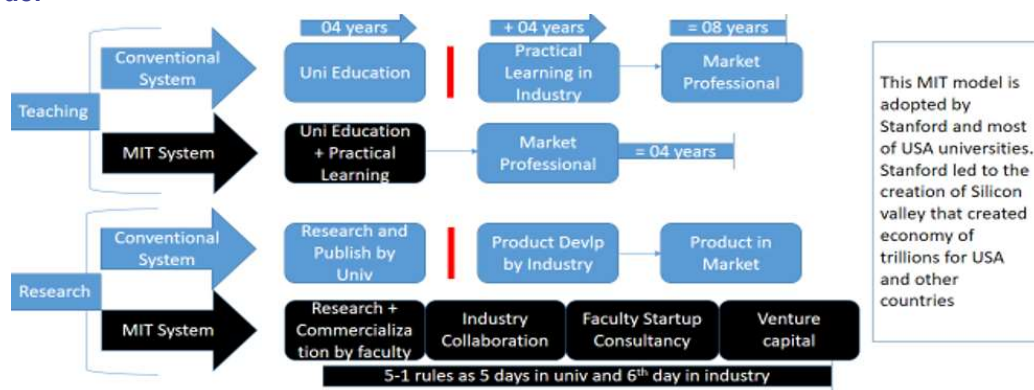
The following successful experiences followed by many countries provide the insight for Pakistan to resuscitate the innovation ecosystem in the country.

MIT Case of University Led Technology Diffusion

Professor W.B. Roger was the pioneer in laying the foundation for this technology generating model in the Massachusetts Institute of Technology (MIT) USA which envisaged leadership of the university system in creating and diffusing technology and innovation to better serve the society and industry for economic growth. The model envisioned a transformative role of the universities away from the conventional teaching and research to an entrepreneurial one comprising: (a) establishment of venture capital as financing arrangement primarily by the private sector; (b) engagement of the faculty in

FIGURE 6.3

MIT Model



Source: etzkowitz, H. (2019). Is Silicon Valley a global model or unique anomaly? *Industry and Higher Education*, 33(2) 83-95

ing primary and technical education to supply highly skilled human resources to the industry and on international standards and protect intellectual property rights.

A vision of “Developing Innovative Pakistan” should be the way forward geared towards wealth creation from technological interventions, investment in science, technology led value addition, and

private consultancy and setting up of start-ups; and (c) focus on the applied learning of the students towards innovation and technology generation. Through this integrated effort of the university, the private sector and the conducive environment created by the government, the pace of technology development responsive to the private sector accelerated phenomenally. The silicon-valley, Microsoft, Intel and Fairchild are some of the

successes achieved through this intervention. Figure 6.3 illustrates the difference between the conventional and the entrepreneurial models.

The State Led Technology Diffusion in South Korea

MIT, after having successfully implemented this model in USA in early 20th century subsequently helped South Korea replicate it. Under the leadership General Park of South Korea, the entire educational system was overhauled to encourage the academia and knowledge and skills imparting learning system to contribute to the needs of industry for industrialization. The Korean Institute of Advanced Sciences and Technology (KIAST) was established with the assistance of MIT for the purpose. Earlier as of 1966 South Korea had already embarked on technology adoption and diffusion through reverse engineering. The birth of semiconductor industry in South Korea and other modern technologies is a testimony to the success of this intervention. The education system was geared towards producing 5percent high-quality researchers, 10-15percent technicians and 80-85percent low-skilled craftsmen to find technological solutions for the private sector growth.

China, inspired by the rapid industrialization and technological development of South Korea copied this entrepreneurial university model to boost technology development, industrialization and economic growth.

Execution Framework of S&T Governance in Pakistan

In Pakistan, a successful attempt was made by Musharraf government to develop S&T ecosystem for the IT sector wherein Dr. Ata-ur-Rehman managed to create an enabling environment through his proactive approach. A number of new companies were incentivized to enter into telecom, IT and broadband services to make the sector both competi-

tive and penetrate the coverage. Internet and phone call charges were reduced significantly to enable access of mobile phones to almost every household. This technology influx changed the IT landscape of Pakistan to make it part of the digital age besides creating economic wealth and millions of new jobs and business opportunities. The higher education institutes started supplying the trained human resource for telecom sector including specialized telecom and software engineering with IT exports reaching USD 5 billion. The ICT R&D fund, 'Ignite' supports the technology development and entrepreneurship in IT and Telecom sector; stimulates the launching of national Incubation Centers to help IT and Telecom graduates. The appropriate legal, policy, education, infrastructure and incentives system constitutes the S&T eco system in the IT sector.

Apart from this episodic success, Pakistan in the recent years has significantly lagged behind in S&T indicators compared to other countries of similar development threshold. The custodian of S&T development in the country is the National Commission for Science and Technology (NCST), headed by the Prime Minister of Pakistan. The NCST is barely functional and as such not effective to spur systemic S&T growth. It does not hold regular meetings nor does it carry out progress reviews of the national or global advancements.

The policy and institutional fragmentation of S&T landscape is another major obstacle characterized by intra-ministerial, inter-ministerial vertical and horizontal coordination dysfunction and lack of connection with the industry and academia/higher learning and knowledge generating institutions for S&T development. The obvious result is duplication, sub-optimal and wastage. inefficient utilization of existing resources. Even, the major S&T related data is not available with any organization or state outfit of Pakistan. In brief, lack of the quintessential nexus among the government, private sector and the

higher education/university system as well as inadequate allocation of resources for planned short term and strategic outcomes continue to impede the S&T development in Pakistan.

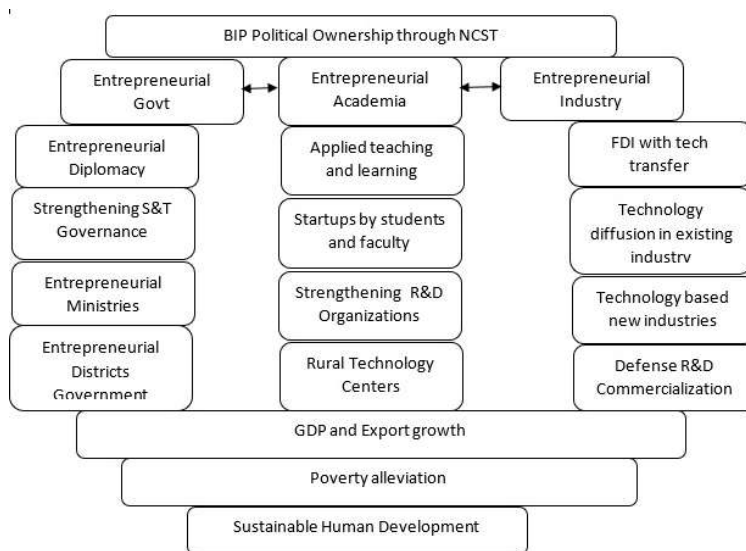
Pakistan, therefore, needs to have a compelling vision of S&T to integrate and mobilize all the material stakeholders i.e., government, private sector/industry and academic and research organizations towards transforming Pakistan into a progressive and proactive S&T led country which generates, disseminates and apply technology and innovation for sustainable human development. The 'Building Innovative Pakistan' (BIP) must be owned and spearheaded by the top political leadership with inclusive participation of chambers of commerce and industries and the higher learning institutions. Figure 6.4 attempts to capture the contours of the vision and its operational framework.

technology led growth in agenda of political parties; and policies' review by Technology Adoption committees to check if tech diffusion component is present in their policies.

The Government needs to espouse an entrepreneurial approach and for the purpose: 2 percent budgetary allocation on technology adoption needs to be earmarked; 10-20 percent of departmental budget on technology import and adoption within their sectors and working areas; establishment of technology adoption and diffusion units in government departments; hiring of S&T graduates for technology planning and adoption; district level technology adoption and diffusion facilitation through training, technology led growth models and clusters. In addition, entrepreneurial and innovation culture needs to be developed in the state apparatus to drive new technology- diffusion in the country. At the

FIGURE 6.4

Building Innovative Pakistan



Political ownership is fundamental for S&T in Pakistan which, a priori, requires: NCST to be activated and strengthened; training of parliamentarians on S&T; creation of parliament and senate committee on Technology diffusion; adoption of

same time, government should improve the ease of doing business to support tech investment and attract FDI for technology led industries. Incentivize and mobilize expatriates to bring advanced technologies and investment in the country.

Entrepreneurial Diplomacy entails bringing investment and technology into Pakistan by training diplomats on technology led growth models and functions; establishing S&T section in embassies to connect global tech with Pakistan's counterparts; and enhancing interaction of the Pakistani business community with diplomats.

Strengthening S&T governance can be achieved through improving institutional and policy coherence within the state apparatus; introducing performance metrics for targeted outcomes and incentives, rewards and appraisals based on these outcomes; allocation of S&T operational budget should be increased; developing linkages of all S&T organizations with counterpart industries and educational institutions; and linkage of imports and exports with relevant S&T organizations.

The entire set of decentralized apparatus of the government at district level should be orientated toward entrepreneurial paradigm to stimulate entrepreneurial development in Pakistan. This should be achieved through giving the district development plans distinct tinge of technology development and diffusion; creating a close collaboration with the universities and private sector working in the area; development of technical education and applied education with the help of TEVTA; establishment of specific goals to improve quality life index, human development index, sustainability and environment parameters in collaboration with local academia and industry; and launching of the district technology fund in conjunction with the local chambers and industry.

The universities need to incorporate entrepreneurial missions along with teaching and research to convert research into products and solutions. The universities should in particular encourage wealth-generation research through various methods including commercialization in the form of technology transfer and new startup creation. Simulta-

neously, faculty should adopt applied teaching and learning; be encouraged to engage in applied projects and with industries and communities to understand real time issues; and for the purpose, incentivized, appreciated and rewarded for applied teaching and research.

Startups by students and faculty should be an inalienable component of learning and teaching through incentives to create startups; facilitation by good logistics and conducive environment for product development and business launch; funding of seed money to develop their products and launch startup; and training on basic finance, marketing and sales to run their ventures. Faculty and students also need support for intellectual property, contract drafting and agreements.

Strengthening of R&D Organizations is yet another essential component of the S&T operational framework with emphasis on training of scientists and staff of organizations on R&D projects and commercialization; financial incentive and profit sharing for tech commercialization; increase in the operational budget; promotion of S&T scientists linked with their performance and contributions to technology development and diffusion; and transforming these organizations from bureaucratic to a more dynamic and independent management.

The universities should be encouraged to set up Rural Technology Centers in their respective districts to drive for grass roots technology diffusion. The government needs to subsidize the import and development of technology for rural areas so that such engineering products can be demonstrated in these areas.

The role of the industries to shift to the entrepreneurial culture is fundamental to this endeavor. Pakistan's industry has traditionally been based on trading, packaging and formulation. The value addition based on technology, is a very small

component of the entire industry. To remedy this situation, constant technological up-gradation and increased value addition should be mandatory precondition for access to easy credit, zero interest loan for new technology or technology upgradation tax holidays, subsidy on technology import and government advice and assistance to achieve a significant increase in GDP and export of Pakistani goods.

The foreign direct investment (FDI) for tech transfer should be incentivized especially for high tech foreign firms which as earlier stated is contingent upon ease of doing business; improvement of the governance function; and policy consistency and law enforcement. The technology based new industries should be promoted through state investment in IP and technology licensing; financial grants for licensing new technologies; risk sharing for technology venture in the areas of national interest; and national appreciation program for startups and new ventures.

It is also important that the advancement made in defense R&D should be commercialized through legal and policy frameworks; attracting private investment in defense technologies; incubation centers to launch new ventures of defense technologies; and dedicated venture fund for defense tech commercialization.

With these indicative measures, the dormant S&T sector in Pakistan will be revitalized to embark on S&T led economic growth both for wealth generation and poverty alleviation and indeed sustainable human development.

S&T Response to COVID 19

COVID 19 crises have reshaped the world from healthcare, to traveling, home based working, online education, commerce and food delivery. This pandemic has also untied the scientific struggle of scientists around the globe to share and exchange their data findings to devise a common response to

the pandemic. Pakistan is amongst the countries that better managed the COVID-19 crises in terms of spread, death rate and economic management.

In the post COVID period, most of the countries need to reorganize their science and technology sectors to better respond to the future pandemic. The following S&T measures will be an asset to address the future possible challenges:

- S&T consortium of experts to predict and manage future infectious disease spread
- Pandemic info labs under disaster management to forecast various kinds of future pandemic
- Regular surveillance studies regarding virus outbreak to predict the risk before time
- Identification of local herbs that boost immunity against viruses
- Compilation of local virology researches and infectious disease studies
- Development of local testing
- Development of vaccine production facilities in the country
- Engagement with international COVID study projects and plans
- The psychological impact studies of COVID 19
- Training and education of civilian officers to manage national pandemics in future

Conclusion

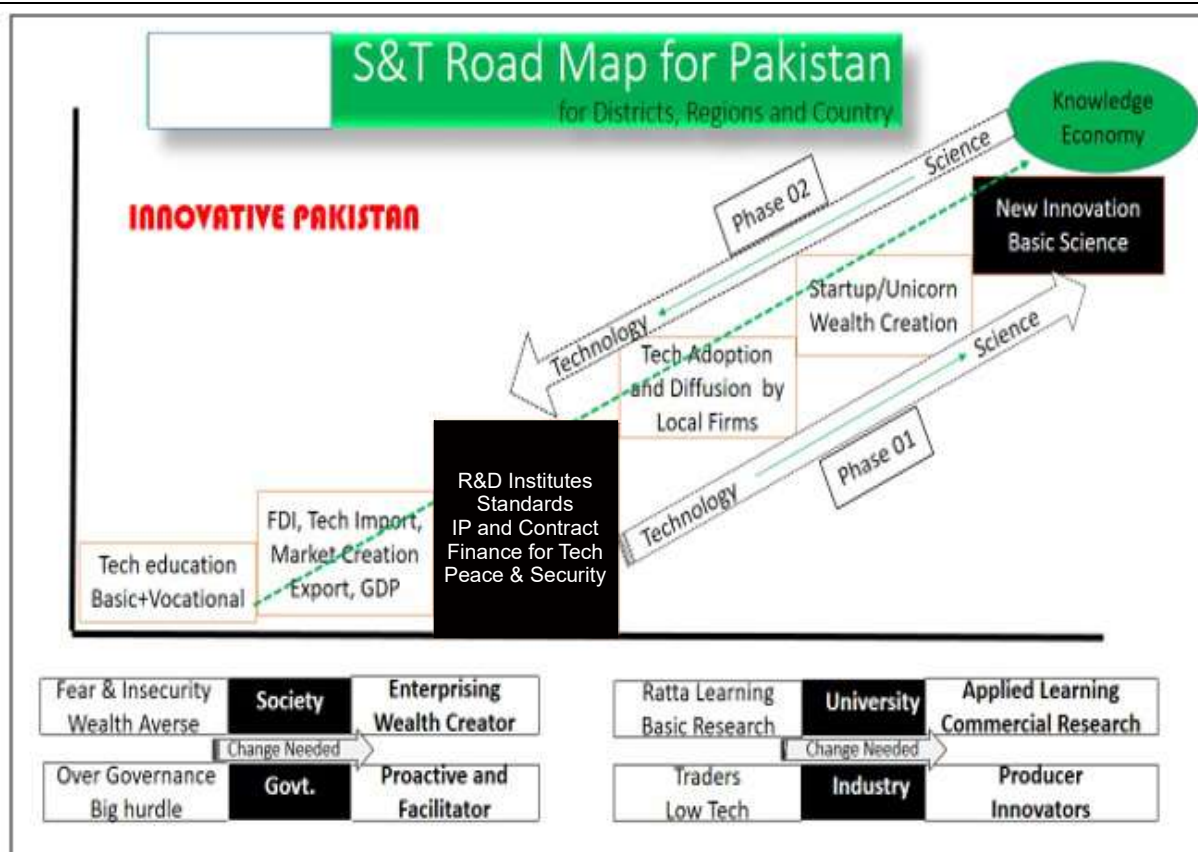
For Pakistan to address its developmental challenges in the highly competitive globalized and rapidly evolving technological and innovative world, there is a need to shun the step by step linear approach for S&T development wrought with policy and institutional fragmentation and the disconnect between government, industry and universities. A more dynamic, cyclical and integrated model of innovation should be adopted to befittingly respond to the emerging dynamic of S&T advancements in terms of method of innovation, areas of innovation, and speed of innovation. China presents a model in this regard. It spends only 6 percent of the world's

research budget on A&I and Data Science but enjoys more than 60 percent share in the commercial market of A&I and data science. The same technology approach serves in e-commerce, digital payment, high-speed railways, renewable energy, and robotics. China invests less than the USA and Europe in basic sciences but earns more than the USA and Europe through technology commercialization of these sciences. The USA has recently announced a USD 100 billion budget to compete with China. But this might not save USA from losing the technology ascendance to China. The USA has a long cycle of investment in technology through the bureaucratic process while China invests directly in the industry giving them the edge to buy technology, produce and quickly capitalize on emerging technology through commercial success. The speed of technological breakthroughs backed by the entrepreneurial state is much faster in China than USA

and Europe.

Pakistan has no choice but to turn its S&T liability into an asset that drives value addition and creates an economy that generates wealth. A compelling vision that drives, integrates, and directs the entire nation into a single focused agenda of “Developing Innovative Pakistan” is sine qua non. The vision of innovative Pakistan should revolve around three components: (a) wealth creation, value addition and exports growth; (b) poverty alleviation; and (c) sustainable human development and growth. For the purpose, Pakistan needs to invest in basic education for quality human resources, technology adoption, and the diffusion and commercialization of available technologies through startups and large-scale enterprises. The following road map (Figure 6.5) summarizes the pathway which the country needs to follow to pursue S&T led development in the country.

FIGURE 6.5



This pathway envision a two phased approach through a closely knit collaborative effort of government , Civil society, industry, and the university system aimed at transforming the mind set and the operational culture of this quartet. The first Phase, backed by conducive policy and regulatory environment, and financial resources will stimulate a strong correlation between the existing technological threshold and development of innovations and basic sciences.

While the second phase will spur the technological development adoption and diffusion through the scientific endeavour and advancement. Ultimately, a blend between the two phases would transform the entire economic landscape to the knowledge economy both for wealth creation and for sustainable human development.

Chapter

7

The Rising Trade Deficit and Fragile Balancing Acts

The Rising Trade Deficit and Fragile Balancing Acts

Imtiaz Ahmad

Covid-19 has accentuated the problematic features of Pakistan's economy. Take trade balance, for instance. The developments during the past two years have highlighted the importance of achieving higher exports growth and reducing dependence on imports. If not addressed timely, the growing trade deficit can again slow down the recovering economy and place Pakistan in a vulnerable position in the conduct of its external transactions. When the pandemic first struck, the GDP growth rate declined to a historic low of negative 0.47 percent in FY2020 from an already low 2.08 percent in FY2019. Consequently, the dwindling exports further declined to \$21.4 billion from \$22.9 billion a year before. Comparatively, there was a large decline in imports from \$54.7 billion to \$44.5 billion owing to lockdowns and disruption in global supply chains, making it a major factor in decreasing the trade deficit from \$31.8 billion in FY2019 to \$23.1 billion in FY 2020. In the following year, with prudent management of Covid-19 situation and opening-up of economy, the GDP growth of 3.9 percent in FY2021 was so-called 'V-shaped economic recovery.' The trade imbalance, briefly suppressed during Covid-19, rebounded, and recently published monthly numbers on imports and exports indicate that the situation is likely to get worse in FY 2022.

This chapter discusses the government's policy interventions and their efficacy in improving the trade deficit, accelerating economic recovery, and the likely effect of the current and post-Covid global economy. The chapter draws on the events and government interventions when the pandemic began, to understand how things played out, and the government's current policy stance towards trade deficit and economic growth. There are a number of government interventions that have fast-tracked the economic recovery including many export incentives and tariff rationalization. However, there are also instances of mismanagement and wrong policy choices which if continued can cast strain on the process of economic recovery.

Recent Pattern of Imports

First and foremost, the swiftly increasing imports are becoming a major cause of concern for the government. All product groups registered increase in imports on on-going FY compared to FY 2019-20. Compared to FY 2018-19 the imports of consumer products have declined by 23 percent, and imports of raw materials and intermediates (excluding oil) has increased by 7 percent. While the increase in import of raw materials and intermediates is encouraging, the growth in food imports is alarmingly high at 51

percent compared to FY2019-20 and 43 percent compared to FY2018-19. Next year, the government is already set to import about 400,000 metric tons of wheat at higher rates than last year. The import of oil is also expected to increase in FY 2021-22 with a higher expected GDP growth rate of 5.2 percent and higher average oil prices compared to last year. Therefore, given the rising oil and food prices in the world market, the imports are expected to increase to over \$70 billion in FY 2021-22. The available figures for the first 3 months of FY 2021-22 that show an average of \$6 billion imports per month, further strengthen this claim.

TABLE 7.1

Imports Composition FY2018-19 to FY 2020-21

	FY19	FY20	Fy21
Imports Composition	54,799	44,553	56,405

An inquisitive mind asks a question here: What has caused the imports to bounce back to unsustainable

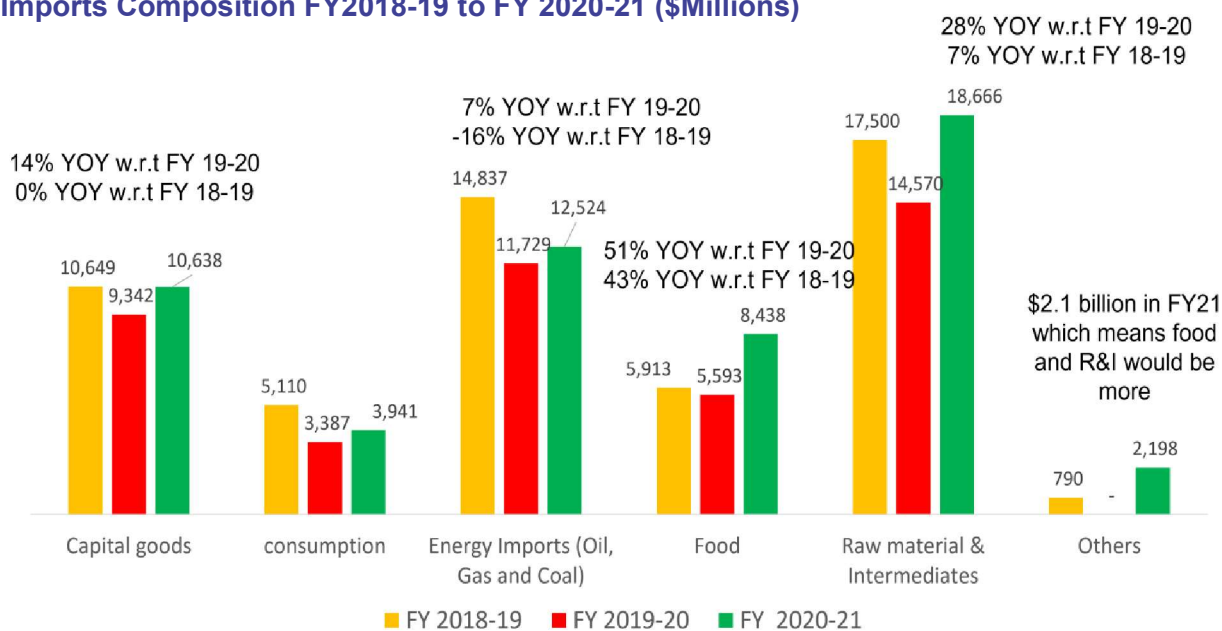
levels? There are multiple factors in play ranging from a rise in global prices to mismanagement on the part of the government. Firstly, the prices for petroleum products and food have increased in the international market which are likely to remain on the higher side according to the International Energy Agency and World Bank Commodity Outlook.

Moreover, as the GDP growth has picked up the volume of oil and food imports have also increased substantially. Furthermore, in addition to expected \$2 billion of vaccine import, the government has also approved the import of 400,000 metric tons of wheat and 500,000 metric tons of sugar to decrease the pressure on domestic prices of these commodities. While these imports may be considered necessary, the government's mishandling of LNG contracts has further added to the rising imports as the price of LNG in the ongoing FY. According to data for the first three months, this has increased four times compared to the same period last year.

Generally, the LNG importing countries secure

FIGURE 7.1

Imports Composition FY2018-19 to FY 2020-21 (\$Millions)



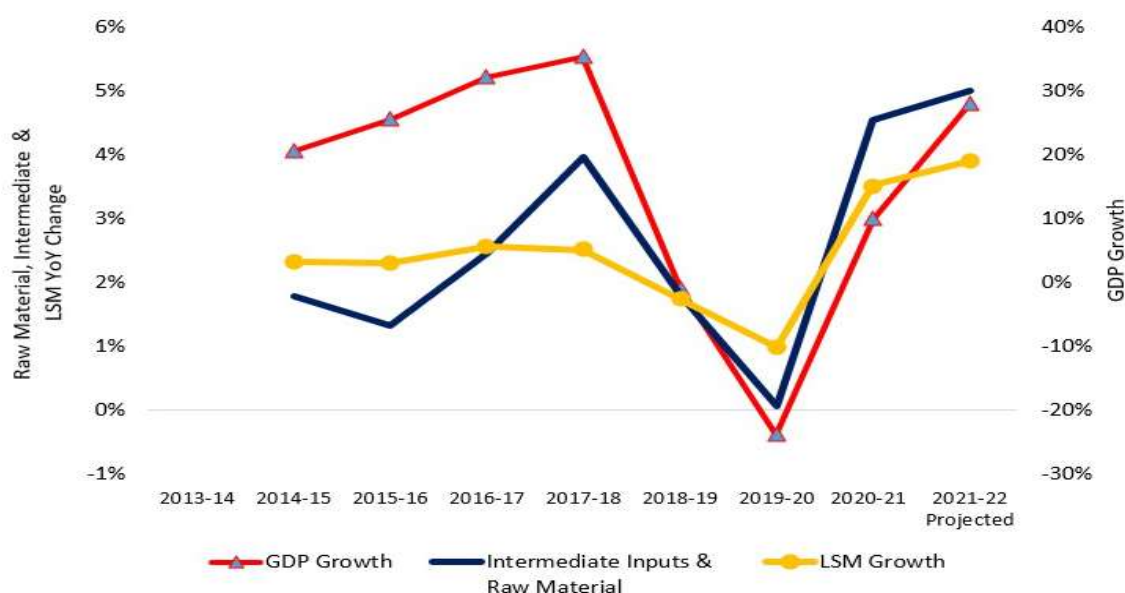
LNG contracts for their winter demand much earlier. The countries that have missed the boat are facing almost unprecedented costs and volatility. The price spiral in LNG prices is expected to continue throughout the winter. The relatively cheaper LNG contract with Qatar, done under government-to-government mode will be effective from January 1, 2022. Till then, since the government is committed to providing LNG at subsidized rates to export-oriented businesses, the government will have to

facturing sector, and it suggests that government is on track to achieve the targeted growth rate of 4.8 percent this year. One of the reasons for increase in imports of raw-materials and intermediates is tariff rationalization on key industrial raw-materials and intermediate products.

The current government has gradually rationalized tariffs on 85 percent of tariff lines, introduced a zero percent tariff slab containing 2063 tariff lines and almost 50 percent of imports of inputs. There is

FIGURE 7.2

Correlation between Imports of Inputs, GDP and LSM



grapple with volatility in LNG prices and serious gas shortages for households and industry, at least till December 2022.

For any economy, during periods of strong growth the imports are bound to increase. However, exports must also grow, so that there must not be a chronic trade deficit impeding the growth process. In the case of Pakistan also, GDP growth, LSM and imports of raw-materials and intermediate inputs have grown in tandem in recent years (See Figure 7.2). The growing imports of raw-materials and intermediates indicate the dynamism in the manu-

major tariff reduction on the textile value chain and inputs of pharma, foot-ware, poultry, dairy and chemicals. Figure 7.3 shows that as result of tariff rationalization, the import of raw materials, on which tariff was reduced, increased by 32 percent in FY 2021. For the same period the raw-materials in which tariff was not reduced increased less as compared to the raw-material products on which tariff was reduced.

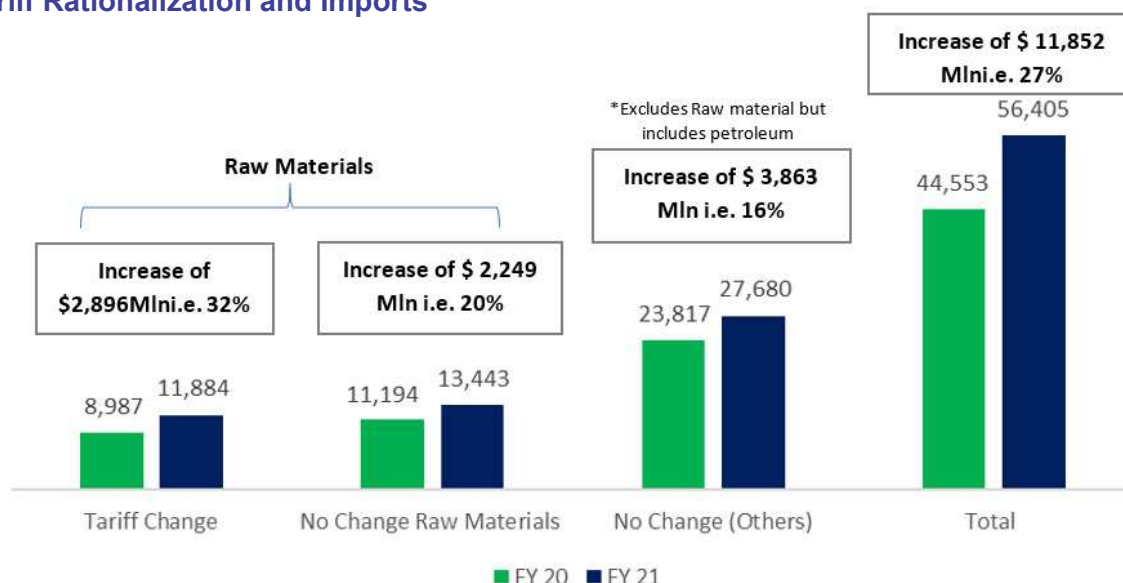
While the present government has started moving in the right direction by reducing custom duties on raw-materials and key inputs, there is still room for

reducing regulatory duties and additional customs duties to support the industrialization process. There are still many intermediate products on which tariff is in the range of 20-27 percent. A careful analysis is needed to identify the intermediate products for further tariff rationalization, particularly for sectors that have export potential. The next steps should be to reduce tariff on final products, encourage competition, and to compel the industry to look for

tional market. That combined with the fact that local industry opened before the global market, trade balance and current account improved temporarily. However, the trade deficit has rebounded again as growth has picked some pace. This widening gap between exports and imports is further putting pressure on the exchange rate. In the first three months of FY2021-22, the rupee has nosedived again from Rs152 to Rs173 against dollar.

FIGURE 7.3

Tariff Rationalization and Imports



international markets instead of enjoying huge profit margins in local markets.

While an increase in imports of raw materials is encouraging, the overall increase in imports and the rising trade deficit is a cause of concern. The State Bank of Pakistan (SBP) has been using exchange rate anchors by allowing depreciation of rupee against dollar as a matter of course which is disquieting, if not alarming. The PKR depreciated from 124 to 160 in the first year of the current government and has jumped to 173 at the time of this writing. This massive devaluation has not helped in restraining imports. The decline in imports in FY 2020-21 was primarily because of lockdowns in the interna-

Rising Exports and Potential Risks

On the exports side, the opening of industry before global markets, tariff rationalization and rising global prices have helped cross the \$25 billion mark in 2020-21. The Government's various incentive packages including tariff rationalization have increased the share of value-added exports. The annual average value-added textile exports during 2015-18 is \$11 billion which has increased by 34 percent and reached \$ 14.8 billion FY 2020-21. During the same period, the exports of raw-material and intermediate within textile and apparel sector have decreased from the annual average of 32

percent during 2015-18 to 23 percent in FY 2020-21. Overall, the share of value-added exports has increased from 68 percent to 77 percent. This changing composition of exports indicates that industrialization process has recently picked-up.

The government interventions which may have contributed to this industrialization process and changing composition of exports include Pak-China FTA phase II, tariff rationalization, payments of DLTL, sales tax refunds, competitive energy prices, and better utilization of LTFF, EFS and TERF. In addition to these incentives, the favorable and realistic exchange rate will continue to give boost to the exporting sector. Going forward, it is expected that the merchandize exports for FY 2021-22 may cross the \$31 billion mark.

Among various government interventions that have helped provide dynamism to the exporting sector, includes payment of long due refunds, subsidized energy tariffs, and reduction in tariffs on cotton seeing that local production is decreasing over the years and it is unable to fulfill the demand of textile manufacturing sector. The governments' Mobile Device Manufacturing policy to promote local manufacturing and assembly of mobile handsets has also started bearing fruits. Under this policy, the Government aims to make the mobile phone manufacturing industry larger than the automobile industry in terms of turnover. The recent numbers show that the imports CKD/SKD units has increased while import of CBU units is declining—indicating the increasing supply capacity of local manufacturers to meet local demand. Moreover, Pakistan has also started exporting mobile units which are expected to increase further this year. Similarly, the exports of meat, cereals and vegetables have also started picking up.

Although rise in exports is encouraging, there should not be sense of complacency by the government as there are possible risks that may impede the

export's growth in the ongoing FY2021-22. Firstly, Covid-19 is not over yet and it can not only affect the export demand, but it can also affect the local industrial production. Pakistan Institute of Development Economics (PIDE) reported a loss in the GDP due to Covid ranged between 12-19 percent for a quarter, implying that it could also have serious supply-side implications for exporting sector. Secondly, the overall import prices of raw materials including cotton are on the rise as the world is recovering from Covid-19. According to World Bank Economic Outlook cotton prices are forecasted to increase by 20 percent this year—which can affect the competitiveness of Pakistan's value-added textiles export.

Another threat to the export's growth is rising freight prices and shortage of containers which has increased the cost of doing business. In addition, the shortage of gas this winter can further increase the cost of production. As in case of shortage, firms are bound to shift to costly alternatives, i.e., electricity, which costs 9-14 cents per unit compared to 6.5 cents in case of gas based captive power.

Afghanistan's Economic and Food Crisis

The tense and volatile situation in Afghanistan after the takeover by Taliban's can have an adverse impact on Pakistan's exports. However, government should also take steps to help Afghanistan in addressing the twin problems of unemployment and food shortage. The rising food inflation and distorted supply chains are turning into economic crisis. The US Federal Reserve, the World Bank and the IMF have continued a freeze on Afghan assets after the Taliban seized power from the elected Afghan government in August. This has only worsened the economic crisis in Afghanistan because Afghanistan is dependent on imports of wheat, cereals, and medicine among other products. Is Pakistan currently in a situation to help Afghanistan to address an acute

shortage of food and other necessities? The products for which Afghanistan's depends on imports include wheat, wheat flour, pulses, rice, sugar, medicine, and meat. The requirement of which amounts to approximately \$2 billion for FY 2021-22. Except wheat, wheat flour and sugar, Pakistan is already exporting the above-mentioned products to Afghanistan which amounts to \$357 million in FY 2020-21. Afghanistan imported \$347 million worth of these products from bordering countries including all of its wheat and flour from Kazakhstan which is a large exporter of this staple product in the world market because it has the highest monetary yield. Out of \$ 2 billion essential imports of Afghanistan, Pakistan can potentially export \$520 million mainly rice, edible oil, medicine, and meat. Pakistan is already importing wheat and sugar to meet its own local demand and control domestic prices; therefore, it cannot export these products to Afghanistan. However, Pakistan can have a currency swap arrangement with Afghanistan—where bilateral trade is done in the respective currency at a pre-determined exchange rate instead of US dollar—to save foreign exchange.

Conclusion

Contrary to all interventions to stabilize the economy and feel-good factor that the government has created with rising GDP growth, LSM growth and exports, the recent interpositions in terms of imposing of cash margins requirements on 114 products and increasing tariffs on automobiles including EV's and increase in financing restrictions on the purchase of automobiles indicates that government has started to find ways to curtail imports. Firstly, the automobile imports are only a small fraction, not even one percent of total imports, this policy activism won't save sizable foreign exchange but only give a bad signal to the industry. Secondly, most of the imports are under new a auto-policy that allow the new manufacturers to import certain number of units for marketing purposes.

These imports are temporary and will eventually decline. Furthermore, the 114 products on which cash margins requirement is imposed, account for only 2 percent of the total imports. It cannot make any significant dent on overall imports.

The spike in imports in the first three months of FY2021-22 is because of higher oil prices, LNG prices, and imports of wheat and Covid-19 vaccines. The oil prices, as of October 2021, are at a 7-year high and LNG is being imported currently at spot prices which is also on the higher side. In addition, the majority of the volume of vaccines and wheat approved by the cabinet is also likely to be imported in the coming months of this fiscal year. Therefore, the monthly imports are likely to remain on the higher side and may cross the \$70 billion figure during FY 2021-22.

Overall, the economy is at a very critical juncture, where the policymakers have two options: either curtail trade deficit by curtailing imports and putting brakes on GDP growth which has just picked-up or keep the economy meticulously on the current growth path. Historically, every four to five years when the economy surpasses GDP growth and the current account deficit grow beyond the manageable levels then deficit reduction becomes the primary task of economic management. The key reason is ever-increasingly dependence on imports and relatively stagnant exports—because exports are concentrated in few products and destinations which have not changed over the decades. Until and unless the exports base does not increase, Pakistan will keep returning to the episodes of growth spurts and severe dips.

As the government has started putting brakes on the GDP growth to avoid overheating, it will take measures in addition to imposing cash margins and tariffs to restrain imports and growing trade deficit—in any case, it should not impose tariffs or non-tariff measures on raw-materials and intermediates. Moreover, it should identify luxury consumer

items to curtail imports. The rapid implementation of new refinery policy, particularly the enhancement of refinery capacity, can also help in saving foreign exchange by increasing the share of relatively cheaper crude oil instead of refined oil to meet local demand. Considering Pakistan's exports to Afghanistan once touched \$2.5 billion in 2011 but since then they are declining and currently stand at \$983 billion

in FY 2020-21. There is huge untapped export potential relative to current exports to Afghanistan, but at this point barter trade and/or currency swap agreement will have a negligible impact on Pakistan's foreign exchange earnings. Also, economic engagement with Afghanistan at this point is necessary to avoid humanitarian crisis and for the development of long-term economic relationships.

Chapter

08

**Agriculture, Food and
Health Nexus under
COVID and other Disasters**

Agriculture, Food and Health Nexus under Covid and other Disasters

Dr. Mahmood Ahmad & Irtaqa Riaz

Introduction

The last two years continue to affect the global economies through different variants of Covid, a record number of natural disasters such as droughts, floods, hurricanes, fires and locust attacks of almost biblical proportions continue to threaten not just the world economy but the very existence of humankind. Even first-world countries like the USA and other European nations admit that the impact of climate change is showing in these recurrent events incurring a very high cost to the economy and thwarting all efforts of progress. Oddly, some developing countries were in a better position and had a certain health infrastructure to cope with the ongoing crisis on a sustainable basis than developing countries which were being badly impacted, in a way neutralizing the economic gains of the past few decades. It is not the question anymore about how long these crises will prevail but to devise a strategy that can combat these problems in a successful and sustainable manner. A consensus is emerging that our economies need a major paradigm shift in developing a more resilient economy to absorb or mitigate these shocks and disasters caused by climate change.

The Covid-19 pandemic has put significant pressure on food and health systems not only in Pakistan but all around the world. The Covid-19 pandemic has

demonstrated how both health and food systems are linked to one another and how local food systems are connected to global systems. Many researchers view that the virus has been spreading across countries with greater intensity and speed due to high rates of urbanization and globalization of trade and travel. The lockdowns and movement restrictions within countries and across borders have disrupted national and local food and agricultural output and input markets; these restrictions have caused sharp reductions in overall economic activity globally. In poorer countries, the fragility of systems (including agri-food systems) and livelihoods has further intensified due to disruptions.

According to The Global Report on Food Crises 2020, 135 million people are facing acute food insecurity at the “crisis” level or higher in 55 countries and territories; it is a situation that needs immediate action. It was further concluded that more than 183 million people were facing a “stressed” level of acute food insecurity with a high risk of moving to the “crisis” level in case of additional shocks. The situation is particularly worrisome in light of the evolving nature of the Covid-19 pandemic.

This chapter attempts to highlight the growing food,

health, and climate change nexus that continues to impact both developing and developed countries. It describes (i) policy measures enacted by governments to contain the spread of the virus; (ii) policies and measures to stabilize the functioning of agri-food systems; (iii) potential effects of policies on agri-food systems and vulnerable groups. Finally, it also assesses longer-term options that would need to adopt a theory of change under this growing nexus.

A Brief on Disasters

The disasters severely disrupt the functioning of a community causing human, material, economic losses and exceeding the coping ability of the affected community using its own resources. The disasters can stem from natural hazards or human activities. In both cases, the loss of human lives and property damage results in human suffering.

In the past ten years, natural hazards triggered 83 percent percent of the total disasters, these were caused by extreme weather- and climate-related events, such as floods, storms, and heat waves. Since the 1960s, the disasters triggered by extreme weather- and climate-related events have been increasing and have risen almost 35 percent since the 1990s. The proportion attributable to such disasters continued to rise from 76 percent during the 2000s to 83 percent in the 2010s. These disasters have killed more than 410,000 people in the past ten years, the majority of which belong to low and lower-middle income countries. A further 1.7 billion people around the world were affected during the past decade; many were injured, left homeless, or without livelihoods. Climate change is further worsening the situation. As the global temperatures are rising and rainfall patterns are shifting, it is leading towards more frequent droughts, floods, and storms in many regions of the world. The world needs to be prepared to mitigate the effects of climate change to prevent the devastating impact on resources, infrastructure, and livelihood.

Floods are one of the most common natural hazards. The extreme weather patterns and rising sea levels due to long-term global climate change are increasing the likelihood of floods, particularly in coastal and low-lying areas. The floods result in extreme devastation such as crops and livestock damage, increase soil erosion, water pollution, and destruction of infrastructure. There have been extensive floods in the past year in different parts of the world including Assam Floods 2020, Jakarta Floods 2020, China (June to September 2020), Eastern Africa (March to June 2020), and more. As of this year, floods have hit European countries, such as Germany and Spain, New York in the USA and Maharashtra in the Asian sub-continent. These resulted in the loss of human lives and property damage. According to Organization for Economic Co-operation and Development, floods affect 250 million people and cause USD 40 billion in damage worldwide on an annual basis. There is a need to have better warning systems to prevent potential calamities in vulnerable areas.

The popular definition of droughts means a situation where there is a lack of sufficient moisture, water, or rainfall for normal activities. Droughts are extremely damaging to crops and livestock and its severity is increasing due to a rise in temperatures, adverse effects of El Nino, and unexpected rainfall during the monsoon season. For example, in 2018, Pakistan received reduced rainfall during the monsoon season (May to August), with Sindh 69.5 percent below average and Baluchistan 45 percent below average. It resulted in acute shortages of water, food, and livestock fodder. The Government of Pakistan estimates that some 5 million people were affected by the drought in 26 districts in Sindh and Baluchistan causing havoc in terms of food, water availability, and exacerbated the health issues. However, the month of September has been exceptional this year in terms of volumes of rainfall received. It will definitely have an impact on

harvesting of rice and sowing of wheat.

Early warning systems, forecasting potential risks, and monitoring actual impacts are important policy instruments that will help to mitigate disasters. With climate change, we are observing a rise in temperature, rise in ocean levels, and shift in rainfall patterns which further multiplies the risk of natural disasters – too much or too little water, hence, more commitment is needed for climate-action to save all provinces of Pakistan from the adverse effects caused by the climate related disasters.

Impact of these Disasters on Agriculture, Food Security and Health

• The Global Case

The measures taken to prevent the spread of Covid-19 have impacted the agricultural sector in various ways. The food supply and demand chain were directly affected. When the lockdown measures were put in place, the local, national, and global supply chains were disrupted. As a result, the resources for maintaining food production and food security were restricted. The movement restrictions reduced access to labor and cultivating lands causing difficulties especially during the critical times of the agricultural season. In many countries, the harvesting capacity and the transport of goods to the markets were adversely affected. The purchasing power of local currency has also been decreasing along with the capacity to produce and distribute food.

For example, the lockdown in Bangladesh limited the access of vegetable farmers to markets and it reduced their production and sales capacities. They were also affected more because of the perishable nature of their product. Likewise, the main cocoa harvest in West Africa was completed by the time local lockdown was imposed. However, there could be a loss of up to USD 2 billion, similarly, 2 million farmers could be affected in Ghana and Côte d'Ivoire

because of export restrictions and a decrease in demand and prices.

At the country level, the primary risks to food security are the increase in retail prices while the incomes are reducing. As a result, it is becoming difficult to afford and many households have to cut down on the quality and quantity of food consumption. The supply disruptions are one of the reasons that a rise in prices has happened. As the people living in low- and middle-income countries spend a major portion of their income on food, they will be impacted more as compared to people living in high-income countries.

The Agricultural Commodity Price Index has been approximately 30 percent higher in July 2021 as compared to January 2020. The prices of maize, wheat and rice were about 43 percent, 12 percent and 10 percent above the January 2020 levels. The strong demand as well as weather uncertainties, macroeconomic conditions, and Covid-19-related restrictions can be observed behind the increased prices. At the same time, the global production outlook for major grains remains good¹.

According to the report on State of Food Security and Nutrition in World, nearly one in three people in the world (2.37 billion) did not have access to adequate food in 2020 – an increase of almost 320 million people in just one year. Of the 2.37 billion people facing moderate or severe food insecurity, half (1.2 billion) are found in Asia, one-third (799 million) in Africa, and 11 percent (267 million) in Latin America and the Caribbean .

The reduced production is one of the direct impacts of natural disasters on agriculture. According to an estimate, during 2008-2018, the disaster-related loss recorded in crop and livestock production was USD 280 billion across all income countries. In the starting months of 2020, huge swarms of desert locusts have caused damage in countries across the

Greater Horn of Africa, the Arabian Peninsula, and Southwest Asia. Such outbreaks leave a devastating impact on rural economies, threaten livelihoods, and lead to food insecurity. In May 2020, while the world was already facing the Covid-19 crisis, heavy rains caused flooding in the Kasese District in Uganda which destroyed villages and displaced thousands of people. The neighboring countries, Kenya and Rwanda, were also affected by floods and landslides. In these three countries, half a million were displaced and almost 300 were killed. Survivors needed emergency food assistance as well as shelters. It was difficult to accommodate people in centers while observing physical distancing to combat Covid-19. In Eastern Africa, the combination of floods and locusts impacted food insecurity and livelihoods leaving nearly 25.8 million people severely food insecure in at least eight countries .

The countries that are most vulnerable to food insecurity, as identified by The World Bank, are the following: fragile and conflict affected states where logistics and distribution are difficult even before Covid-19 restrictions took place; countries combating multiple crises resulting from more frequent extreme weather events and pests like locust outbreak; the poor and vulnerable, including the 820 million people who were already food insecure before the Covid-19 crisis; and countries with significant currency devaluations that increases the cost of food imports.

According to Al Jazeera reports, even developing countries continue to face empty shelves, food shortages, and supply issues. These are not the usual traits in the globalized and technologically interconnected 21st century, yet food shortages across the United Kingdom have dominated headlines in recent weeks. Supermarket shelves have been sparse and restaurant menus have been modified. This is mainly because of the supply chain issues. Analysts say there are no food shortages as such, but rather labor supply issues in haulage and logistics caused

by a combination of Covid-19 and Brexit happening almost simultaneously, thus adding to the problem. The labor shortage due to travel restrictions and uncertain travel policies due to Covid continue to disrupt the supply chain. On behalf of Logistics UK, a transport association, independent research was carried out by RepGraph². It is estimated that 14,000 EU drivers left UK in the year up to June 2020 with just 600 returning by the second quarter of 2021. At the same time, there is a backlog of domestic drivers who are waiting to take HGV tests that were pushed back during the pandemic, and the already dwindling pool of drivers is being further reduced by test-and-trace isolation rules³.

- **The Case of Pakistan**
- *Impact on Food Security*

In Pakistan, it is estimated 53 million people live below the poverty line; 40 million people are undernourished, while 20-30 percent are facing moderate and severe food security. The pandemic, as well as the impact of other disasters, make the population more vulnerable to food insecurity. It is speculated by economic experts that the number of food insecure people will rise in Pakistan in 2021 as the current pandemic is evolving. According to the Pakistan Bureau of Statistics, the Consumer Price Index increased in Pakistan by 8.2 percent between May 2019 and May 2020. Moreover, food inflation also increased by 13.73 percent in the rural areas and 10.94 percent in the urban areas during this pandemic. WFP and FAO (2020) reported an increase of 4 percent and 1.9 percent in wheat and flour prices in Pakistan. In Punjab, the rise in wheat price was the highest, as there was a 33 percent increase in Gujranwala alone. In KP, wheat flour prices increased up to 14 percent in April compared to the prices in February. Similarly, prices of rice, pulses, vegetables, fruits, and other household items increased substantially. While the increase in prices was bad news for the consumers, it could be an incentive for producers who were adversely affected

Box 8.1

Are 2020 and 2021 the Records Years for Disasters?

A popular refrain on social media notes that while 2020 was among the hottest and one of the worst years for climate disasters, it is also likely to be the coolest and calmest for years to come. During a speech at Columbia University in December, UN Secretary General António Guterres put it bluntly: “The state of the planet is broken.” In fact, this trend continues in 2021. A few major disasters for both years are listed:

1. Covid pandemic started in China and continues to spread up till now affecting countries worldwide. Climate disasters started early in 2020 — The catastrophic fires in Australia in early 2020 were soon
3. followed by flooding in Indonesia, a super-cyclone hitting the coast of India and Bangladesh and then more flooding in Kenya and wide swaths of Central and West Africa. Record-breaking fires in the Brazilian Amazon, South America's Pantanal wetlands, California and
4. Colorado, followed by a historic hurricane season in the Atlantic, including two apocalyptic hurricanes in Nicaragua and Honduras. 2020 ended with bushfires consuming more than half of K'gari, a World Heritage site and island off
5. the coast of Queensland, Australia. The triple threat of conflict, climate change and Covid-19 are driving the crises in nearly all Emer-
6. gency Watchlist countries and threatening famine in several countries in 2021. In mid-July, China's Henan province, one of the country's most populous regions, was hit by year's worst rain — 640 millimeters (more than 2 feet) — in just three days, a phenomenon “unseen in the last 1,000 years.” Drought in parts of India left farmers and livestock owners in desperate conditions for most of this
7. year. Such events did occur in the past, but are now becoming increasingly more frequent, stressing communities and entire nations. In USA very recently, the President of USA said on Hurricane IDA hitting state of Louisiana “is
8. another reminder that we need to be prepared for the next hurricane, and superstorms are going to come -- and they're going to come more frequently and more ferociously.” Based on its maximum sustained winds of 150 mph at landfall, Ida was the seventh-strongest hurricane on record to strike the United States. It also made landfall exactly 16 years after Hurricane Katrina although the two storms were far from identical. The remnants of Hurricane IDA blew through the mid-Atlantic states with at least two tornadoes,
9. heavy winds and drenching rains that collapsed the roof of a U.S. Postal Service building, left cars and roads underwater and sent garbage floating through the streets of New York.

by the pandemic measures.

The provinces of Punjab, Sindh and Baluchistan account for two-thirds of Pakistan's population and the severe food insecurity is more prevalent in the rural areas than in the urban areas of these provinces. People with low income and vulnerable groups may have to cut down on their consumption of food or its

diversity. A special survey was conducted by the Pakistan Bureau of Statistics for evaluating the socio-economic impacts of Covid-19 in the country. The standard module for measuring food insecurity, developed by Food and Agriculture Organization (FAO), was used to estimate the food insecurity for the Covid period from April to July in 2020. The

results revealed that severe food insecurity has increased by 10 percent during the Covid period as compared to approximately 3 percent reported in (HIES) 2018-19. Moderate food insecurity was faced by 30 percent of the households as compared to 13 percent reported in (HIES) 2018-19.

There were eight questions regarding the fear, quality and quantity of food consumption during the Covid period. The responses from the households are presented in the table 8.1.

The provincial comparison depicted that Sindh had the highest percent of households facing food

placements. Extreme high temperatures can cause or intensify health problems including heatstroke, heat exhaustion, and cardiovascular and respiratory diseases. The allergy seasons are also prolonged due to heat which means worsening of respiratory conditions. The European heat wave in 2003 resulted in 30,000 deaths and it is considered as one of the ten deadliest natural disasters in Europe for the last 100 years . Pakistan was hit by a heat wave in 2015 which resulted in the death of almost 1200 people and 40,000 suffered from heatstroke and heat exhaustion in the province of Sindh . The likelihood of vector-borne diseases is expected to increase with

TABLE 8.1

Household Experiences Regarding Food Insecurity (COVID Period: April – July 2020)

Inability to eat Healthy and Nutritious Food	Worrried About Not Having Food	Consumed Few kinds of food	Consumed Less Food	Skipped a Meal	Ran Out of Food	Felt Hungry	Hungry for a Whole Day
60%	59%	58%	30%	29%	22%	17%	12%

Source: Pakistan Bureau of Statistics, December 2020, Special Survey for Evaluating Socio-Economic Impact of Covid-19 on Wellbeing of People.

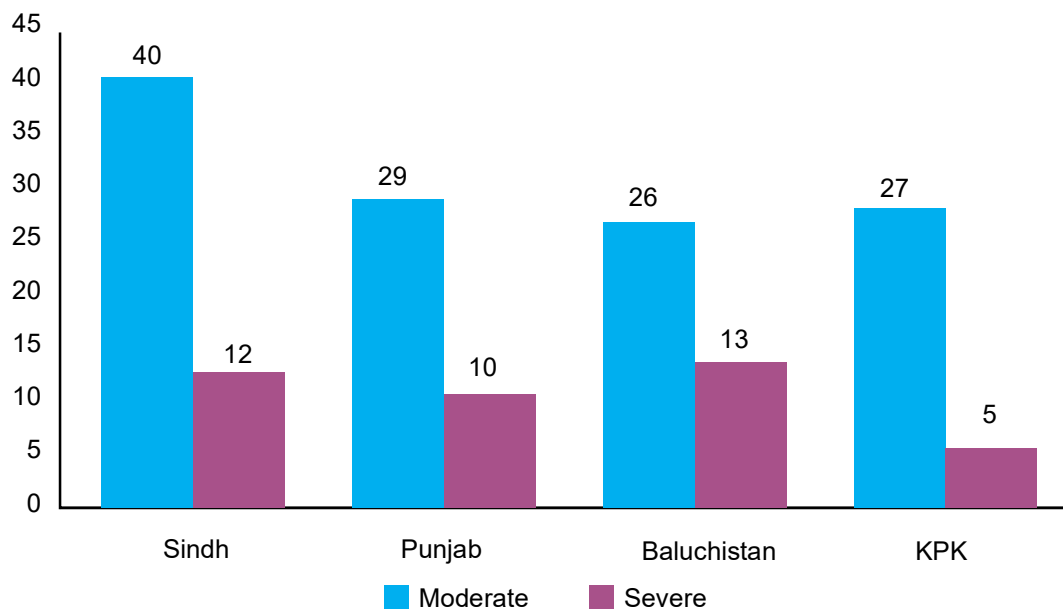
insecurity i.e., 52 percent. The provinces of Punjab and Balochistan had 39 percent followed by Khyber Pakhtunkwa with 32 percent. Figure 8.1 represents the percent of moderately and severely food-insecure households in the four provinces.

- **Impact on Health**

Climate change is a major threat to health in the 21st century. The social and environmental determinants of health including clean air, quality of water, food availability and secure shelter are adversely affected. As such, health can be impacted either directly or indirectly. The direct impacts include heat waves, droughts, floods and heavy storms; the indirect impacts include food and water insecurity, vector-borne, rhinoviruses and contagious diseases, undernutrition and forced displacements. Extreme weather events result in injuries, deaths and dis-

climate change due to warmer temperatures and changing rainfall patterns which provide a suitable environment for climate-sensitive vectors. For example, mosquito-borne dengue fever has increased 30-fold in the past fifty years and causes up to 50-100 million infections in over 100 countries. Dengue fever is a nationwide risk in Pakistan and even currently many cases are being reported in different provinces. The effects of climate change will vary based on age, gender, geographical area and socioeconomic status. The elderly, children, individuals with pre-existing health problems and individuals living in underdeveloped countries and with lack of access to proper healthcare will be more vulnerable.

Food insecurity is a health concern as reduced calorie intake and compromised nutrition results in negative health outcomes. People go without food or

FIGURE 8.1**Mderate and Severe Percentage of Food Insecure Household**

Source: Pakistan Bureau of Statistics, December 2020, Special Survey for Evaluating Socio-Economic Impact of Covid-19 on Wellbeing of People

have to cut down the quality and quantity of their food in times of food insecurity. These research studies indicate that development of children is negatively affected due to malnutrition and risk factors such as stunted growth, erratic behaviour, psychological troubles combined with cognitive problems can occur. The household food insecurity is hypothesized to work in two ways. The nutritional pathway with compromised quality and quantity of food is one way; the other one is parental distress due to low resources that affects the caregiver-child relationship and leads towards developmental and attachment problems in children.

The region of South Asia accounts for 40 percent of the world's stunted children who are short for their age usually from malnutrition. Moreover, women in Asia have the highest rate of anemia in the world. Pakistan is also facing major malnutrition problems. According to National Nutritional Survey 2018, four in ten children are stunted under the age of five

in Pakistan and 17.7 percent are suffering from diseases caused by malnutrition. It was also reported that 41.7 percent of women of reproductive age are anemic. The proportion of women is slightly higher in rural areas (44.3 percent) as compared to urban areas (40.2 percent) of the country. Iron deficiency is one of the leading causes for anemia among women of reproductive age along with unhealthy diet, deficiency of certain vitamins (B12 and folate) and some other chronic conditions.

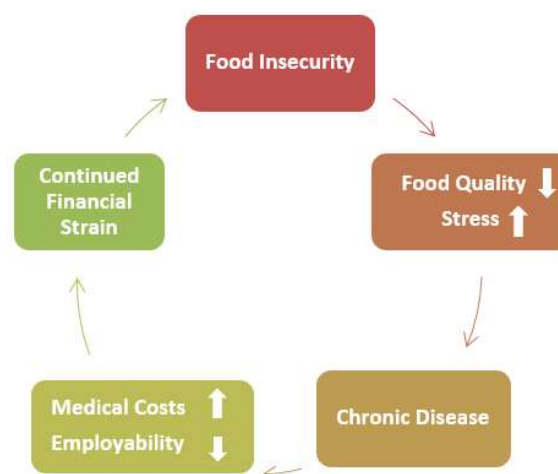
It has been suggested that household food insecurity is linked to chronic disease. The Hunger in America 2014⁴ found that many people were dealing with diet-related chronic disease in households served by the feeding America network of food banks. There was at least one member with high blood pressure in fifty-eight percent of households and at least one diabetic member in thirty-three percent of households. A cycle of food insecurity and chronic disease is presented in Figure 8.2. It starts when an individ-

ual is not able to afford nutritious food, coupled with stress due to financial strain is also a contributing factor. This makes it difficult to manage the disease. The household budget is spent on the health conditions which leaves little money for essential nutrition, thus worsening the situation.

The Covid-19 outbreak has had a psychological impact as well. The pandemic, subsequent lockdowns and decline in economy has adversely affected the mental health of people across the world. Mental and emotional conditions such as anxiety, chronic depression, fear, post-traumatic stress disorder and adjustment disorder can be observed in individuals including healthcare workers. A study conducted among healthcare workers in many regions of China found a considerable proportion of health care workers experiencing symptoms of depression, anxiety, insomnia, and distress, especially in women and nurses. Medical attendants in Wuhan, and front-line health care workers directly involved with suspected or confirmed Covid-19 patients were found to be dealing with physical exhaustion, mental fatigue and psychological problems. People with limited resources, especially those facing unemployment, or are in isolation, or existing mental health problems are vulnerable; in addition, youngsters are also at risk of developing anxiety. A study was conducted to measure emotional impact in children (aged 3-18) during quarantine in Italy and Spain. The results revealed 85.7 percent of parents observed emotional and behavioural changes in their children. The following symptoms such as concentration problems (76.6 percent), boredom (52 percent), irritability (39 percent), restlessness (38.8 percent), nervousness (38 percent), sense of loneliness (31.3 percent), uneasiness (30.4 percent), and worries (30.1 percent) were more frequent. In these times, women are considered to be vulnerable as their multifaceted lives are affected by stressful events. As people were confined to homes during the lockdown, it adds to the responsibilities of women in

FIGURE 8.2

The Cycle of Food Insecurity and Health Problems



Source: Second Harvest Food Bank of Middle Tennessee, March 2019, The Cycle of Hunger and Health Issues.

households and increases parental stress among them; moreover, some women have to juggle between housework and office. Women who have been experiencing domestic violence are more at risk as being at home increases the exposure to the perpetrator. A study conducted in Karachi found women scored higher on depression scores in Covid times as compared to pre-Covid days. Hence, this phenomena needs to be addressed, especially now that the Pandemic is entering its second year. As the restrictions have been lifted and we are returning to a new way of living, it is important that people feel supported.

The researches indicate how our health can be impacted by the quality and quantity of food. There is also growing evidence establishing an association between climate change and health problems. The direct and indirect impacts of climate change have been observed on health as discussed above. Covid-19, that allegedly started from a wet-market in China, is an example of unsustainable food production and consumption. These ecosystems disturbances are currently amongst the biggest global health challenge. It is time to make decisions and move towards practices that are more sustainable

and resilient to protect the well-being of people.

The Policy Response

Pakistan has well demonstrated its capacity to respond to major disasters such as the 2005 earthquake and the 2010 floods with NGOs and civil society proactively participating in this process. Similarly, the policies of Smart Lockdown have been recognised as being successful globally. It is a success story at internationally as it kept the food and health supply chain unaffected. The government has been prioritising the agriculture sector recently and bringing innovative ideas to enhance land and water productivity by promoting climate-smart agriculture and water management policies all along the value chain. The Pakistani Government also launched a Ten Billion Tree Tsunami Project (2019-2023) to deal with the effects of climate change. The purpose is to improve ecosystems and forestation in the country.

However, there is room for improvement in planning and coordination, which need to be provided by the government. Keeping in view the increasing likelihood of future emergencies, better plans and coordination mechanisms at district, provincial, and national levels are needed. The government will have to continue to take the lead especially in areas facing complex security conditions such as where there is a large number of refugees or other disaster prone areas.

According to a FAO Report, the actions taken by the Government at Federal and Provincial levels to mitigate effects of the crisis on vulnerable groups and the economic well-being include:

- The Government of Pakistan announced that PKR 1.25 trillion (USD 7,538,233,750) will be spent on a multi-sectoral relief package to address the challenges arising from the pandemic (OCHA, 2020). Ehsaas Emergency Cash Programme was launched to help the vulnerable

population during the coronavirus crisis and the aim was to help them buy items of basic necessities during the lockdown period. The program covered 12 million families during the first phase and Rs. 12000/- was provided to each household.

- The Utility Stores Corporation (USC) will use USD 300 million to provide five basic edible commodities including flour, pulses, sugar, and ghee at subsidised rates to charitable organizations, and they will distribute them in 'ration-packs.' It was not a one-time support; however, it was seen that there was no estimate of how bags were distributed resulting in many families getting them again at the same time and people selling them in markets.
- The government has increased the monthly stipend provided by the Benazir Income Support Programme (BISP) from PKR 2,000 (USD 13) to PKR 3,000 (USD 18). A cash transfer programme targeting the country's poorest of the poor, BISP reaches five million families.
- 10 Billion Tree Tsunami programme was redirected to provide employment, over 63,000 workers have been hired to plant saplings, earning PKR 500 (USD 3) per day, half the daily earnings of an average daily wage worker (Aljazeera, 2020). Despite the easing of the lockdown, a majority of daily wage workers remain unemployed due to the state of the economy.

The fact that Covid-19 virus is here for sometime to come and the frequency of disasters is expected to rise, highlights the need to be prepared and build a more resilient eco-based economy.

The Way Forward: Bringing Resilience to Agriculture. Strategies For Coping with Disasters Including Covid

- **Short-Term**

Covid-19 is exposing new global realities in terms of health, food, and the way we live which is critical issues for both developing and developed countries with negative impacts varying from country to country and region to region. The impact of Covid-19 on food security and agricultural food systems cannot even be captured at this stage. According to the FAO, the full impact of Covid-19 is not clear and it will take years to assess as the pattern of the virus because it is so unpredictable (Ahmad, Amira 2020).

In the short-term, at the global level, efforts must be invested in preventing disruptions to crop production and protection systems – much in the same way as the food supply chains of many countries were exempted from the restrictions to the movements of persons, goods, and services. Two areas of policy change are (1) moving from global to local or regional value chains and (2) moving from longer and inefficient local value chains to shorter, efficient and climate smart value chains.

Furthermore, There is a need to integrated in the planning and policy process to adopting technology and practices that take into account the production of food, health and climate change nexus that provides solutions at much lower costs – in economic and health context.

Crisis often provides opportunities – Build Back Better i.e., to develop sustainable institutions with world class knowledge and technology base with inclusion of economic and environmental criteria to base decisions. Without institutional reforms, the implementation of short-term and long-term policies are not going to happen if the past is any guide. According to ADB Report, the approach should not be based on projects that are limited in time because in most cases, it is unsustainable and unscalable.

Smallholders and large-scale farmers were both

affected – albeit in different ways – by disruptions to the food supply chain. Small-scale farmers faced challenges in producing and transporting their produce, ensuring timely inputs at a fair price, gaining access to markets and a fair selling price for their goods, and minimizing food losses along the supply chain; while large-scale farmers found it difficult to hire daily or formally-employed workers during the recent the lockdown (FAO 2020).

The expansion of digital technology base and use of cost effective digital technology is key to providing much needed innovation in the production of food, health-care and to limit the negative effects of climate change.

The innovative approaches for addressing Covid and other natural hazards need to be formulated, damage and loss along the food value chain also needs to be analysed. In addition to the above, the role of creating cost-effective storage at farm and market levels that can reduce transaction costs during times of disaster must be taken into account.

- **Long-Term**

FAO suggests that based on the outcomes of the needs assessment, countries should provide sustained investment, engender public-private partnerships, and enact laws and relevant policies and regulations for strengthening the sustainable crop production intensification value chain. FAO's Save and Grow3 paradigm (summarized below) provides a menu of interventions that countries and partners may deploy in context-specific settings to engender a sustained resilience of national crop production and protection systems needed to address the food production system – a prerequisite for developing food, health, and climate change nexus.

Farming Systems: Sustainable crop production intensification should be built on farming systems that offer a range of productivity such as socio-economic and environmental benefits to producers

and to the society at large. Farming systems should be implemented using the seven recommended management practices: minimum soil disturbance, permanent organic soil cover, species diversification, use of high-yielding adapted varieties of seed, integrated pest management, plant nutrition based on healthy soils, and efficient water management. The integration of pastures, trees and livestock into the production system and the use of adequate and appropriate farm power and equipment are also key.

Plant Protection: In well-managed farming systems, crop losses to pests can often be kept to an acceptable minimum by deploying resistant varieties, conserving predators, and managing crop nutrient levels to reduce pest reproduction. The recommended measures against diseases include the use of clean planting material, crop rotations to suppress pathogens, and eliminating infected host plants. Effective weed management entails timely manual weeding, minimized tillage, and the use of surface residues. Lower risk synthetic pesticides should be used for targeted control, in the right quantity and at the right time. Integrated pest management can be promoted through farmer field schools, local production of biocontrol agents, strict pesticide regulations, and removal of pesticide subsidies.

Water Management: Sustainable intensification requires smarter, precision technologies for irrigation and farming practices that use ecosystem approaches to conserve water. Knowledge-based precision irrigation that provides reliable and flexible water application, along with deficit irrigation and wastewater-reuse, is a major platform for sustainable intensification. Policies need to eliminate perverse subsidies that encourage farmers to waste water. The increase in rain-fed productivity depends on the use of improved and drought-tolerant varieties and management practices that save water.

New Dimensions in Health: There should be an investment in climate change and public health research to understand the potential health co-benefits of climate mitigation. The policies must be designed to incorporate health and climate considerations at the local and national levels. The shift to a low carbon economy through effective mechanisms is needed. Furthermore, healthcare systems must be made more resilient in countries. For making healthy sustainable foods affordable and improving human health, advanced research, policies and innovations must be accelerated in agriculture to increase and diversify the supply of food and promote food safety.

Enabling Policies and Institutions: To encourage smallholders to adopt sustainable crop production intensification, fundamental changes are needed in agricultural development policies and institutions. First, farming needs to be profitable (some countries protect income by fixing minimum prices for commodities; others are exploring “smart subsidies” on inputs, targeted to low-income producers). Policymakers also need to devise incentives for smallholder farmers to use natural resources wisely and reduce transaction costs. Regulations are needed to protect farmers from unscrupulous dealers selling bogus seeds and other inputs in many countries. Major investment will be needed to rebuild research and technology transfer capacity in developing countries in order to provide farmers with appropriate technologies and to enhance their skills through farmer field schools.

Theory of Change

A more robust concept of “Theory of Change” is presented to cast future policies in developing food, health, and climate change nexus. The theory of change for this paper is based on the impact of climate change and other disasters on farming communities for food availability and health needs. It also looks at strengthening government capacity

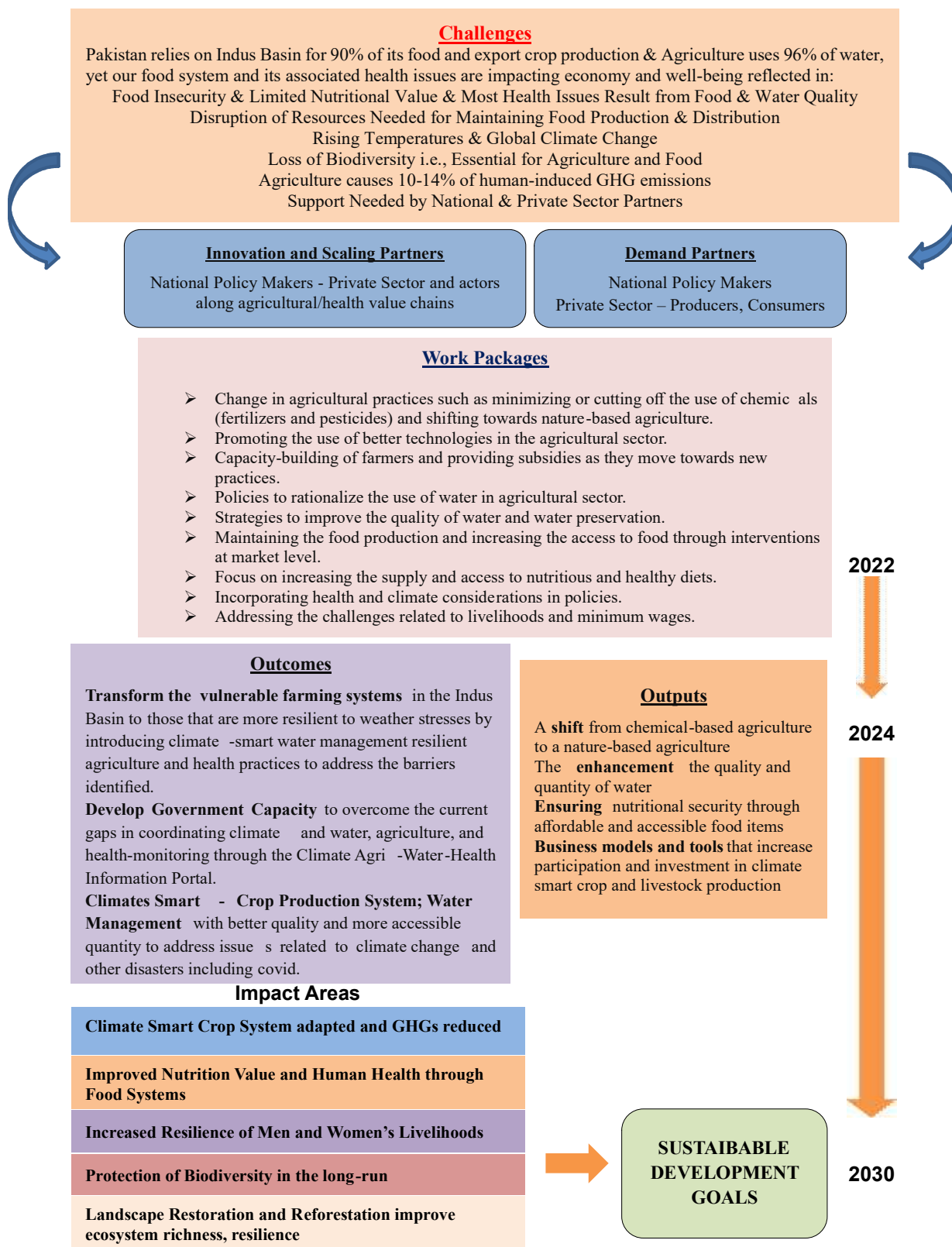
to support farming communities and remove the barriers to adaptation that producers are facing. The idea is to transform the vulnerable farming systems in the country to those that are more resilient to weather stresses through the introduction of climate-smart water management and climate-resilient agriculture to produce more and healthy food.

We suggest three pathways to follow over time in transforming from traditional food production to an eco-based resilient system to address disaster and climate change issues discussed. First, to move from environment polluting and health detrimental industrial agriculture to nature based sustainable production and marketing system. The second, need to produce more and better quality food with less quantity of water using better quality. Third, designing and implementing a health policy that puts greater emphasis on prevention than on costly response, targeting most poor and other vulnerable groups through digital technologies in providing low cost but quality health care.

The introduction and integration of climate and water-related analytical tools will develop the government capacity to overcome the current gaps in coordinating climate and water monitoring through the Climate Agri-Water Information Portal. The government will be able to serve the needs of

communities on food and health issues with more accurate information, improve water availability, and better early warning systems through the integration of climate and water monitoring.

The adoption of nature-based technology, practices to improve water quality and quantity, and supply of healthy food are the transformational new practices needed amongst producers in the sector. Under this paradigm shift, producers and the public, private service providers working with them will be supported in accessing and using new knowledge on weather and hydrologic conditions as highlighted in this paper. It also registers the need to increase efforts to create an enabling environment at the policy level as well as develop partnerships with key stakeholders.



Chapter

09

**China's Rise and Pakistan's
Move into its Orbit**

China's Rise and Pakistan's Move into its Orbit

Daud Ahmad

This chapter takes an overview of a close and steady relationship¹ between China and Pakistan who share a narrow mountainous border, which is now emerging as a strategic regional trade link. Both countries emerged as independent nations at about the same time in the late 1940's and had a lot in common as both faced immense challenges of poverty and political turmoil for decades. The decade of the 80s saw China embark on a very forceful and enterprising program of economic and social reforms. As a consequence, it garnered enormous influence across the world. Today, China is a global economic giant with enormous influence across the world. On the other hand, Pakistan with all its natural and human resources continues to struggle economically and politically. Yet, the relationship between the two countries started soon after their respective independence, has continued to grow stronger because of Pakistan's strategic location and mutual political interests. Pakistan, for the most part of its first 3 decades, relied heavily on USA and the West for political and economic support. Unfortunately, it was often sporadic and unreliable. Gradually, Pakistan's reliance on external support shifted from the west towards China. Today, Pakistan is to a great extent in China's orbit. This chapter takes a brief overview of the development history of the two

countries, their growing relations, Pakistan's increasing reliance on China and the status of China-Pakistan Economic Corridor (CPEC).

China's Rise as a Global Power

China has a long history of imperial rule that dates back to 206 BC that peaked during the Tang Dynasty (618 ~ 907 AD). The reign of the last Emperor ended with the establishment of the National Republic of China in 1923. After a prolonged military effort led by Mao Zedong, the People's Republic of China (PRC) was established in 1949 under the Communist Party of China. (CPC). The one-party system² has since been in place. Not surprisingly, in its first 3 decades, the country experienced a period of political and economic turbulence. The Mao era saw the consolidation of CPC rule on mainland China as well as famines and political turmoil. The Chinese leaders chose a leap-forward strategy that required the development of heavy industry, as in the Soviet model, to catch up with Western industrialized countries. This strategy did not work. At the end of the Mao era in 1976, China was still an impoverished nation. However, Mao Zedong's emphasis on social development and human resources such as mass education and public healthcare had a favourable impact and created a conducive environment

for development. Starting in 1978, under Deng Zhao Peng, a new era of gradual economic reforms started in which the country underwent a gradual and planned shift from a largely agrarian society to an industrial powerhouse. This was a gradual and prudent approach of liberalization. It transformed a communist styled centrally planned system to a controlled capitalist market through the introduction of market reforms. Through this program, China witnessed an economic growth phenomenon, which has no parallel in history. China is now poised to become the largest economy in the world by the end of this decade. China today has a population of nearly 1.24 billion; GDP at \$ 16 trillion; GDP per capita: \$ 11,800; exports \$ 2.6 trillion; imports \$ 2.06 trillion and foreign exchange reserves of over \$ 3 trillion. Indeed, these are all staggering numbers. Extreme poverty in China which was reported around 99 million in 2012 is now reported as zero. This was possible because of a poverty alleviation campaign backed by the government's sustained and substantial resource allocation. The high growth rates of the reform period were achieved through massive mobilization of resources, and a shift of their control from public to private ownership which resulted in improved efficiency in the management of those resources. A stable political system was also a contributing factor. The benefits reaped from this era of high growth rates are now peeking out and China is starting to face new set of challenges, which can best be described as “problems of success”.

Pakistan's Struggles Since Independence

Pakistan, as a nation, has been struggling since independence both politically and economically. Pakistan was a middle class and predominantly agricultural country when it gained independence. It has since been unable to define itself politically and culturally. It started with a virtually non-existent government structure and political framework. Established as a parliamentary democracy that

espoused secular ideas, the country has experienced repeated military coups and religious dominance. Over the past 70 plus years, Pakistan has had 15 governments under 40 years of cumulative democratic setups and 4 military rules spanning 32 years. Pakistan's³ population has grown rapidly from around 30 million in 1947 to over 220 million in 2020. Economic growth during the last 4 decades has fluctuated between 5.6 percent in 2006 to -0.4 percent in 2020 (Covid-19) and has averaged around 3.5 percent that is somewhat higher than the world economic growth rate. Currently, its per capita GDP is around \$1,540, which ranks 154th in the world. Pakistan has always been struggling with a negative trade balance, which has deteriorated significantly since early 2000s. The peak trade deficit at \$34.6 billion was in 2018, it has since improved to \$ 18 billion in 2020.

China and Pakistan's stark contrast in terms of political and economic growth is noticeable because the two countries became independent at about the same time with about the same levels of poverty and development. Till about 1995, Pakistan was ahead of China in per capita GDP. While China with a stable political system and visionary leadership has since become a super economic power, Pakistan has been struggling with challenges like: lack of national identity, political instability, regional and religious conflicts and often volatile and uncongenial relations with neighboring countries.

Development of China Pakistan Relationships

The relationship between Pakistan and China started in 1950, when Pakistan recognized the new Peoples Republic of China and established diplomatic relations in 1951. Pakistan's eager membership of the two United States-led anti-communist military pacts, SEATO and CENTO, was not a perfect starting point for its relationship with China in the same decade when India and China had relatively

good relations. Closer relations between China and Pakistan started to emerge in the 1960s with events like the Indo-China war of 1962, Kashmir related Indo-Pakistan war of 1965 and resulted in the weakening of Pakistan-US relations. Pakistan then started to look more towards China for military and economic support. After the 1971 Indo-Pakistan war, while China never entered into the conflict, a deeper strategic relation developed. Pakistan's reliance started to shift from US/ West towards China. The next 3 decades saw a growing military and strategic cooperation between the two countries. Pakistan played a key role in facilitating secret contacts between USA and China leading to visits of Henry Kissinger to China in 1971 and the subsequent historic visit of President Nixon in 1972. This was the starting point of normalizing relations between USA and China and subsequent opening up of China to the rest of the world.

The key developments in China-Pakistan relationship is listed below:

- 1950 – Pakistan becomes the third non-communist country, and the first Muslim one, to recognize PRC.
- 1951 – Beijing and Karachi establish diplomatic relations.
- 1971-72 – Pakistan helps the U.S and arranges the visit of Kissinger and Nixon to China.
- 1978 – The Karakoram Highway linking the mountainous Northern Pakistan Xinjiang Province in Western China officially opens.
- 2006 – China and Pakistan sign a free trade agreement.
- 2013 – Pakistan and China agreement on the CPEC, which will link Pakistan's Gwadar Port on the Arabian Sea and Kashgar in the Xinjiang Province.

- 2015 – Pakistan and China signed 19 agreements under CPEC wherein China pledged investments worth \$46 billion, in key energy and infrastructure projects.

China views Pakistan as strategically unique and geographically important. Pakistan shares its border with China that could provide a shorter route to the Persian Gulf and help to improve economic development in the relatively impoverished and restive Xinjiang province. The China-Pakistan relationship is underpinned by traditional geo-political interests. China and Pakistan have similar geographical and historical concerns with respect to India that make the two natural partners. These include territorial disputes in their shared borders with India; a history of hostility and confrontation with India; and a mutual interest to contain India's power and influence in the region.

China Pakistan Cooperation – Pre CPEC

For nearly three decades after the emergence of the PRC, China was essentially an isolated state. Its relationship with Pakistan was mostly strategic on political and defense matters. There were minimal trade and development assistance activities. The 500 miles Karakoram Highway, linking Northern Pakistan with Kashgar, was the first major Chinese undertaking to help Pakistan. This complex engineering project was first completed in 1978. It involved joint efforts of Chinese and Pakistani engineers and construction workers even though over 1000 Chinese and Pakistani workers lost their lives during the construction of this road. The road triggered commercial activity between Pakistan and China. It has now been upgraded as the Northern link under CPEC. In the following years, China also helped Pakistan in construction of a number of industrial facilities like: Taxila Heavy Industries Complex, Pakistan Ordnance Factories, Pakistan Aeronautical Complex etc. which helped build

Pakistan's intrinsic technological and industrial base. China also helped Pakistan in building a number of nuclear energy facilities at the Chasma power plant complex in the eastern province of Punjab. The first plant became operational in 2000. The assistance on this front is ongoing. Another noteworthy Chinese assistance project to Pakistan was the completion of Phase I of the Gwadar Port. Gwadar, located in Baluchistan's southwest coast, was a small fishing village under Oman sovereignty after partition. Pakistan's interest in Gwadar started in 1954, when it engaged the United States Geological Survey to conduct a survey of its coastline, which identified Gwadar as a potential site for a deep seaport. Pakistan subsequently received the Gwadar enclave from Oman for free. The development of Gwadar has a checkered history. A small wharf at Gwadar was completed in 1992; formal proposals for a deep-sea port at Gwadar were unveiled in 1993 and the government's approval of port construction was issued in December 1995 but the project could not get started because of political and financial constraints. China got involved in this project during the 2001 visit of Premier Zhu Rongji, when an agreement for its construction was signed. Construction began in 2002 and Phase I was completed in 2007. Subsequently, the Singapore Port Authority was given a contract for management and further development of the port. This arrangement did not work out. Later when Gwadar port became a part of the CPEC program, the development of the port and surrounding areas has since picked momentum. In February 2013, China Port Holding Company (CPHC) was awarded a long-term management contract for the port.

Pakistan and China are natural trading partners. The territories comprising the present state of Pakistan were once part of the historic silk route connecting China with the West. Before CPEC, trade volume between China and Pakistan was relatively small. A free trade agreement between the two countries was signed in 2016 and trade volume has since picked up

substantially. Currently, Pakistan's annual imports from China amount to about \$12 billion +, while exports are around \$2 billion. Pakistan's trade deficit of almost \$10 billion with China is nearly 1/3rd of its total trade deficit. The trade volume is expected to grow further with increased Chinese investments in Pakistan.

China Pakistan Economic Corridor - - Overview and Impact

Soon after launching the opening of its economy to the outside world, China realized the need to establish new and secure global trade links. A road link from western China to the Gulf states was on its radar in the early 1990s. As China's trade with the rest of the world grew exponentially, other countries began seeing China an economic threat. China then started to work on means to secure its global trade. Also, around 2010, China started to face new challenges like a decline in its annual growth rate, surplus labor, surplus construction material supply capacity. This was coupled with a large foreign exchange reserve (\$ 3 trillion). Under these circumstances, President Xi Jinping announced, in 2013, the "Belt Road Initiative" (BRI) which was based on the Chinese vision of infrastructure development, connectivity and economic cooperation covering Asia, Europe, Middle-east Africa and the Pacific. BRI proposed \$ 3 trillion investments over the next 30 years in nearly 60 countries, comprising 6 "economic corridors" linking China to the rest of the world. The program composition is an evolving process.

China Pakistan Economic Corridor (CPEC) is a key component of the 6 corridors mentioned above. It has been called the "front runner" or "flagship" for BRI for its strategic location and implantability. The CPEC agreement was signed in April 2015 covering 51 investment undertakings for \$ 46 billion over 10-15 years in energy, infrastructure, industry/ trade etc. The program aims to achieve China's long-term

desire to open a land-based trade route to the Arabian Sea. China, is also working to reduce its regional disparities, between coastal and western regions. For this, western provinces of China, particularly Xinjiang, needs a shorter trade link for its development. The CPEC also intended to promote connectivity across Pakistan with a network of highways, railways and pipelines accompanied by energy, industrial, and other infrastructure development projects to address critical energy shortages needed to boost Pakistan's economic growth. CPEC was thus designed with multiple objectives. CPEC started with extreme enthusiasm in Pakistan, as it represented unprecedented growth and development opportunities. It was labeled a “game changer” and remained a national focus during 2016~ 2019. Map 97.1 exhibits the overview of BRI corridors and the major investments included in CPEC to date.

The last three annual reports of BIPP have covered CPEC extensively. The 2018 report was entitled: Review and Analysis of CPEC. The subsequent two

The CPEC program can best be described in two phases. Phase I, that started with a fanfare under the PMLN Government. Nearly \$ 24 billion worth of projects were committed for 20 large projects. The initial focus of the program was on energy and infrastructure that are critical for the country's needs. Nearly all of the fund's committed in the initial phase went to: energy (60 percent) infrastructure (35 percent) and Gwadar Port (4 percent). The energy program included investments for more than 10,400 MW of power plant capacity from coal and renewable energy. To date, 9 energy projects (4 coal and 5 solar/ wind plants) have been completed with total generating capacity of 5,120 MW at a reported cost of \$ 7.4 billion. Another 7 energy projects (2 coal, 2 hydel, 2 transmissions and one coal mining) are under implementation for an estimated cost of \$ 8.5 billion. These projects are to generate an additional 2,950 MW. Despite these large investments in production capacity, Pakistan's power shortage problems persist, due to multiple technical, financial

Map 9.1

BRI and CPEC



Source: www.worldlinks.com

reports focused on the impact of changing situation in Pakistan – the new PTI government in 2018 and the Covid 19 pandemic – on the design and implementation of CPEC.

Like BRI, the CPEC program is evolving. It started with an initial investment portfolio of about \$46 billion, which subsequently increased to \$60 billion.

and management weaknesses of the sector. The initial CPEC investments focused mainly on short-term capacity generation from expensive/ imported fossil fuels. The infrastructure investments in Phase I went mainly to improve various highway sections along the KKH (northern section common to the 3 alternative routes) and the “Eastern Corridor” linking to Karachi, which was the route preferred by

the PML government. So far over 1,100 km of highways are reported to have been completed and another 850 km are under construction. On the flip side, an over emphasis on the eastern route is viewed as a shortcoming of the program.

The PTI Government, which was elected in March 2018, decided to shift the focus of CPEC from energy/ infrastructure to industry, socioeconomics, agriculture and Gwadar Port development. As such, progress on new CPEC projects was essentially on hold till the program composition was reset and new implementation modalities were put in place. The onslaught of Covid-19 in 2020 also had a major impact on the government's investment program. Despite these limitations, reasonable progress has been made in the last 3 years in completing the ongoing projects and setting new directions for the program. Most of the energy and infrastructure projects committed under PML regime are completed or are near completion. For new commitment, there is a clear shift in focus, wherein hydropower and renewable energy sources are getting preference. Progress on the development of Gwadar Port and the supporting city facilities is encouraging. The development of the shorter western route, between Kashgar and Gwadar, is now receiving priority, using domestic funding in some cases. The main challenge facing CPEC is the slow progress on income generation and export enhancement projects –industry, agriculture etc. Nine Special Economic Zones (SEZs) are planned under CPEC to boost employment and industrial production. Of these, 3 SEZs have been designated as a priority; site works on two, near Nowshera and Faisalabad have started. Not much progress is reported on investments in the value-added agriculture sector, including horticulture, livestock and fisheries. These will be essential for enhancing exports and creating a base for Pakistan to join the regional 'trade value chain'.

The Potential of Regional Growth of CPEC Coverage

CPEC investments, at the moment, are concentrated within Pakistan. However, it is well recognized that the full potential of this program can best be achieved through trade and transit connectivity to other neighboring countries like Afghanistan, Iran, India and the Central Asian Republics (CARs). Given the historic hostile relations between India and Pakistan, it is unlikely that anything will happen on this front in the near future. There is more potential on the other fronts as discussed below.

Afghanistan: Afghanistan's geographic location, at the crossroads of South Asia and Central Asia, is of significant strategic value. Afghanistan has vast untapped mineral resources which present a valuable economic opportunity. As such both China and Pakistan have a strong interest in seeing the development of links with Afghanistan and beyond to the CARs. The Asian Development Bank since 2008, has been supporting the development of a Central Asia Regional Economic Cooperation (CAREC) strategy and plan with a focus on transport and trade. It aims to link the CARs with a comprehensive transport network. One major proposed route (Corridor 5) is the road link between Peshawar and Dushanbe (Tajikistan), which will provide a short link for Uzbekistan, Tajikistan and Afghanistan to the Arabian Sea. The Dushanbe to Peshawar link via Afghanistan has been under development for some time. It is supported by various international agencies. Pakistan financed the Jalalabad to Torkham road that was completed over a decade ago. The world Bank supported another segment of this link which became a part of the Khyber Pass Economic Corridor (KPEC). This road aims to improve connectivity. Historically, Afghanistan has relied heavily on the Kabul- Karachi transport route for its trade. The opening up of the Gwadar Port provides Afghanistan with a shorter alternative route for its maritime trade. Two serious constraints to the trade volume have been: transport logistics bottlenecks at the border crossing and security challenges along the route.

While the potential of extending CPEC to Afghanistan resulting benefits to Pakistan and the region has been widely recognized, not many concrete proposals are under discussion. China is supporting CPEC's extension to Afghanistan, but given the current fluid political situation, it is not practical at this time to formalize any plans or projects.

After the US Army's swift withdrawal from Afghan-

opposition.

Recently, discussions about bringing Iran under the umbrella of BRI have been taking place. In January 2016 Chinese President Xi Jinping visited Iran. During his visit it was decided that China and Iran would expand their bilateral trade. A 25-year strategic partnership between China and Iran is being planned, which proposes \$400 billion in

Map 9.2

Central Asian Republics and Regional Connectivity



Source: www.worldlinks.com

istan, China is taking a very cautious approach to the new Taliban government's promises to restore stability. It also has serious concerns regarding terrorist groups operating from Afghanistan because it can have an adverse effect on the Chinese province of Xinjing. At the moment, China is taking a pragmatic, 'wait and see' approach.

Iran: Iran is very rich in natural resources, and suitably located in the context of connectivity between South and Central Asia. For well over 3 decades, it has been isolated from the rest of the world due to politically motivated sanctions. Despite its resource potential, its economy is crumbling. Iran badly needs trade and economic ties/ outlets to other countries. China's global outreach BRI program could be a possible source, especially in the context of CPEC. Beijing seems to be seeking to strengthen ties with Tehran despite US

investments, spread over of 25 years. These include cooperation in telecommunications, infrastructure, banking, and creating free trade zones. Till the time of this writing, there is not much information or official confirmation of these investments. India, for some time has been trying to develop the Chabahar Port in Iran, which is only 170 km from Gwadar, as a competitor to the later. This port was to be linked through a railway to interior Afghanistan and beyond to central Asia. While the initial phase of Chabahar port was completed further development of the port and railway links are on hold now due to changing political environment. This should enhance the importance of the Gwadar port and the potential for Iran to avail the CPEC links to increase trade with Pakistan and South Asia. A Turkey-Iran-Pakistan proposal is also being considered under the umbrella of the Economic Cooperation Organization (ECO), which comprises 10 regional member

countries. Recently, the governments of Turkey, Iran and Pakistan have decided to revive a transnational rail service linking Istanbul, Tehran and Islamabad. This transnational railroad is expected to enhance connectivity with China's BRI, by providing an alternative connection between China and Turkey.

The enhancement of the CPEC link to Iran, like for Afghanistan, is hindered by political environment and security challenges. The abundance of natural resources and potential for trade growth makes them very attractive for China and Pakistan. Tehran is facing domestic challenges, but in the strategic context, it needs to develop new external links. It also remains to be seen whether India and Pakistan can set aside their differences, while Afghanistan and Iran can sort out their challenges to work towards an inclusive 'New Silk Road'.

Central Asian Republics (CARs): Since their independence in 1991, the CARs have acquired regional and global attention. Of these Uzbekistan, Tajikistan, Kyrgyzstan are of particular interest to Pakistan because of proximity and mutual interests (Map 9.2). Geographically, this region is landlocked but very rich in natural resources. The CARs have historically been connected to the world through the ancient Silk Road, situated at the crossroads of Asia and Europe. The CARs states are a goldmine of energy reserves with Kazakhstan having 30 billion barrels of oil reserves while Turkmenistan's natural gas is estimated at 265 trillion cubic feet; this wealth makes the region centred in the battle for resources between regional powers. The central Asian countries have always looked for access to regional markets, including Pakistan, China, India, and beyond. Pakistan also desires to access the rich resources of Central Asia via Afghanistan to meet its energy needs, as well as transport goods to Central Asia. In this context, CPEC China-Pakistan Economic Corridor has great potential to become a gateway to Central Asia and to provide the region with the much-needed economic uplift.

A number of ongoing activities to support linkages to CARs need mentioning. The ADB/ WB supported CAREC transport corridor, mentioned above, is under implementation. It will, inter-alia, improve transport links between Peshawar and Dushanbe. The ongoing Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline project was first proposed 22 years ago but construction was delayed due to geopolitical circumstances. Work on the \$10 billion gas pipeline finally began in Turkmenistan in 2015. It took a long time for Afghanistan, India and Pakistan to reach gas purchase agreement. Currently, construction works on the pipeline are ongoing; expected to be completed in a couple of years. Lately, the Wakhan corridor has been prominent in the news media as well. Wakhan is a narrow strip of land located in the extreme northeast of Afghanistan. It is about 100 km long and 14–60 km wide, separating Pakistan and Tajikistan and connecting Afghanistan with China. This remote rugged terrain is of immense strategic geopolitical value. Three separate geopolitical conflicts intersect in the Wakhan Corridor: the so-called “New Great Game” between Russia and China over Central Asia, the rising geopolitical contest between China and the West over BRI, and the perennial tensions between India and Pakistan over Kashmir. China recently decided to revive an old road through the corridor. The Wakhan corridor provides a unique potential to improve Pakistan's northern links to CAR and increasing connectivity with Gwadar to the south links.

It was reported a few days back that China seeks to set up cooperation with the Central Asian countries on security issuers, “amid fears of a resurgence of terrorism in Afghanistan.”

Summary Remarks

Pakistan and China have not only sustained friendly relations since their independence; these relations have kept growing in strategic, defense and eco-

conomic matters. Pakistan was once considered as a strong USA ally. But that has changed over the years as Pakistan has shifted into China's orbit due to changing geopolitical environment. China has maintained its support and friendly relations with Pakistan throughout this period. The phenomenal rise of China as an economic superpower and its global vision of connectivity and secure trade is beneficial to Pakistan as a neighboring country. Pakistan's geographic location provides China with an opportunity to link western China to the Arabian Sea through the new Gwadar Port. Hence CPEC was a logical priority corridor of the global BRI, which aims to create a number of economic corridors linking China with the rest of the world to create transport and trade opportunities. CPEC, which started in 2015, was hugely welcomed in Pakistan. China has so far pledged investment totaling well over 40 billion in Pakistan. So far about 20 projects have been completed and as many are ongoing. These investments, besides creating 75,000 jobs, have vastly improved Pakistan's power production

capacity, expanded the road network and operationalized the Gwadar Port.

While these large Chinese investments have resulted in improvements in the energy production and transport infrastructure of Pakistan, their projected economic benefits are not yet visible on the ground. This is partly because CPEC is a long-term and geographically broad undertaking. For Pakistan, the litmus test of its success would be that it becomes an integral part of the regional trade value chain. For this, Pakistan has to enhance its exports to the regional markets. This will require investments and outputs in industry and agriculture wherein Pakistan has a comparative advantage. Opening up of the trade links with regional markets would happen through improved infrastructure and stream-lined transit logistics.

Chapter

10

Afghanistan: The Endgame

Afghanistan: The Endgame

Shahid Javed Burki

Before proceeding with what I have called, “The Afghanistan Endgame,” it may be useful to recall some of the milestones Washington crossed over its twenty years engagement in Afghanistan. Operation Enduring Freedom began on October 7, 2001, with American bombs falling over the sites where the Al Qaeda had been given sanctuary by the Taliban regime that then governed from Kabul. President George W. Bush had promised to punish the Taliban and Al Qaeda for September 11, 2001, attacks on New York and Washington that left nearly 3,000 people dead. When American troops entered Afghanistan, they linked up with the soldiers of the groups known as the Northern Alliance. Kabul and Kandahar fell to the Americans and the forces of the Northern Alliance in November. In December, Osama bin Laden, the Al Qaeda leader, escaped through the mountains and arrived in Pakistan. That month an interim Afghan government led by Hamid Karzai was installed. He had spent time in Pakistan while the Taliban ruled from Kabul. In December also, a United Nations Security Council resolution established the International Security Assistance Force, ISAF, a military coalition led by the United States with several NATO allies also contributing. The ISAF was to help the Karzai regime establish its control over Afghanistan.

In May 2003, Defense Secretary Donald Rumsfeld announced an end to major operations in Afghanistan. Even with a major reconstruction effort underway, and about 8,000 American troops in place, the Bush administration began shifting combat resources to Iraq. The American-led war in Iraq although not as long as the one in Afghanistan, had disastrous consequences. It led to the founding of the Sunni extremist group initially known as the Islamic State of Iraq and Syria, ISIS. In 2004, an Afghan Assembly drafted a constitution that Afghan-American Ambassador Zalmay Khalilzad described as the “foundation for democratic institutions.”

In February 2009, President Barack Obama declared a commitment to the war and deployed 17,000 troops to Afghanistan, adding to the 36,000 already there. In December, President Obama announced, “a surge” meant to build and train an Afghan security force that would be strong enough to take responsibility for dealing with the insurgency. He planned to send 30,000 more American troops, bringing the total number to nearly 100,000 by mid-2010.

In May 2011, a U.S. Navy SEAL team killed Osama bin Laden in a compound in Abbottabad, a military garrison town in Pakistan, less than 70 miles from

Islamabad, the country's capital. In June 2011, President Obama in a reversal of his troop build-up policy announced that he would pull 33,000 troops from Afghanistan by mid-2012. This revision in policy followed President Karzai's assertion that the United States and coalition troops were responsible for rising civilian casualties. Afghans took over most security responsibilities in 2013 with coalition forces shifting to training and counterterrorism operations.

On December 31, 2014, the combat mission in Afghanistan formally ended but a large contingent of American troops remained in the country. President Obama announced a timetable for the withdrawal of most American troops by the end of 2016. In mid-2014, following the Constitution adopted in 2004 that limited the president to two terms in office, elections were held in Afghanistan that were generally believed to have been marred by fraud and mismanagement. In a compromise engineered by then U.S. Secretary of State John Kerry, Ashraf Ghani, a Pashtun, was inducted into office while Abdullah Abdullah, a Tajik and his main rival, was appointed Chief Executive, a position that did not exist in the Constitution. In January 2017, Donald Trump was sworn in as America's 45th president. Seven months into his office, he announced in August that while his first instinct was to withdraw all troops from Afghanistan, he would continue to prosecute the war.

Having come to the conclusion that America was engaged in a costly but unwinnable war, it decided to sit down with the Taliban and conclude an agreement that would allow the United States to exit while the Taliban would agree not to support the presence of such extremist groups as Al Qaeda and the Islamic State. The Afghan government was excluded from the talks at the insistence of the Taliban. On February 29, 2020, the American and the Taliban signed a peace deal in Doha, the capital of Qatar. The deal promised the American pull out of the country,

leaving the Afghan affairs to the citizens of Afghanistan.

Seven months after the Doha Deal, peace negotiations between the Taliban and the Afghan started. Doha, once again, was the venue of the talks. However, the talks stalled in early 2021. After a review of the 2020 agreement, President Biden called for a withdrawal of U.S. forces from Afghanistan by September 11, 2021. By then the United States had spent about \$2 trillion on the 20-year long war effort. More than 2,300 American troops and nearly 700 troops from other countries had by then been killed. Civilian deaths were estimated at over 40,000 while the Afghan security forces had lost 60,000 soldiers.

Most reports sent by the correspondents who are still in Afghanistan, living there despite the increasing difficulties they face in meeting their daily basic needs, draw a picture of chaos and confusion among those who govern the country as the American pullout gathers pace. One account by Thomas Gibbons-Neff in *The New York Times* told the story of the rapid draw-down of the America's giant Bagram from a short distance from Kabul. The large airbase was originally built by the Soviet Union in the 1950s, decades before it sent in its troops to beat back the insurgents that were threatening the pro-Moscow regime it had installed. It became a vital military hub during the Soviet's 10-year occupation of Afghanistan. After Moscow pulled out its troops in 1989, the Taliban and an association of non-Pashtun militias known as the "Northern Alliance" fought for the control of the base, digging their trenches at either side. When the Americans arrived, although it was rubble, they regarded the base giving them strategic advantage. Ten years later Bagram had been transformed into a major American entity. It ballooned into small city with two runways, tens of thousands of residents, shops and U.S. military prison. In spite of the American presence, the base was often attacked, sometimes violently, with the

Taliban firing rockets and mortars. In one of the worst strikes in November 2016, a suicide bomber found his way into the base and ignited his bomb killing several people including four Americans. “For generations of American service members, the Bagram Air Base, was a gateway to and from a war that cut across constant changes on the battlefield and in presidential administrations. In 2014, the Americans concluded their first drawdown after the surge of troops before – which brought the number of American and other international into the country to well over 100,000. But the final withdrawal overnight in August 2021 occurred with little fanfare and no public ceremony, and in an atmosphere of grave concern over the Afghan security forces' ability to hold off Taliban advances across the country¹.”

In a follow up story, Thomas Gibbons-Neff reported on how quickly the airbase was destroyed, thus becoming a symbol of what may happen to the rest of the country after the United States was gone. “At Bagram, the new tenants are the Afghan security forces who will inherit the conflict the United States built for them, along with fields of equipment, vehicles and weapons that will long represent the war's grim legacy and the country's uncertain future,” he wrote. “To continue the fight the United States has left behind its tan and green pickups and its Humvees, along with its Hesco barriers, the cube-shaped boxes used to build and protect American, now Afghan outposts.” Some of what the departing Americans left behind appeared as second-hand goods for sale in now-delapidated stores². There was a slight change in the management of the withdrawal plan. On July 2, there were indications from the Pentagon that the rapidly deteriorating situation was causing a partial shift in the speed of the military's plans. The planned departure of Gen. Austin Scott Miller – the top U.S. commander in Afghanistan for nearly three years – was delayed for several weeks. He retained the ability to approve airstrikes to protect U.S. Afghan forces although the capacity to

carry out such operations was seriously degraded by the pullout. The United States said that the plans for closing of Bagram base were worked out with the Afghan authorities. According to Col. Sonny Leggett, a U.S. military spokesman in Afghanistan, “all handovers of Resolute Support bases and facilities including the closing of Bagram Airfield were closely coordinated both with the government and our Afghan partners in the security forces, including leadership of the locally based units respective to each base.” Some of the Afghan counterparts said that was not the case. The Bagram district governor, Darwish Raufi expressed irritation at not being included in the process. He said in a statement that the U.S. military left “without coordinating with security and defense forces and in general without coordinating” with the Afghan government and officials in the Bagram district.

The Taliban leadership was happy with the development. Its spokesman, Zabiullah Mujahid said in a statement that the group considers the “evacuation” of all U.S. troops from Bagram to be a positive step and that Taliban leaders will “seek withdrawal of foreign forces from all parts of the country. Such is in the interest for both them and Afghans. Afghans can move closer to peace and security with the complete withdrawal of foreign forces³.”

The Republican Party was not pleased to see the United States leave Bagram after having spent billions of dollars to make the base work. “As our only base sandwiched between China, Russia and Iran, it's a huge strategic asset,” said Representative Michael Waltz, a Florida Republican who served in Afghanistan as an Army Green Beret. “Why are we just giving it away?” he wrote in a tweet. He saw American presence in Bagram to have global significance. “As our only base sandwiched between China, Russia and Iran, its huge strategic asset,” he wrote in a tweet. “Why are we just giving it away?” Jeffrey J. Schloesser, a retired two-star Army General, reflected on the outcome of the conflict in

which three of his generations had been involved. His book, *Marathon War: Leadership in Combat in Afghanistan*⁴ appeared while the Americans were in the process of exiting the country. While he predicted that a brutal civil war would follow the American pullout, he recognized that “the broader population in America has forgotten about Afghanistan unless they lost someone, they knew there,” he wrote. “The vast majority of Americans are not paying attention.” This was what President Biden was betting on. According to an Associated Press/NORC poll in 2020 only 12 percent of Americans said they were following news related to the U.S. presence in Afghanistan.

History has repeated itself in Afghanistan over several centuries. The governments that ruled from Kabul – or, more accurately tried to rule from the capital – were unable to establish their full authority of the many dissident forces that held power in local areas. Most of the local warlords as they came to be called drew their support from the many ethnic groups that wished to remain independent of Kabul's control. The government that governed did not manage better than those that came before it. At the apex sat Ashraf Ghani who, according to several accounts, spent time with fewer and fewer people. His visit to the White House where he and Abdullah Abdullah met with President Joe Biden did not introduce any new thinking on the way the ruling elite should exercise power from its base in Kabul. Meanwhile, the growing Taliban threat promised to return the country to the situation that prevailed when the Soviet Union pulled out of the country in 1989. The former Afghan president, Mr. Ghani's work habits did not change since I got to know him at the World Bank. Then he was recovering from abdominal surgery which had reduced his capacity to eat a decent meal at one time. According to one account, “several former aides criticized, the president's reliance on a tiny circle of Western-educated advisers. They noted that cabinet members were afraid to contradict him because of his ten-

dency to yell at them.” The story from which this quote is taken quoted Mr. Zakhilwal, the former finance minister who told the journalist, that Ghani “is the republic. The government is two, three or four people. A soldier sitting there, watching, asks: 'Should I sacrifice my life?' That's why we are seeing soldiers surrendering across Afghanistan⁵.”

The president fled Kabul in haste and later announced that he had done so to avoid the risk of, “bloody street fighting.” There were allegations that he fled Afghanistan on August 15, with almost 170 million US dollars. He denied this in a tweet that appeared a couple of days later. His whereabouts were unknown for some time but the UAE government said it was, “hosting Ghani and his family on humanitarian grounds.”

There were reports that the Taliban entered Kandahar on July 9, attacking the city from several directions. Kandahar is Afghanistan's second largest city and is close to the border with Pakistan. The city was the birthplace of the Taliban movement with Pakistan's Inter-Services Intelligence, ISI, acting as the midwife. By the end of 1990, a year after the Soviet Union had withdrawn its troops from the country, the ISI had concluded that the seven mujahedeen groups, several of which it had supported, would not be able to come together to establish a working government in Kabul. President Zia ul Haq who was killed in an air accident in August 1988, had predicted such an outcome. In a conversation with me on July 30, 1988, he said that he had used the provision he had inserted in the Constitution that the president could fire the prime minister along with his cabinet to remove Prime Minister Muhammad Khan Junejo. He had done that, he said to me, since he did not accept the president's advice not to sign what came to be known as the Geneva Accord. The accord committed the Soviet Union to pull out its forces from the country without waiting for the mujahidin to agree on a governing arrangement. The president thought that

without such arrangement chaos would reign. That is exactly what happened.

To fill the vacuum in Kabul, the ISI decided to create an entirely new entity; they called it the Taliban, the Arabic word for students. The recruits were drawn from the scores of religious seminaries, the madrassas, that were set up in the refugee camps established along the long Pakistan-Afghanistan border to house millions of refugees who had left their country and moved into Pakistan. The seminaries were funded in part by the United States and a number of teachers came over from Saudi Arabia to provide Islamic education to the male students.

To get back to the developing situation in Afghanistan in July 2021: According to a newspaper report, “the insurgents had been encroaching on Kandahar city, the capital of the province with the same name, for several weeks, capturing surrounding districts, before entering the city for the first time on Friday, July 9. Taliban fighters arrived in Kandahar's Seventh Police District on Friday, seizing houses and engaging with security forces, in the area, said Bashir Ahmadi, the spokesman for the Kandahar governor. Commandos and other special forces units were battling the insurgents well into the evening, proceeding cautiously because the area is heavily populated, Mr. Ahmadi said⁶. Elsewhere in Kandahar Province, the Afghan security forces were embroiled in fighting in Arghandab, another district bordering the provincial capital, and near the Pakistan border crossing of Spin Boldak. By early July 2021, fighting in Afghanistan had come very close to Pakistan.

Of the several strategies the Taliban seemed to be following, one was focused on improving their financial situation. By taking control of the border towns, they had gained access to the customs duties the state collected on the goods and commodities entering the country. In the western part of the country, the insurgents captured two major border

crossings in early July, Islam Qala at the Iran border and Torghundi bordering Turkmenistan. While the Iranian suspended trade with Afghanistan flowing through the captured crossings, Turkmenistan kept the flow going. The loss of the border posts could prove costly for the government in Kabul. For instance, the border crossings near Herat on the Iranian border collected a quarter of the country's annual customs revenue, estimated at about \$281 million.

The Americans trained Afghan security forces for twenty years, but they could not match the ideological fervor of the Taliban forces. In early July, forty miles east of Kabul, the Taliban captured a bunch of villages in the Sarobi district where several posts had been abandoned according to Abdul Wahid Wahdat, a local tribal leader. Once the posts were abandoned, the locals looted and took away most of what the security forces left behind. “The Americans trained these forces for 20 years but they were not capable of keeping their outposts for days,” Mr. Wahdat told the American journalist who interviewed him. “There was no fighting between security forces and the Taliban. These areas were abandoned without the firing of a single shot.”

While the United States completed its withdrawal, two NATO allies – Britain and Turkey – were supposed to remain holed up in the fortified embassy grounds or at the Kabul International Airport. But this did not happen and the plan changed to an almost mortifying and hasty evacuation of embassy staff and their Afghan allies. This was affected by using Pakistani air bases and air space. Ironically, it was a bewildering reversal of the route taken twenty years earlier. It became increasingly clear that the new Biden administration was unable to control the narrative as the former presidents Mr. Bush, Mr. Obama and even Mr. Trump had managed to do. It must be admitted that social media played a big role in it, as it broadcasted images of desperate Afghans clinging to US aircrafts taxing or taking off from the

tarmac. This was compounded when a claimed drone strike against ISIS militants was later revealed to have been undertaken on an innocent Afghan family. On the night of 30/31st August 2021, the last US soldier in Afghanistan, Gen McKenzie, the commander of the Allied Forces, boarded the last flight out of Kabul. The American War was over.

The American experience in Afghanistan added one more episode to its post-Second World War story of not being able to use its military might to influence world events.

Afghanistan: One Possible Component of the Counter-Quad or a Quintet

There are likely to be serious domestic consequences for Afghanistan of the withdrawal of American troops from the country. One result is that the American departure will be accompanied by the exit of a class of Afghan people the country would need for advancing national integration, developing its economy and modernizing its society. There were reports in the Western press that a thousand members of the country's security forces had left their stations in the north and escaped into Tajikistan. But as I will suggest later, American departure could create some interesting and welcome opportunities for Kabul in the international field. The country could become an important participant in what I would like to call the “counter quad.” I would get to an explanation of that proposition a little later.

Several senior American military and political leaders are of the view that the current government in Kabul would not survive for long under the pressure the resurgent Taliban are already exerting on it. The group has been emboldened by the hasty American withdrawal. If the Taliban do take control of Kabul, they may not be able to establish a strong presence in the country's capital. Their rise will be challenged by several ethnic militias who have been

called into service by the government headed by President Ashraf Ghani. It is a move prompted by desperation. However, if a relatively strong authority emerges in the Afghan capital, it should be able to create a productive space for itself in the rapidly evolving global order. At the heart of this developing order is the growing rivalry between the United States and China.

The Americans had established an association which Shinzo Abe, the former prime minister of Japan first suggested and named the “quad.” This represented an understanding among the four nations about military and economic underpinnings. In addition to Japan, the quad includes Australia, India, and the United States. Its main objective is the containment of the growing influence and reach of China. Countering China's rise is one issue about which there is an agreement between Democrats and Republicans in the American political system. Even though former President Donald Trump had entertained Xi Jinping, his Chinese counterpart at Mar-a-Lago, his resort in Florida, and called him his friend, he used several public policy instruments to push China into a corner. By calling the virus that caused the COVID-19 pandemic, the “Chinese or Wuhan” virus he unleashed a dangerous anti-Asian-American sentiment in the United States that hurt several people of that origin. However, it should have been expected that the Chinese would react to these verbal and policy assaults and this they have begun to do.

Cold wars have been around for as long as nations have been in existence. The most important of these was the one that was fought by the United States and the Soviet Union for almost half a century – from 1945 when the Second World War ended to 1991 when the Soviet Union collapsed and broke up into a dozen or so independent states. Another is now shaping up with the United States and the rising China as the two contenders. China is now the second largest economy in the world and is likely to

overtake the United States in a couple of decades. Even then, its income per capita would remain only a fraction of that the United States.

The moves towards creating another cold-war situation have been initially made by the leadership in the United States. Although several centuries ago Thucydides, the Greek sage, suggested that a rising power when it threatens the one that has been in the lead for a long time, open conflict is almost always the result. He based his conclusion after studying the conflict between Sparta and Athens which led to a war between the two Greek states. That conflict became the subject of a long account by Homer and was central to the thesis developed in Thucydides' History of the Peloponnesian War. The war ended with the defeat of Athens at Syracuse and the rise of Sparta as the dominant Greek state. Thucydides is generally regarded as one of the first true historians.

In addition to imposing severe tariffs on Chinese imports and restricting the access of several Chinese firms to American technologies, the Americans also took note of the policies the Xi government was pursuing in the Autonomous Region of Xinjiang. Some commentators noted that 40 percent of the world's polysilicon, a key component of solar panels, is manufactured in Xinjiang where it was alleged that the manufacturers were using forced labor. The Australian Strategic Policy Institute identified 82 major corporations located all over the world that were benefiting from the labor policies the government was pursuing in the Autonomous Region. The anti-China lobby in the United States and several other countries in the West demanded action to be taken against the companies that imported goods many saw as produced by forced labor. ASML, the Dutch manufacturer of high technology equipment is one example of the way the West is attempting to deny the road to technological success Beijing is determined to travel on. The Dutch were pressured by the Trump administration not to sell the ASML equipment to China; a policy

that President Biden has marinated.

The ASML's technology is based on using a different kind of light to print circuits on thin silicon wafers. The light used is ultra-ultra violet. ASML's equipment took years to develop and at a cost of hundreds of millions of dollars. The final machine has bulk: it takes 40 shipping containers, 20 trucks and four Boeing 747s to move the machine from the place of its manufacture to the place where it would be used. Manufacturers can't produce leading edge chips without the system and without access to the equipment progress would be slow. According to one assessment, "ASML's machine has effectively turned into choke point in the supply chain for chips, which act as the brains of computers and other digital devices. The tool's three-continent development and production – using expertise and parts from Germany, Japan, the United States – is also a reminder of just how global that supply chain is, providing a reality check for any country that wants to leap ahead in semiconductors by itself⁷."

The Chinese responded to these pressures in several ways. At the ceremony where the country's political elite celebrated the 100th birthday of the Communist Party, President Xi Jinping issued a clear warning to his country's detractors. Standing in front of the portrait of Mao Zedong that overlooks Tiananmen Square, he told the world that China's rise was unstoppable. The country, he said would not be lectured to. And those who tried to block its ascent will hit a "Great Wall of steel." Several western news correspondents listened to the words of the Chinese leader. "The speech was laden with symbols intended to show that China and its ruling party would not tolerate foreign obstruction on the country's path to becoming a superpower," wrote Chris Buckley and Keith Bradsher for The New York Times. "The events pageantry symbolized a powerful nation firmly, yet comfortably in control: A crowd of 70,000 people waved flags, sang and cheered in unison. Troops marched and jests flew

overhead in perfect formations. And each time Mr. Xi made a pugnacious comment, the crowd applauded and roared approval. The biggest applause came when he declared that China would not be pushed around. “The Chinese people will never allow foreign forces to bully, oppress and enslave us,” he said referring to the country's history when it was pushed around by some western nations. “Whoever nurses delusions doing that will crack their heads and spill blood on the Great Wall of steel built from the flesh and blood of 1.4 billion Chinese people.”

To quote once again from the account provided by Buckley and Bradsher, “Mr. Xi has been building on a rise of public confidence since China suppressed the coronavirus relatively quickly last year while the United States, Britain and other democracies suffered waves of death. But the country must tackle challenges, such as an aging population that could slow growth. Mr. Xi suggested that the solution to any problem demanded staying with the party⁸.” Party loyalty would help China overcome all the obstacles that would be placed in its way as it marched towards what was its destiny – a major world power.

The Chinese leadership is fighting the West led by the United States with more than words. This brings me back to a discussion of the role Afghanistan could play in world affairs. It could align itself with Beijing and other regional powers to break the monopoly of the West in the global system. China is already moving in that direction. It is investing trillions of dollars in building a complex system of roads, railways, pipelines, and fiber optics cables to improve its connectivity with the world outside its western borders. The China Pakistan Economic Corridor, CPEC, is one part of what President Xi has called his country's Belt and Road Initiative, BRI. There is expectation that with the Americans gone from Afghanistan, that country would find it attractive to join the BRI as a partner and embrace

the aims of the initiative. Also, once Kabul is fully in command of its own affairs, it may become a partner in a “quad” arrangement that would include along with itself, China, Iran and Pakistan. The United States has distanced itself from these countries, preferring to go along with those in Shinzo Abe's “quad.” Such an arrangement would provide a counterpoint to the U.S. led association of countries in the Pacific. The United States quad was designed to constrain and bind China; the Chinese-led quad could release China's energies to the world to its west. Including Turkey in the configuration would result in the proposed counter quad becoming a “quintet.”

One of the better analyses of the failed American involvement in Afghanistan comes from Carter Malkasian who spent several years in the country serving in different positions. He went on to write a book, *The American War in Afghanistan*, which was excerpted by Politics. His conclusion: “For the United States, Afghanistan was a long war but also an experience,” he wrote. “It feels wrong to cast the entire experience as bad or evil. Better, I think, to see the good as well as the bad.” His main conclusion is that the typical Afghan is deeply committed to his faith and resists seeing foreigners as non-believers. “For me, America's Afghanistan experience is a dark, cloudy front with points of sunlight. The last thing I want to do is to condemn it and all those involved⁹.”

America- No Longer Wins Wars

The United States came out of large military conflicts in Europe and Asia having known together as the Second World War as totally victorious. But for the American involvement, the group of nations called the “Allies” would not have defeated the authoritarian states of Germany, Italy, and Japan in the long-drawn-out conflict waged on two continents. After the conflict, the United States emerged as the dominant and invincible global power. This

dominance was not only in terms of its military power but also, it was widely believed, that America after nearly 200 years of political development had evolved a system of governance the rest of the world would do well to follow. According to Francis Fukuyama, an American sociologist whose book *The End of History* became a bestseller, the era of ideological conflicts was over. The participatory and most inclusive political system the Americans had evolved would sweep the world. The world would follow America.

This confidence in American dominance came to be questioned as the country later in the 20th and the 21st centuries failed to prevail in some of the conflicts it chose to be engaged in. While it was able to arrest the advance of Communism in the Korean Peninsula, it failed in expelling the Communists entirely from the area. The Communist regime of North Korea remains a thorn in the side of the United States in particular and the West in general. But it was the American defeat in Vietnam that raised questions about America's invincibility. The picture of helicopters flying out American soldiers from Saigon to escape the rapidly advancing army from Communist North Vietnam became a symbol of America's declining global power. To this picture was added the way the Americans pulled out of Iraq and are now getting disengaged in Afghanistan. While no longer aiming for total battlefield victory, the American approach has been to build local forces to do what it tried to do. "Train and equip" became the pronounced components of the American strategy in the parts of the world where their military could not win wars.

The United States not only trained local forces on the ground where they would need to fight but brought some senior people from these forces to the training bases America used for its own personnel. According to one estimate, "in fiscal 2018, at least 62,700 students from 155 countries took part in U.S. training programs at a cost of \$776.3 million. In

2020 the Defense Department reportedly trained at least 31,000 foreign military students and had military advisers in more than a dozen foreign nations." This strategy has also run into serious problems. "In more recent years, some foreign-based trainees have been caught in the middle of major geopolitical disputes. In 2019, the U.S. sent home Turkish students who were learning to fly the F-35 fighter jet. The U.S. kicked Turkey out of the lucrative program after Ankara bought the Russian-made S-400 missile system¹⁰."

The United States had some other problems with the trainees who came from the Middle East. Saudi Aviation student Mohammed Saeed Alshamrani in 2019 opened fire at Florida's Naval Air Station, Pensacola, killing three people and wounding eight others. U.S. officials confirmed that six former Colombian soldiers with American military training were involved in the recent assassination of the Haitian president.

The most recent example of the likely failure of this approach is the way the Afghan situation developed after President Biden's decision to pull-out all American troops from the country in a "disorderly manner." Firstpost reported, "No country will put itself at risk for another's security. Yet, how nearly 20,000 US troops and contractors were stealthily pulled out the night of 1st July shocked the Afghans." It goes on to state, "Biden's realpolitik-driven decision to withdraw....from Afghanistan has tarnished the reputation of United States and raised questions about its trustworthiness." However, it is still not very clear what the Afghan people want. The country is divided along ethnic and religious faultlines. There were also several warlords who had never accepted the authority of Kabul over the areas they controlled.

Militants besieged the capital by seizing districts nearby and choking off key roads in a bid to deny

Afghan security forces freedom of movement¹¹.” Washington in discussing the strategy its forces and their commanders were pursuing made it clear that it would not support Afghan airstrikes after the complete withdrawal at the end of August, a process which by the end of July was 95 percent completed. The United States will reserve the capability only for militants planning terrorist attacks on the U.S. homeland or against allies. The United States commanders were also attempting to demotivate the resurgent Taliban by using some aspects of psychological warfare. “A B-52 long range bomber was spotted over Kabul in recent days, for the first time in several years. The plane's massive size and distinctive silhouette were likely intended as show of force. The bombers have been moved to Qatar to cover the withdrawal of U.S. and international forces¹².”

These maneuvers by the Biden administration would not change the direction in which the United States is moving. History would chalk the two-decades long American involvement in Afghanistan by the United States as yet another failure on the battlefield.

Another Afghan Refugee Wave? Implications for Pakistan

The level of violence in Afghanistan has perceptibly increased as the date for the American troop withdrawal approaches. Hundreds of people have perished as September 11, 2021 comes closer. That is the day when President Joseph Biden has said his country's armed forces would head home, leaving the Afghans to handle their affairs in the way they please. There was a pattern to the killing that was taking place. Whichever group is involved, it is very deliberately targeting girls from the Shiite community attending schools. The Hazaras who have their homes in the province of Ghazni southwest of Kabul have buried hundreds of young girls – all students – who were the victims of a meticulously planned suicide bombing near their schools. One incident

alone on May 8 took the lives of 80 to 90 teenage girls. The Taliban through their spokesman in Doha, their political office in Qatar, forcefully denied their involvement in this particular incident or those that occurred near the Tribal Belt bordering Pakistan. Should their denial be taken seriously since they have made no secret of their opposition to female education and demonstrated their hostility towards the Shiite community?

The Islamic State or IS is the other possible perpetrator of the attacks. This extremist Sunni group emerged as a powerful entity after the then U.S. President Barak Obama ordered his country's troops to leave Iraq. At one point the group ruled over an area as large as Britain. This domain was in Iraq and Syria and because of their presence in these two countries, it came to be known as the Islamic State of Iraq and Syria, ISIS. However, a concerted effort by the administration headed by President Donald Trump, America pushed ISIS out of the Middle East. Since then, it has established itself in several Muslim countries in various parts of the world. The group looks for places that have weak governments and civil strife. The IS has been attracted to several countries in Africa and also to Afghanistan. Their ideology is not markedly different from that of the Taliban but their ultimate objective is much more ambitious. They would like to see the world of Islam come together as a vast caliphate that includes most if not all Muslim nations. Like Taliban they oppose the education of women or having women work outside their homes. Like Taliban they also regard the Shiites as heretics. While the Taliban have denied their involvement in the acts of violence in recent weeks, the IS has not issued any statement distancing itself from these incidents.

These acts of violence indicated that the American departure from Afghanistan could result in the country plunging into serious turmoil. Civil strife displaces people who are not directly involved in the conflict but are afraid of becoming its victims. That

happened in Syria when the civil war in that country resulted in a mass migration of people who headed towards the countries in the neighborhood as well as in Western Europe, in particular to Germany.

Pakistan was bracing for another Afghan refugee wave if the withdrawal of the American troops from the country resulted in the chaos most observers believed would follow. But Pakistan has since fenced its long and porous border with Afghanistan. The requirement of biometric documentation and Proof of Registration (PoR) has helped Pakistan stem the flow of disorderly and disruptive refugees from the neighbouring country. Reliefweb.int reported in its update on 21 Sept 2021 that around 1.4 million already registered, “Afghan refugees are being verified and issued with new biometric cards through 35 sites and 4 mobile units.” The Afghan refugee moves this time around were expected to take the form of several wavelets. The largest number would come to Pakistan, increasing the number of country's Pashtuns by another couple of millions. Thus far, this has not happened. “Documentation Renewal and Information Verification Exercise (DRIVE), is a Pakistan government's initiative and is run by Pakistan's National Database and Registration Authority (NADRA) and Commissionerate for Afghan Refugees (CAR), with the support of the UN Refugee Agency (UNHCR)” It is expected to be completed within the year and will help Pakistan to heighten protection and assistance for refugees, especially in the areas of “critical services' such as health and education.

A million or so Afghan Shiites were expected to head to Iran. A few thousand new Afghan refugees entered Iran and Tajikistan but UNHCR says, “border movements by Afghans seeking refuge in regional countries have been limited.” Those who have saleable skills would go to Europe (Germany in particular) and the United States. Both Germany and America already have sizeable Afghan communi-

ties.

During the war with the Soviet Union, Pakistan was the first preferred option of taking refuge on the part of the Pashtuns who lived on the Afghanistan side of the Durand Line. Many had relatives on the other side who, given the deep Afghan custom of accommodating those who were seeking refuge, welcomed the refugees. Millions arrived; some went deep into the country to take advantage of the presence of the Pashtun communities. Karachi, Pakistan's largest city, was one place to which a million or so refugees headed. Peshawar, Islamabad and Lahore also accommodated those who were faced with danger in their homeland. In spite of the efforts by Pakistan that were aided by the United Nations, the Pashtun refugee communities have not shown any sign of going back to their country of origin. The members of the Shiite community headed to Iran where the population was mostly Shiite. They too have stayed on preferring life in Iran to the risks in their homeland.

The pattern this time around is likely to be different. With the promise made by President Joseph Biden that his country will take in more refugees than was intended by his predecessor Donald Trump, we are likely to see more Afghans entering the United States. Biden has indicated that his administration is prepared to take in 65,000 refugees between now and September 30, 2021, the end of the American fiscal year. Twice that number may be allowed in the year 2021-2022. A significant number of these will likely be Afghans. There is a precedence for the United States letting in people who had worked with its forces in the areas of serious conflict. Hundreds of thousands of refugees came in from Vietnam, Cambodia and Laos after Washington admitted that it had failed to keep these nations out of Communist hands. Thousands of Afghans who had worked for the Americans during the latter's involvement in their country for two decades have already gone through extensive vetting. They will now be heading

towards the United States. But the process has been slow and chaotic. A law passed by Congress in 2009 requires the Secretary of State to “make a reasonable effort” to offer protection or remove Afghan special visa applicants from the country if they are facing “imminent dangers.” The Washington Post in an editorial suggested: “an evacuation now.” The United States “has a profound obligation to take care of those who risked their lives to serve alongside its troops. It cannot leave their fate to chance or ill-prepared afterthought¹³.” There was precedence of using the U.S. territory of Guam to have the refugees complete the visa process before heading for the mainland. In the final days of the Vietnam War, more than 110,000 South Vietnamese were evacuated on ships and planes to Guam where they were housed in tent cities for resettlement.

More recently other countries in the neighborhood in addition to Pakistan and Iran have emerged as preferred refugee-destinations. Turkey is one such country since it is being treated as a point of transit between the homeland and Europe. According to Carlotta Gall, writing for The New York Times, “the number of Afghans arriving in Turkey has soared over the last seven years as the United States and NATO have wound down their military presence. More than 200,000 Afghans were caught entering Turkey illegally in 2019. Many were deported back to Afghanistan. But despite a reduction of overall numbers in the last year because of the pandemic, Afghans still represent by far the largest migrant group making the dangerous crossing by sea or land to Greece.” From Greece, they move on to Germany or other countries in Western Europe.

The American withdrawal will affect Pakistan in two ways. It would further strengthen the Pashtun presence in the country, particularly in the outskirts of large cities. It is also likely to start a new wave of migration with the second generation of Pakistani-Afghans going to the United States and Europe for higher education and better-paying jobs. To answer

these questions in the context of Pakistan we need to go back a century and a half in history. This recounting of the past will help to understand why the border between Pakistan and Afghanistan has remained so unsettled. In the late eighteenth century, Britain used its impressive military might it had built in its Indian colony to do to Afghanistan what it had done to other states that bordered its expanding Indian colony. Several of these were conquered and made part of British India. That happened in the case of Punjab over which the Sikhs had ruled for several decades. Kashmir was an anomaly since it was a Muslim territory over which a Hindu maharaja ruled. The British tried a different approach with respect to this particular state. They concluded a treaty with the maharaja which allowed him to retain control over his kingdom with the provision that external relations were handled by the British government located in New Delhi. The same arrangement was made in the case of Bahawalpur and several princely states in Baluchistan.

The first British impulse with respect to Afghanistan was to repeat what they had done in Punjab – to conquer the country and make it a part of the expanding Indian colony. But the Afghan in spite of the fact that they did not have an organized national army, were able to repulse the British attempts. The British suffered a number of humiliating defeats at the hands of the Afghans that history remembers as the Afghan wars. This was also the fate of other foreign intrusions in the twentieth and the twenty first century. The Soviet Union in the 1980s and the United States over a period twice as long as the Soviet Unions' failed attempt to bring Afghanistan under its control. Finally, the British decided to conclude an arrangement with Abdur Rahman, the Afghan Emperor. The most important part of this understanding was the drawing of a 1,660-mile line of control that separated independent Afghanistan from the British-controlled territories on the other side of the border. Called, the Durand Line after the name of a British civil servant who had served in

India as a member of the powerful Indian Civil Service, the ICS the British saw it as an international border. The agreed border limited the spheres of influence of Afghanistan and British India in the areas close to the border. They came to be called the “Tribal Belts.” Even before the demarcation of the Durand Line, the government in Kabul had ceded the regions of Quetta, Pishin, Harnai, Sibi, Kurram and Khyber to the British under the Treaty of Gandamak signed in 1879, four years before the treaty that led to the drawing of the Durand Line.

In terms of having been able to preserve its geographic entity in spite of the many attempts made by powerful nations to either dismember it or, at least, include it in the sphere of influence. All these attempts failed including, those by the British who as the rulers of India in the nineteenth and good part of the twentieth century. The Russians invaded the country in 1979 and stayed for a decade before being pushed out by a cluster of resolute Afghan forces. The Americans came in the last days of 2001 and after two decades of occupation of sorts Washington in April 2021 set a date for its departure. This brief account is that part of the Afghan story.

Newspaper accounts in the American press suggest that Biden administration's senior leadership is actively debating the options available to Washington after the withdrawal of American troops from Afghanistan. While the political leadership would like a total disengagement, the military was not in favor of a total turn-back. Some in the senior ranks were in favor of intense air attacks to deter the Taliban from an outright victory in Afghanistan and establishing in Kabul the kind of regime they had in

place in the 1990s. Was that to happen what be its impact on the Tehreek e Taliban Pakistan, the TTP. Although Pakistan's military action in North Waziristan contained the growing influence of the TTP, the movement has not been totally suppressed. It maintains close contact with the Taliban across the border in Afghanistan.

Recently, Iran has proposed to host a multilateral conference on Afghanistan on Oct 27. According to a report by Aljazeera, the foreign ministers of Iran, China, Pakistan, Tajikistan, Uzbekistan, Turkmenistan and Russia will hold talks in Tehran. The objective of this conference is to focus on how they can help the Taliban to form an inclusive government, one that has the presence of all ethnic groups. As of now the situation in Afghanistan oscillates between an uneasy calm and a nightmarish security situation for the Taliban government as the IS-K has stepped up suicide attacks, especially on Shiite mosques during Friday's congregational prayers.

Cynthia Smith wrote that “The Great Game” in Afghanistan was used to describe the rivalry of, “Great Britain and Russia as their sphere of influence in Mughal India.” It later morphed into the Afghan-Soviet Jihad and at the turn of the century USA entered this prodigious contest which culminated in their exit from this war-torn land twenty years later. Is this the end or the beginning of another conflict?

**“The end is in the beginning and yet you go on.”
(Samuel Becket: Endgame)**

Statistical Appendix

Key Indicators

Statistical Appendix

Key Indicators

Table A-1
Level of Pattern of Growth
(Base year 2005-06)

	GDP Growth Rate (%)	Incremental Capital Output Ratio	Volatility of Growth% a	Extent of Balanced Growth b	Intensive Sector c
2000/01	2.0	9.9	-2.2	6.3	0.8
2001/02	3.1	6.1	-0.2	4.4	0.9
2002/03	4.7	4.1	1.4	4.1	1.1
2003/04	7.5	2.3	3.9	10.2	0.6
2004/05	9.0	2.0	4.8	11.6	0.9
2005/06	5.8	3.4	0.6	17.4	0.7
2006/07	5.5	3.5	-0.5	3.4	0.9
2007/08	5.0	3.9	-1.5	5.4	0.8
2008/09	0.4	7.0	-6.2	5.6	3.9
2009/10	2.6	3.8	-2.6	3.8	1.1
2010/11	3.6	8.6	-0.2	8.6	1.0
2011/12	3.8	3.2	0.4	3.2	1.1
2012/13	3.7	4.4	0.6	4.4	1.2
2013/14	4.1	3.4	1.3	6.6	1.0
2014/15	4.1	3.8	0.5	4.7	0.9
2015/16	4.6	3.5	0.7	7.1	1.0
2016/17	5.2	3.2	1.2	5.7	1.1
2017/18	5.5	3.1	1.2	5.7	1.1
2018/19	2.1	7.7	-2.6	5.5	0.9
2019/20	-0.5	-37.6	-4.8	5.2	-2.2
2020/21	3.9	3.9	0.6	5.2	1.3
Average	4.1	2.5	-0.2	6.4	1.0

Note: The base year of all calculations has been changed from 1999-00 to 2005-06. The values before 2005-06 will differ compare to previous reports.

n.c. = not computed

Source: Pakistan Economic Survey (various issues)

^a Difference in the growth rate of GDP during a year minus the trend growth rate (as approximated by the average growth rate during the previous five years)

^b Computed as the weighted (share of value added in 2005-06) standard deviation of the growth rates of individual sectors during a particular year. The larger the magnitude of this indicator the less the extent of balanced growth

^c Labor-intensive sectors of the economy are identified as agriculture, small scale manufacturing, construction, whole sale and retail trade, public administration and defence and social services

Table A-2
Level and Pattern of Investment
(Base Year 2005-06)

	Gross Domestic Capital Formation (% of GDP)	National Savings as % of Investment	Private Investment as % of Total Fixed Investment	Share of Private Investment in Labor Intensive Sectors (%)
2000/01	17.2	95.8	64.6	46
2001/02	16.8	110.7	72.9	39.8
2002/03	16.9	123.1	73.9	38.6
2003/04	16.6	107.8	72.7	38.6
2004/05	19.1	91.5	74.9	42.9
2005/06	19.3	78.8	76.3	34.3
2006/07	18.8	74.5	73.3	35.4
2007/08	19.2	57.3	72.7	34.6
2008/09	17.5	68.6	73.6	38.3
2009/10	15.8	86.1	73.9	43.2
2010/11	14.1	100.7	74.4	46.5
2011/12	15.1	86.1	71.9	47.1
2012/13	15	92.7	73.1	47.3
2013/14	14.6	91.8	72.6	46.1
2014/15	15.7	93.6	73.8	43.0
2015/16	15.7	88.5	73.0	41.4
2016/17	16.2	74.1	14.6	43.2
2017/18	16.8	65.3	66.9	41.9
2018/19	14.9	69.2	73.6	43.1
2020/21	14.8	90.30	74.60	42.30
Average	16.5	87.3	72.6	41.7

Source: Pakistan Economic Survey (various issues)
SBP, annual Report (various Issues)

Table A-3
Agricultural Growth and Profitability
(Base Year 2005-06)

	Growth Rate (%)	Share of Growth in Crop Sector (%)	Volatility in Agriculture Growth	Change in of Output Prices to Fertilizer Prices (%)	Change in Agriculture Terms of Trade with Manufacturing (%)
2000/01	-2.2	n.c	-7.1	-3.8	4.6
2001/02	0.1	n.c	-2	-5.4	0
2002/03	4.1	57.8	2	-0.3	-0.8
2003/04	2.4	42.4	0.4	-0.3	0.2
2004/05	6.5	90.9	4.4	-4.8	-2.1
2005/06	6.3	n.c	4.1	-4.1	-6.7
2006/07	3.4	55.8	-0.5	10.2	4.2
2007/08	1.8	n.c	-2.7	-20.6	-4.2
2008/09	3.5	62.5	-0.6	-10	9.6
2009/10	0.2	n.c	-4.1	17.3	1
2010/11	2	20.8	-1.1	-4.9	3.3
2011/12	3.6	36.3	1.4	-48.3	-9
2012/13	2.7	23.2	0.5	7.8	6.2
2013/14	2.5	47.8	0.1	10.6	3.1
2014/15	2.1	14.1	-0.1	4.7	7.9
2015/16	0.2	n.c	-2.4	6.9	6.6
2016/17	2.2	16.5	0.0	30.9	3.1
2017/18	4.0	37.1	2.0	2.4	-0.5
2018/19	0.6	n.c	-1.6	-19.4	-7.7
2019/20	3.3	58.8	1.5	6.8	2.4
2020/21	2.8	32.1	0.7	18.3	8.3
Average	2.5	42.6	-0.2	-0.4	1.4

n.c. = not computed, n.a. = not available

Source: Pakistan Economic Survey (various issues)

Table A-4
Level of Pattern of Manufacturing Growth
(Base Year 2005-06)

	Manufacturing Growth Rate (%)	Large Scale Manufacturing Growth(%)	Small Scale Manufacturing Growth (%)	Share of Growth in Large Manufacturing (%)	Manufactured Goods Exports Growth(%)
2000/01	9.3	11	6.2	76.3	21.3
2001/02	4.5	3.5	6.3	52	7.7
2002/03	6.9	7.2	6.3	68.2	21.3
2003/04	14	18.1	-20	84.6	8.9
2004/05	15.5	19.9	7.5	87	21.7
2005/06	8.7	8.3	-20	75.2	13.5
2006/07	9	8.7	7.5	74.3	3.5
2007/08	6.1	4	8.7	58.9	13.2
2008/09	-4.2	-8.1	8.1	n.c.	14.5
2009/10	1.4	4.8	7.5	24.9	12.8
2010/11	2.5	1.1	7.5	54.8	26.7
2011/12	2.1	1.13	7.5	44.5	1.2
2012/13	4.9	4.46	8.28	74.9	8.4
2013/14	5.7	5.46	8.29	78.3	11.3
2014/15	3.9	3.28	8.21	68.2	-8.4
2015/16	3.7	2.98	8.19	65.0	-5.3
2016/17	5.8	5.64	8.15	77.2	0.3
2017/18	5.4	5.12	8.17	78.4	14.9
2018/19	-0.7	-2.6	8.2	n.c.	25.6
2019/20	-7.4	-10.7	1.5	n.c.	-10.7
2019/20	8.7	16.1	8.3	80.2	16.1
Average	5.0	5.2	4.8	67.0	10.4

n.c. = not computed

Source: Pakistan Economic Survey (various issues)

SBP, Annual Report (various issues)

Table A-5
Inflationary Trends

	Rate of Inflation (Consumer Prices) (%)	Rate of Inflation (Food Prices) (%)	Core Rate of Inflation (Non- Food Non- Energy) (%)	Rate of Inflation in Import Prices (%)	Rate of Monetary Expansion less GDP Growth (%)
2000/01	4.4	3.6	n.a	15.2	7
2001/02	3.5	2.5	n.a	0	12.3
2002/03	3.1	2.8	n.a	3.7	13.3
2003/04	4.6	6	3.9	14.8	12.1
2004/05	9.3	12.5	8.8	10.4	10.3
2005/06	7.9	6.9	7	17.3	9.4
2006/07	7.8	10.3	6.9	7.6	13.8
2007/08	12	17.6	10.2	27.7	10.3
2008/09	17	23.5	11.4	25.1	9.2
2009/10	10.1	12.6	7.6	6.2	9.9
2010/11	13.7	18.3	9.4	20.7	12.2
2011/12	11	11	10.6	21.8	9.8
2012/13	7.4	7.1	9.6	7.8	12.3
2013/14	8.6	9	8.3	4.3	8.5
2014/15	4.5	3.5	6.5	1.3	9
2015/16	2.9	2.1	4.2	-13.45	9
2016/17	4.1	3.9	5.2	-1.34	8.4
2017/18	3.8	2.0	5.4	5.2	3.9
2018/19	7.3	4.6	7.9	6.1	8.0
2019/20	11.2	14.9	8.2	2.0	18.0
2020/21	8.6	12.9	6.7	5.9	12.3
Average	7.8	8.9	7.7	9.0	10.4

n.c = not computed

Source: Pakistan Economic Survey (various issues)

SBP, Annual Report (various issues)

IMF

Table A-6
Fiscal Policy
(Percentage of GDP)

	Revenue	Expenditure	Non-Interest Current Expenditure	Budget Balanced	Revenue Deficit/ Surplus
	a	b	c	d	e
2000/01	13.1	17.1	9.4	4.0	-2.2
2001/02	14	18.6	9.6	4.6	-1.7
2002/03	14.8	18.4	11.4	3.6	-1.5
2003/04	14.1	16.9	9.8	2.8	0.3
2004/05	13.8	17.2	9.7	3.4	0.5
2005/06	14	17.1	9.7	4	-0.5
2006/07	14.9	18.1	10.9	4.1	-0.8
2007/08	14.1	21.4	12.8	7.3	-3.3
2008/09	14	19.2	10.7	5.2	-1.4
2009/10	14	20.2	11.7	5.2	-2.1
2010/11	12.3	18.9	12.1	6.5	-3.5
2011/12	12.8	21.6	12.9	8.8	-4.5
2012/13	13.3	21.5	12	8.2	-3
2013/14	14.5	20	11.3	5.5	-1.5
2014/15	14.3	19.6	11.3	5.3	-1.8
2015/16	15.3	19.9	11.8	4.6	-0.8
2016/17	15.5	21.3	12.1	5.8	-0.8
2017/18	15.1	21.6	12.6	6.5	-1.8
2018/19	12.9	21.9	13.2	9.1	-5.8
2019/20	15.1	23.2	14.2	8.1	-5.4
2020/21	15.9	22.9	13.5	7.0	-4.1
Average	14.18	19.84	11.56	5.70	-2.18

Source: Pakistan Economic Survey (various issues)

SBP, Annual Reports (various issues)

MoF, Fiscal Operations

a Total revenues of federal and provincial governments

b Revenue and development expenditure of federal and provincial governments

c Current expenditure minus interest payments

d Total revenue minus total expenditure

e Revenue receipts minus current expenditure of federal and provincial governments

Table A- 7
Fiscal Policy
(Base Year 2005/2006)

	Primary Balance (% of GDP)	Total Government Debt (% of GDP)	Effective Interest Rate on Domestic Debt %	% of Deficit Financed by Bank Borrowing %
	a	b	c	
2000/01	1.3	82.4	11.3	-18.4
2001/02	0.1	73.1	12.4	7.4
2002/03	0.4	68.9	10.2	-30.5
2003/04	1.1	62.3	9.4	47.4
2004/05	0.3	58	8.5	27.7
2005/06	-1.1	53.1	10.2	21.8
2006/07	-0.1	52.1	13.8	37.5
2007/08	-2.7	56.8	13.7	80.5
2008/09	-0.3	57.8	12.9	54.2
2009/10	-1.9	59.9	12.4	32.8
2010/11	-2.7	58.9	10.5	51.5
2011/12	-4.3	54.3	10.7	52
2012/13	-3.8	59.3	9.7	79.5
2013/14	-1	60.2	9.5	23.3
2014/15	-0.6	58.1	9.3	61.2
2015/16	-0.3	58.3	8.1	58.3
2016/17	-1.6	61.3	8.2	55.7
2017/18	-2.2	61.5	8.1	49.57
2018/19	-3.6	99.4	8.8	65.7
2019/20	-1.8	100.9	9.9	57.5
2020/21	-0.5	0.0	9.6	54.9
Average	-1.20	61.74	10.34	41.41

n.a = not available

Source: Pakistan Economic Survey (various issues)

SBP, Annual Reports (various issues)

Ministry of Finance, Fiscal Operations

Ministry of Finance, Debt Policy Statements

a Estimated as revenue receipts minus total expenditure net of interest payments

b Includes domestic and external debt

c Defined as the ratio of domestic interest payment to outstanding domestic debt

Table A- 8
Monetary Policy

	Net Foreign Assets a (% Change of broad money)	Net Assets a (% Change of broad money)	Private Credit Growth %	Interest on Six Treasury Bill (%)	Broad Money Growth (%)	Spread Interest Rate
	a		b			c
2000/01	5.1	3.9	4.0	10.4	9.0	8.3
2001/02	13.4	2.0	4.8	8.2	15.4	9.6
2002/03	17.5	0.5	18.9	4.1	18.0	7.8
2003/04	2.1	17.5	29.8	1.7	19.6	6.3
2004/05	2.2	17.1	33.2	4.7	19.3	7.4
2005/06	2.5	12.4	23.2	8.5	14.9	8.7
2006/07	8.1	11.3	17.2	8.9	19.3	9.0
2007/08	-7.8	23.2	16.4	11.5	15.3	8.4
2008/09	-3.2	12.8	0.7	12.0	9.6	9.8
2009/10	-6.9	0.8	3.9	12.3	12.5	9.3
2010/11	23.5	-2.4	4.0	13.7	15.9	9.0
2011/12	-40.2	5.3	7.5	11.9	14.1	8.3
2012/13	-55.8	4.1	-0.6	8.9	15.9	7.0
2013/14	97.9	-3.1	9.1	9.7	12.5	7.3
2014/15	20.5	-1.3	11.7	8.0	13.2	5.6
2015/16	9.1	-0.7	11.1	5.9	13.8	5.7
2016/17	-8235.6	26.5	11.6	12.7	11.3	5.9
2017/18	-961.2	11.9	2.1	7.5	17.5	6.3
2018/19	-8235.6	26.5	11.6	12.7	11.3	5.9
2019/20	-961.2	0.0	2.1	7.5	17.5	6.3
2020/21	1470.8	0.0	-1.6	-	16.2	4.5
Average	-801.7	8.0	10.5	9.0	14.9	7.4

Source: State Bank of Pakistan, Annual Report (various issues)

IMF Article 4 Consultation's Press Releases

a Growth rate of net foreign assets/broad money ratio

b Growth rate of net domestic assets/broad money ratio

c Difference between the interest rate on advances and deposits

Table A- 9
Effective Tax Rates
(Tax Revenues as percentage of Tax Basea)

	Income Tax (%)	Customs Duty (%)	Excise Duty (%)	Sales Tax (%)	Total FBR Taxes (%)
2000/01	4.2	17.8	4.7	13.1	9.3
2001/02	4.5	12	4.3	14.1	9.1
2002/03	4.4	14.8	3.6	14.8	9.4
2003/04	4	14.3	3.1	12.7	9.2
2004/05	3.8	11.2	2.9	10	9.1
2005/06	3.9	12.1	2.4	10.3	9.4
2006/07	5	10.5	2.7	9.9	9.7
2007/08	4.9	7.6	2.9	10	9.8
2008/09	4.6	5.7	5.7	10	9.1
2009/10	4.8	5.7	5	10.1	8.9
2010/11	4.4	5.6	4.3	10.3	8.6
2011/12	4.6	5.6	3.3	11	9.1
2012/13	4.3	5.5	4.1	11.4	9.5
2013/14	4.6	5.2	4.3	12.6	10.1
2014/15	4.9	6.6	5.3	13.9	11
2015/16	5.3	8.7	5.6	16.1	12.4
2016/17	5.5	8.8	5.4	14	12.5
2017/18	5.2	10.0	5.1	14.4	10.7
2018/19	4.8	8.6	5.3	13.3	9.6
2019/20	4.8	8.8	4.9	13.9	10.0
Average	4.62	9.26	4.24	12.29	9.82

Source: SBP, Annual Reports (various issues)

Pakistan Economic Survey (various issues)

FBR (various issues)

a Tax bases for various taxes are as follows:

Income tax: Non-agricultural GDP

Custom Duty: Value of imports

Excise Duty: Value of manufacturing

Sales Tax: Value of Imports plus value of manufacturing

Table A-10
Balance of Payments

	Current Account Balance (% of GDP)	External Debt as a % of Exports of Goods and Services	Net Reserves (US \$ Million)	Gross Reserves (In months of next year's import of goods and services)	Change in Value of Pakistani Rupee per US \$ (%)	Change in Real Effective Exchange Rate (%)
1999/20	-1.6	322.1	908	0.9	3	-0.6
2000/01	-2.7	309.4	1679	1.7	12.8	-2.5
2001/02	3.9	282	4337	3.7	5.1	-2.6
2002/03	4.9	229	9529	6.5	-4.7	-0.1
2003/04	1.8	209.5	10564	5	-1.5	-1.8
2004/05	-1.4	183.7	9805	3.5	3.1	0.3
2005/06	-3.9	167.2	10760	3.7	0.8	5.3
2006/07	-4.8	169.2	13345	4.5	1.3	0.5
2007/08	-8.4	169.7	8577	2.7	3.2	-1.12
2008/09	-5.5	212.9	9118	2.8	25.5	-1.0
2009/10	-2.3	218.9	12958	2.9	6.8	1.0
2010/11	0.1	204.9	14784	3.6	2.0	6.5
2011/12	-2.1	212.2	10803	2.9	4.4	3.1
2012/13	-1.0	182.3	6008	1.5	8.4	-1.3
2013/14	-1.3	204.1	9098	2.7	6.3	7.3
2014/15	-0.8	204.9	13532	3.9	-1.5	5.4
2015/16	-1.7	250.9	18130	9.0	2.9	4.6
2016/17	-4	284.6	16242	4.4	0.4	3.5
2017/18	-4.8	317.2	7285	1.7	23.9	-15.4
2018/19	-1.1	368.4	12132	3.3	16.1	2.2
2019/20	-1.1	387.3	17,299	3.9	1.3	7.3
2020/21	-1.1	387.3	17,299	3.9	1.3	7.3
Average	-1.8	249.0	10645.1	3.6	5.5	1.3

Source: SBP, Annual Report (various issues)
IMF Article IV Consultation's Press Releases

Table A- 11
Level and Pattern of Trade

	Merchandise Export Growth (US \$; %)	Extent of Product Diversificat ion of Exports (a)	Extent of Market Diversificat ion of Exports (a)	Merchandise Import Growth (US \$; %)	Change in Terms of Trade %	Share of Essential Imports (a) %
1999/20	11.2	0.801	0.23	13.1	-15.3	39.3
2000/01	12.5	0.798	0.221	14.3	-7.1	39.3
2001/02	2.3	0.786	0.221	-7.5	-0.2	36.7
2002/03	20.1	0.791	0.223	20.1	-9.6	35
2003/04	13.5	0.782	0.232	21.2	-4.1	28.8
2004/05	16.2	0.778	0.218	38.3	-6.5	25
2005/06	14.3	0.769	0.229	31.7	-11.7	30.7
2006/07	3.2	0.737	0.228	8	-3.7	29.1
2007/08	16.5	0.722	0.21	31.2	-11.5	38.9
2008/09	-6.4	0.709	0.202	-10.3	2.8	41.9
2009/10	2.9	0.717	0.199	-1.7	0	42.3
2010/11	28.9	0.697	0.184	14.9	2.8	42.7
2011/12	-2.6	0.722	0.183	12.8	-5.9	45.8
2012/13	0.4	0.719	0.189	-0.6	-2.4	42.9
2013/14	1.1	n.a	n.a	3.8	0.9	40.8
2014/15	-3.9	n.a	n.a	-0.9	-0.4	33.8
2015/16	-12.2	0.768	0.202	-2.5	4.2	25.5
2016/17	-1.7	n.a	n.a	18.5	1.5	24.5
2017/18	12.6	0.745	0.193	16.2	-0.6	44.4
2018-19	-2.2	n.a	n.a	-7.4	1.5	40.3
2019/20	-7.1	n.a	n.a	-15.9	3.7	50.1
2020/21	13.7	n.a	n.a	23.3	-5.0	50.0
Average	5.7	0.8	0.2	9.7	-3.1	37.3

Source: Pakistan Economic Survey (Various issues)

United Nations Conference on Trade and Development

State Bank of Pakistan, Annual Report (various issues)

a This is estimated by UNCTAD as the Herfindahl Index, which ranges from a value of 0 to 1.

The greater the extent of diversification the lower the value of the index

Essential imports are of wheat, edible oil, fertilizers, medicines and POL products

Notes

Chapter 1

1. Gustav F. Papanek, *Pakistan's Development: Social Goals and Private Incentives*, Harvard University Press, 1967.
2. The World Bank, *World Development Report, Entering the 21st Century: Globalization, Urbanization and Fiscal Decentralization*, 2000.
3. The book was eventually published in 2007. See Shahid Javed Burki, *Changing Perceptions and Altered Reality: Pakistan's Economy Under Musharraf, 1999-2006*, Oxford University Press, 2007.

Chapter 2

This chapter draws upon the speech given by Shahid Javed Burki at a session organized by the Pakistan Chamber of Commerce UAS and Pakistan Association of Greater Houston. The session was held on June 10, 2021 at Houston.

2. Shahid Javed Bukri, Iftekhar Ahmed Chowdhury and Asad Ejaz Butt (Editors), *Pakistan at Seventy: A Handbook on Developments in Economics, Political and Society*, Routledge, 2019.
3. Shahid Javed Burki, *Pakistan Under Bhutto, 1971-1977*, St. Martins and Macmillan, 1980.
4. Mahbubul Haq, *The Strategy of Economic Planning: A Case Study of Pakistan*, Oxford University Press, 1966.
5. Shahid Javed Burki, *A Nation in the Making*, Westview Press, 1986.

Chapter 3

1. In FY20, the World Bank estimated that Pakistan's (extreme) poverty rate would rise from 4.4 to 5.4 percent (or roughly 2 million persons using the international poverty line of PPP \$1.90 per person per day) based on the forecast that GDP growth would decline by 1.5 percent. In the event, economic growth declined by only 0.5 percent in FY20, suggesting an increase in potential poverty of only about a third that originally estimated. The eventual poverty impact should be further diminished by the social protection measures undertaken. Note, however, that the Ehsaas.
2. Sayeed and Afzal (2021) describe the reasons for repeated trips to the IMF as follows: "In the last two decades, Pakistan's economy has gone through a boom and bust cycle in terms of growth and macroeconomic stability. The booms are generally predicated on a comfortable external balance situation and the reverse is the case with busts. The usual formula is that once the economy is stable in terms of external finances, governments in Pakistan – irrespective of regimes in power – tend to lower interest rates and overvalue the currency to create a veritable consumption boom. This inevitably leads to a current account deficit,

which in turn feeds into an increasing budget deficit and depletes foreign exchange reserves, pushing the economy back into crisis mode. This leaves the government no option but to seek recourse from the IMF.”

Chapter 4

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The Shahid Javed Burki Institute of Public Policy at NetSol

138-Abubakar Block,
New Garden Town, Lahore.

Tel: 042-35913304

Email: admin@sjbipp.org
Website: www.sjbipp.org