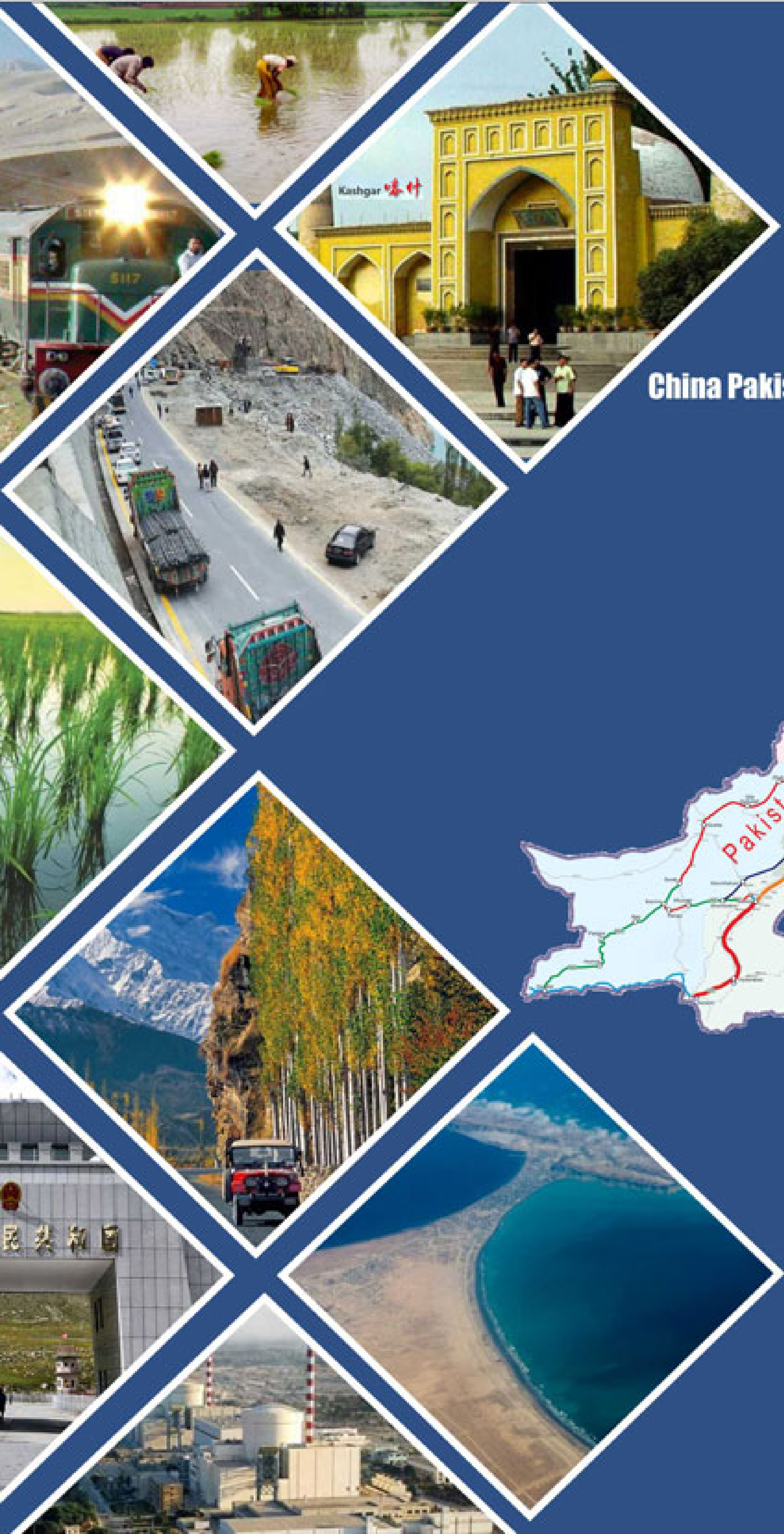

10th Annual Report

2017

THE STATE OF THE ECONOMY

China Pakistan Economic Corridor Review and Analysis

The Shahid Javed Burki Institute of Public Policy at NetSol - Lahore -

BIPP

BIPP 10th Annual Report 2017

The State of the Economy
China Pakistan Economic Corridor
Review and Analysis

The Shahid Javed Burki
Institute of Public Policy at NetSol

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The Shahid Javed Burki Institute of Public Policy at NetSol

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

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Foreword
Reading Pakistan's History from Different Angles

Before sitting down to write the Foreword for this year's annual report published by the Shahid Javed Burki Institute of Public Policy at NetSol (BIPP), I reread what I had said in some of the earlier reports. One thing that sprang out of these writings was a sense of optimism about the country's future. Given all the negative stuff that has been noted about Pakistan, especially in the foreign press, it is legitimate to ask whether this point of view is justified. I am asked this question when I speak about Pakistan in front of foreign audiences. I answer by saying that my training was in development economics, a discipline I followed in my professional life. Pessimism and development work don't sit well together.

But that is not the only reason why we at the Institute are positive about the country's future. It has several attractive attributes that often go unnoticed by those who observe it as well as those who are engaged in the making of public policy. It is these two audiences that we have sought to reach at the BIPP. The list of positives is fairly long. It includes Pakistan's impressive but still not fully used agricultural endowment. That was the subject of the 2016 BIPP report.[1] Traditional skills in metallurgy and machine-making also remain to be fully harnessed. The area bounded by Lahore, Sialkot, Gujranwala and Gujrat could become a significant contributor to the development of value chains that are becoming central to the rapidly changing international production system. Of the world's more populous countries, Pakistan has the youngest population. The median age is only 25 years that means that some 104 million people are below that age. In the megacities of Karachi and Lahore, the population is even younger; perhaps 75 percent of their population is under the age of 25. Given proper education and training the youth can help transform the Pakistani economy, increasing the presence of the modern service sectors.

To this list, we can now add another — Pakistan's location. It is because of this that China has developed a deep interest in Pakistan that has led to the formulation and implementation of the China Pakistan Economic Corridor, CPEC. In writing this report we have looked at the large Chinese program, the Road and Belt Initiative, RBI, of which CPEC is an important component. The RBI is a part of the new development paradigm Beijing has adopted to deal with its own changed circumstances as well as those that have occurred in the world in which it must operate.

China has outgrown what the World Bank once described as the East Asian miracle economies model.[2] According to it, the state guided the enterprises, private as well as public, to produce cheap manufactures for consumption in the expanding western markets. China no longer has low-wageworkers and the western markets are not growing as they were in the last quarter of the previous century. China is now interested in building supply chains for its technology-rich products, shift production to the relatively empty lands in its western part, use land routes to trade these products and bring in imports needed by those who would move to the west. Pakistan could fit very well into this scheme as a player in this new world. But to move into this world, Pakistan must understand where it is today, from where it has come and where it needs to go. To answer these questions we need to bring into the discourse a number of other disciplines in addition to economics, politics, sociology and anthropology. We could also make use of fiction to develop a better understanding of what is happening in the country.

I have studied Pakistan for almost four decades. My first book, Pakistan Under Bhutto, was published by London's Macmillan.[3] The book was mis titled. It was less about Zulfikar Ali Bhutto, Pakistan's first elected prime minister, and more about the political economy of the Pakistan Movement. I argued that there was a paradox concerning what came out of that movement. The western part of the country it created was in an area that did not particularly want the division of British India on religious grounds. The Muslim population of the province of Punjab was comfortable with the arrangement it had reached with the non-Muslims as well as with the British administration. The Muslim citizenry of what was then called the North-Western Province wanted to get liberated from the stranglehold of tribal leaders. This, they thought, would be possible within the context of what Mahatma Gandhi preached in terms of social change. They too were luke-warm about the idea of Pakistan.

However, the Muslim population of Bengal was extremely enthusiastic about partitioning India. The Bengali Muslims had campaigned for it in the early part of the twentieth century and won the partition of their province on religious grounds but saw its annulment in 1911 when the British succumbed to the pressure mounted by the Hindu-dominated Indian National Congress and reunited Bengal. For them the creation of Pakistan was to be Bengal's second partition. They provided Muhammad Ali Jinnah the mass support that was not available from the Muslim majority provinces of Northwest India. Moreover, when Pakistan came into being, political power passed into the hands of the leadership groups resident in the western part of the country. This was not acceptable to the Bengali political elite. This lack of political equilibrium resulted in Bengal's third partition, the creation of Bangladesh in 1971.

I followed this work with a book that appeared in the United States under the title of Pakistan: A Nation in the Making.[4] In this book, published in 1986, I maintained that while Jinnah had succeeded in creating a Muslim state in what was once British India, he did not manage to create a Pakistani nation. That was still very much a work in progress. The absence of political cohesion and uneven economic and social progress has kept the country seriously divided. Even though Pakistan is making greater political progress than any other Muslim country in the world, much work remains to be done. As I write this on February 23, 2018, the Supreme Court has issued its judgment according to which the constitution cannot be superseded by an act of parliament. This was done when Mian Nawaz Sharif, having been barred from membership of the National Assembly under the provisions of Articles 62 and 63 of the Constitution, was elected to the chairmanship of the Pakistan Muslim League aftersuch a move was enabled by an act of parliament. This move was not permissible under the Constitution. The basic document can be amended but not overruled by an act of parliament. This decision further advances Pakistan's political progress.

At this time, I am engaged in compiling a book of essays to celebrate Pakistan's 70th birthday. The scholars who have contributed to this volume have looked at Pakistan's turbulent history from several different perspectives. They have analyzed the many problems the country has faced but have separately come to the conclusion that a better future lies ahead. The country has shown remarkable amount of resilience and has learnt a great deal from the past.

I have gone into this brief recounting of history to make what I believe is an important point. It is hard to plan a country's future without understanding its past. Economists call this "path dependence" which means that history, both its positive and negative aspects, weighs heavily on the future. But I have long believed that understanding the past, we must delve into a number of disciplines including fiction.

Often times, fiction writers do a better job at understanding the underlying currents in societies. Much of Latin America's great literature was produced when the continent was being torn apart by economic turbulence and civil strife. Mario Vargas Llosa, a Nobel Laureate from Peru, who will soon be 82 years old,is the only survivor of the Latin American greats. They include Gabriel Garcia Marquez, Julio Cortazar, Carlos Fuentes, Jose Donoso, Juan Rulfo, Miguel Angel Asturias and Guillermo Cabrera. All of them wrote with politics in the background. Llosa and others influenced political development in the continent. According to Jose Miguel Vivanco, the America's Director of Human Rights, "Mario Vargas Llosa has been a central figure — central, central, central — for democracy, human rights and fundamental freedoms. I don't think I'm exaggerating. He's some sort of a father of the current Peruvian democracy."[5]

It appears to me that the same type of literary ferment is taking place in Pakistan. "Pakistan may often be in the news for all the wrong reasons — such as political crisis brought on this summer by an increasingly assertive judiciary and a defiant (former) prime minister — but it has arguably outshone its giant neighbor India, in producing fine novelists for some years now," wrote Rahul Jacob in the Financial Times, in his review of Kamila Shamsie's latest novel, Home Fire. "In addition to Shamsie and Mohsin Hamid, British-Pakistani writers long listed, and in Hamid's case, shortlisted for this year's Man Booker Prize, any roll-call of storytellers must include Nadeem Aslam and Muhammad Hanif to name but a few."[6] Most of these writers of fictions have used political turmoil and extremism as the background for their work. At some stage we in the Burki Institute will request one of these writers,who have seen Pakistan's history through the prism of fiction,to tell us where Pakistan is today and where it seems to be headed.

Using the themes developed in these works of fiction, a composite picture emerges of Pakistan that helps to make public policy. In The Reluctant Fundamentalist, Mohsin Hamid wrote about a young Pakistani professional working in the United States who was hounded out of the country after all those from Pakistan and other Muslim nations became suspects following the 9/11 terrorist attacks. Extremism, terrorism and youth alienation is the theme of his latest novel, Exit West, where a couple uses magic doors to escape violence that has changed the pace of life in their native town. The book was voted one of the ten best novels of 2017. Shamsie's Home Fire is the story of a family of Pakistani origin living in Britain which was torn apart by the rise of Islamic extremism. First the family's father and then the son gets recruited to go violent in order to pursue the dream of creating an Islamic caliphate. In Maps for Lost Lovers, Nadeem Aslam wrote about a Pakistani family that had relocated from central Punjab in Pakistan to the outskirts of London. It failed to get integrated in the culture of the host population, creating enormous complications for the community's youth. In A Case of Exploding Mangos, Mohammad Hanif tells the story of President Zia ul Haq's death. The story is built around the tensions authoritarianism builds in society and the animus that results for the person who uses this form of governance. Going back to Mohsin Hamid, his How to Get Rich in Rising Asia tells the story of a poor man who gets rich by selling tap water in used branded bottles but loses all when he is swindled by a relative.

Pakistani diasporas and how they connect with the homeland, the rise of extremism and how it is destroying ordinary lives, corrupted political systems and overall practice of corruption are the themes woven into the stories these talented writers tell. We learn more about society in Pakistan than we would by reading academic works and policy analyses.

As indicated at the beginning of the foreword, in its past reports the BIPP has examined both the macro situation as well some aspect of the micro situation. It is the same with the 2017 document. This year our focus is on the massive program of investment China has promised to make as a part of the CPEC. In the chapters that follow we look at the many ways in which this initiative will aid Pakistan. At the macro level, it will add to the low investment to GDP ratio and increase the low trade to GDP ratio. At the micro level, it will improve connectivity both inside the country as well as with the areas beyond our borders. By bringing markets closer to the people, it will add to the incomes of the poor as well help integrate the country's less developed areas with those that are more advanced. In the report's final chapter, we provide a matrix on the policy initiatives those in decision-making positions could take to realize the full potential of this major program.

Finally, a word of thanks. This time again, as we did for the 2016 report, we turned to a retired official from the World Bank of Pakistani origin to "task manage" the annual report for the Burki Institute. Without the hard work and able management by Daud Ahmad, who worked with me as Project Advisor when I was in charge of the World Bank's work on China, this report would not have been done and done as well. We thank him for the effort he put in.

Shahid Javed Burki,
Lahore,
February 23, 2018.

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Acronyms

ADB	Asian Development Bank
AIIB	Asian Infrastructure Investment Bank
AJK	Azad Jammu and Kashmir
APEC	Asia Pacific Economic Cooperation
APTTA	Afghanistan Pakistan Transit Trade Agreement
ASEAN	The Association of Southeast Asian Nations
BIPP	Burki Institute of Public Policy
BRI	Belt and Road Initiative
BRICS	organization composing: Brazil, Russia, India, China and South Africa
CAF	Civil Armed Forces
CAREC	Central Asia Regional Economic Corridor
CARs	Central Asian Republics
CCI	Council of Common Interests
CEO	Chief Executive Officer
CNG	Compressed Natural Gas
CPEC	China-Pakistan Economic Corridor
CPFT	Certified Pulmonary Function Technologis
CPHGC	China Power Hub Generation Company
CPI	Consumer Price Index
CSF	Coalition Support Fund
DISCO	Distribution Company
DTMB	Digital Terrestrial Multimedia Broadcast
EAEU	Eurasian Economic Union
ECO	Economic Corporation Organization
EPZ	Export Processing Zone
EWS	Early Warning System
FATA	Federally Administered Tribal Area
FBBM	Frozen Boneless Bovine Meat
FBR	Federal Board of Revenue
FDI	Foreign Direct Investments
FPCCI's	Federation of Pakistan Chambers of Commerce and Industry
FRDL	Fiscal Responsibility and Debt Limitation

FTA	Free Trade Agreements
GB	Gilgit Baltistan
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GPNs	Global Production Networks
GVCs	Global Value Chains
HVDC	High Voltage Direct Current
ICCBS	International Center for Chemical and Biological Sciences
ICT	Information and Communication Technologies
IED	Improvised Explosive D evice
ILO	International Labour Organization
IMF	International Monetary Fund
IPM	Integrated Pest Management
IPP	Independent Power Producer
IT	Internet Technology
JCC	Joint Coordination Committee
KKH	Kora Kuhram Highway
KPK	Khyber Pakhtunkhwa
LEMOA	Logistics Exchange Memorandum of Agreement
LNG	Liquefied Natural Gas
LPG	Liquid Petroleum Gas
LTP	The Long Term Plan
LUMS	Lahore University of Management Sciences
MIIS	Medimaging Integrated Solution
MNCs	Multinational Corporations
MOPDR	Ministry of Planning, Development and Reforms
MoU	Memorandum of Understanding
MPI	Multi-Dimensional Poverty Index
MW	Megawatt
NCR	National Capital Region
NDB	New Development Bank
NDRC	National Development and Reform Commission
NEPRA	The National Electric Power Regulatory Authority
NOC	No Objection Certificate
OBOR	One Belt One Road
PARC	Pakistan Agricultural Research Council
PIA	Pakistan International Airlines

PIEDMC	Punjab Industrial Estate Development and Management Company
PMLN	Pakistan Muslim League Nawaz
QTTA	Quadrilateral Transit Trade Agreement
R&D	Research and Development
SAARC	The South Asian Association for Regional Cooperation
SBP	State Bank Of Pakistan
SCO	Shanghai Cooperation Organization
SDGs	Sustainable Development Goals
SEZs	Special Economic Zones
SME	Small and Medium Enterprises
SSRL	Stanford Synchrotron Radiation Laboratory
STPF	Strategic Trade Policy Framework
TDAP	Trade Development Authority of Pakistan
TIR	Transports Internationaux Routiers
TPP	Trans-Pacific Partnership
UN	United Nations
UNDP	United Nations Development Programme
UNESCAP	United Nation Economic and Social Commission for Asia and the Pacific Study
UN-OHRLLS	United Nations Office of the High Representative for the Least Developed
USIP	United States Institute of Peace
USSR	Union of Soviet Socialist Republics
WAPDA	Water and Power Development Authority

Chapter

1 Setting the Stage

Setting the Stage

Shahid Javed Burki

Introduction

The model we have used for writing the annual reports, published by the Shahid Javed Burki Institute of Public Policy at NetSol (BIPP) on the state of the Pakistani economy comprises two parts. In the first, we report on our reading of how the economy is performing at the time of the writing. We also provide an assessment of what we believe lies in the immediate future — the next year or two. Included in this part of the report are policy prescriptions: what those holding the reins of power should be worrying about if the economy was in distress and off-balance. If the economy was performing reasonably well, we would offer suggestions how it could be further improved.

There is a good reason why every year we write on the state of the economy. We do this in the hope that our analyses and prescriptions based on them would have some impact on the making of public policy. After all, that was the reason for establishing the BIPP, a public policy institution working in the private sector. By creating such an institution, we hoped to bring a perspective that was different from the one offered by the entities working in the public sector. Also, it was our impression that the institutions doing policy work in the government had weakened over the years. They had been politicized and were no longer capable of offering policy positions that differed from those held by their political masters. This process had begun in the 1970s and was not reversed. At the same time, the emoluments offered by the government to those who had the skills to do policy work were not sufficiently attractive to bring in the needed talent into the government. BIPP-like institutions could fill some of the gap in public policy work thus created. To fulfill our mission, it was essential for us to reach decision-makers in the government at the federal level as well as those working in the provinces.

How could we fulfill this part of our mission? We asked ourselves. One way of doing this was to release the report about the time the federal and provincial administrations were engaged in preparing the budgets for their jurisdictions and to hold well-attended report launch ceremonies in either Islamabad or Lahore. Limited by finance, we couldn't reach other provincial capitals. The chief guests invited to preside over the launch were mostly senior policymakers. Members of the media — press as well as electronic — were invited to project the main messages of the report to the public. There was fair amount of coverage of the reports in the press.

It is difficult for us to estimate the impact we may have had on the making of public policy. But it was less than what we had hoped. This year we are taking a different approach. Rather than focus on the launch — which will still happen — we will invite the policymaking community to participate with us in workshop settings and hold open discussions with the report's authors and other experts. Also invited will be the international development agencies working in Pakistan as well as diplomats from some of the missions that are active in the country in the economic and social development field.

The second part of the report has always dealt with a particular policy issue we believe needs the attention of the policymakers. This year's report is different in that it examines, in considerable detail, a large investment program with a focus on policies needed to make that program successful. In other words, we are moving from general policies to a particular program. For instance, we don't look at the cost of extremism for the economy or that of the shortage of energy; we don't ask the question and then attempt an answer why the southern districts of Punjab have fallen behind the rest of the province, we don't examine the consequences of the passage of the Eighteenth Amendment to the Constitution on provincial finance. These and several others were the themes we explored in the reports since the founding of the BIPP.

This year, instead, we concern ourselves with one particular large-scale program that, we believe, will prove to be a game-changer for the economy. The program, the China-Pakistan Economic Corridor (CPEC) is one component of the massive effort the Chinese have launched under the leadership of their President Xi Jinping. President Xi was given another term in office by the 19th Communist Party Conference, which met in Beijing in October 2017. He came out of the meeting greatly strengthened; the "Xi thought" was incorporated in the party's constitution, only the second time this was done. The first time was the "Mao Zedong thought". In the Xi thought, the president talked about bringing his country into the "new era." This meant that China would be more active in the international field than it ever was before. One aspect of this activism will be consequential for Pakistan. The country is an important component of the Belt and Road Initiative, the BRI. The larger investment program has no historical presence in terms of its size and scope.

The BRI will bring in more than a trillion dollars of Chinese investment into nearly 60 countries. The BRI represents a paradigm shift for China under the leadership of President Xi Jinping to move the country and its society on to a new trajectory. The East Asian "miracle economy model", dependent on cheap manufactures and robust demand for them in the Western markets, no longer works for China. Beijing's focus now is on developing new markets and for delivering to them by using land routes. The idea of land-based commerce was articulated by President Xi in a 2013 speech delivered in Astana, the capital of landlocked Kazakhstan. The idea figured prominently in the Chinese leader's speech at the 19th Communist Party Conference.

The BIPP 2017 report will analyze what the CPEC will mean for Pakistan's economic future, its social and regional development and its place in the world. This analysis will have to go beyond economics. It will need to factor in geopolitics into the equation. Chapter Three in the report will set the discussion of both land-based commerce as the driving force behind the CPEC initiative and the global context in which this program will take shape.

An Unstable External Environment

This is the first time we will move beyond economics to develop the main theme of the report. It is important to point out that the context in which the Chinese program will be developed is a dynamic one — it is changing all the time. With the political rise of Donald Trump in the United States, we have a leader in place who has a volatile temperament and not much understanding of international affairs. His actions on the global scene are hard to predict. "Countries are unsure to take Trump's words as policy pronouncements, or whether they can be safely ignored," wrote Steven Erlanger who covers foreign policy issues for The New York Times. "If Mr. Trump's threats are seen to be hollow, what that does to American credibility? In a series of Tweets posted on January 6, he reacted to questions about his mental fitness calling himself a very 'stable genius'."[1]

What Trumpism will mean for the United States and the world at large has been chronicled in painful details in a book by Michael Wolff, a journalist who spent a great deal of time with the Trump campaign team, and, once Trump won unexpectedly, in the White House. "He hopelessly personalized everything," wrote Wolff in his book, Fire and Fury, describing the Trump White House in the first nine months with him in office.[2] According to the author, "in the White House, the intrigue is the thing; substance is almost incidental, while policy is just a weapon wielded in the service of careerism, personal advantage and brand management." As we will discuss in Chapter Three, Trump's pronouncements and policies have already deeply affected Pakistan, Afghanistan and China — the three countries critical to the success of the BRI. Reviewing the book for The Washington Post, Carlos Lozada provided a good summary of Donald Trump, the man. "The president himself appears driven by insecurity, ego, and constant fear of ridicule and failure than by any ideological conviction."[3]

Donald Trump, in other words, is the main source of instability in the global environment in which Pakistan is now operating. We will focus on the aspect of policymaking in Pakistan in Chapter Three.

Land-Based Commerce

There is a reason why land-based economic systems have received so little attention in development literature. The European empires were established by the conquerors and explorers who used the sea to reach distant lands. That said, there are some examples in history of the use of land to conquer a great deal of space. This was done by the Mongolian hordes under Ghengiz Khan, who over ran most of Central Asia. Later Babar, the first of the Great Mughal Emperors, conquered India in 1526 and founded a dynasty that stayed in power for three centuries until the British arrived by sea and established their dominion over the entire Indian Sub-Continent. For the European powers, oceans were generally the conduit of conquest and resulting commerce. It was inevitable that this would lead to the use of the sea to transport goods and commodities back and forth between the colonial powers and the territories they controlled.

According to Simon Denyer, who has written extensively on the subject, "a land based economy is by definition rooted in place, animated by its inhabitants, and conditioned by the natural resources that make up the span of its geography, however that is defined — one day's horse ride, river or mountain boundaries."[4] But this is a very limited interpretation of a vast subject at the center of productive and efficient land-based commerce. We need to extend our thinking about development to land-based international commerce. Since most inter-country trade moves on sea-lanes, land based economic systems have not received much attention from the academia as well as the community of policymakers. It is only recently that land-based economic systems began to be looked at with interest as contributing to growth and regional development. If Pakistan makes good use of the large China supported program of building highways, railways, oil and gas pipelines and fiber-optic cables — all included in the CPEC — the country could provide the lead in defining this shift in the development paradigm.

This report covers a lot of ground. It examines the CPEC in the context of geopolitics, its contribution to the development of the backward regions in the country, and how it will improve connectivity between Pakistan and several land locked states in the country's north. As the chapter that examines the impact of the CPEC on Pakistani economy suggests, this multifaceted program is likely to be a game changer for the country.

Report's Key Messages

We have placed a matrix at the end of the report that summarizes its main findings and identifies some of the policies the two governments — those of Pakistan and China — need to adopt to make the CPEC a success for both countries. We believe that a successful CPEC would help to reverse the downward sloping growth trajectory the country has followed since the arrival of democratic governance in the country. There is some fear that without placing the economy on an increasing and sustainable growth path, the needed progress in political development could be compromised.

The CPEC could result in a significant increase in the level of fixed capital formation, which is low and is the main reason why the GDP increase is stuck at an unsatisfactory level. CPEC-related flows of capital will give a boost to foreign direct investment. That, in turn, would stimulate domestic investment. The two together could increase gross investment from about 15 percent of GDP at this time to 20 percent in about a decade's time. Such an increase could add up to 1.5 percent to the rate of increase in national income taking it beyond six percent a year. Such a growth path will bring Pakistan close to those being travelled by other South Asian nations.

We believe that for this transformation to occur, Pakistan will need to give attention to the building of institutions necessary for implementing the large investment program envisaged in the CPEC. There has to be the institutional ability to identify, design and implement the projects included in the program. Also, there has to be close coordination among the units in the Pakistani federation and between them and the federal government. Given its constitutional mandate, the Council of Common Interests (CCI) could become the focal point for such coordination. However, for the CCI to play this role, it needs to have the capacity to undertake this work. Bringing in the needed talent would mean providing reasonable emoluments, higher and more attractive than those generally available for service in the government.

Chapter

2 Recent Economic Developments and Prospects

Recent Economic Developments and Prospects

Farrukh Iqbal

After experiencing considerable macroeconomic stress (high inflation, high fiscal deficits, low growth and declining reserves) in the wake of the global financial and economic crisis during FY 09-13, the economy stabilized and recovered, growing by more than 4.5 percent on average during FY 14-17. However, some aspects of the recovery warrant concern. In particular, large imbalances remain in the fiscal and external accounts. Rather than moving smoothly onto a trajectory of sustained high economic growth and macroeconomic stability, the economy is presently characterized by much uncertainty.

This chapter is organized in two parts. The first part documents the main features of the macroeconomic recovery in recent years while noting key areas of concern. The second part turns to a discussion of economic prospects in the light of (a) the surge of Chinese investment and loans under the China-Pakistan Economic Corridor initiative and (b) continuing fiscal and external account imbalances.

Recent Economic Developments

Recovery and Growth

The economy grew by 5.3 percent in FY17,[1] the highest growth rate during the past decade and capping a four-year run of above 4 percent growth. All major sectors grew at decent rates, with industry growing at a healthy 5.3 percent and agriculture growing at 3.5 percent. The recovery in agriculture (up from 0.3 percent the previous year) was partly due to strong performance in the livestock sector which contributed 2 out of the 3.5 percentage point growth of the sector. The crop sector contributed another one percentage point. This was due to a revival of the cotton crop, which had crashed the previous year from around 14 million bales in FY 15 to 9.9 million bales in FY 16 before rising to 10.7 million bales in FY17. It was also due to the rise in sugarcane output from 65.4 million tons in FY16 to 75.6 million tons in FY17 due to generous price supports.

Growth in industry was consistent with bank lending to the private sector, which rose by 16.8 percent in FY17 as compared with 11.2 percent in FY16. However, despite the fact that about a third of this credit was meant for fixed investment, the rate of private fixed investment has remained at around 10 percent of GDP (provisional data). The stagnation in the private investment rate at this level for the last ten years or so suggests that the private sector continues to hang back in making long-term commitments. While improvements have taken place in energy supply and general security over the last few years, these have not made a significant difference to the private sector's confidence in the long-run prospects of the economy.[2] It is possible that while some aspects of the business environment have eased, others have worsened. The tax burden on formal sector businesses, for example, remains very high.

On a related note, the stock market experienced a significant correction in the past year with the KSE100 declining about 23 percent from its peak of around 52000 (in May 2017) to a level of 40000 at the end of December 2017.

Price Stability

While inflation, as measured by the growth of the CPI, picked up somewhat — registering 4.2 percent in FY17 compared to 2.9 percent in FY16 — it remains at a comfortable level from the point of view of macroeconomic management and was below the originally anticipated level of 6 percent. The upward tick in inflation was due partly to delayed domestic adjustments to changes in international oil prices and an increase in the prices of some food commodities, such as palm oil. The monetary policy stance remained stable, with M2 rising by 13.7 percent in FY17 and the policy interest rate being pegged at 5.75 percent, the same as in FY16.

Resumption of Fiscal Pressures

The overall fiscal deficit rose sharply to 5.8 percent of GDP in FY17, higher than the 4.6 percent registered in FY16 and much higher than the 3.8 percent targeted at the beginning of the fiscal year[3]. This was due mostly to an increase in development spending.

The improving trend in the revenue to GDP ratio seen in the past three years weakened in FY17. Revenue collections came in at PKR 4.9 trillion or 15.5 percent of GDP, much below the target of PKR 5.3 trillion set at the beginning of the fiscal year. Direct tax revenues grew by only 10.3 percent in FY17 compared to 17.8 percent in FY16. Indirect tax collection growth fell off even more sharply, from 21.8 percent in FY16 to only 6.5 percent in FY17. The proximate causes of the deceleration in collections were: (a) lower petroleum sales tax rates introduced to prevent pump prices from rising in line with international oil prices; (b) relief measures and tax breaks provided during the course of the year to support investment and exports; and (c) lower dividends declared by public sector enterprises and lower disbursements under the Coalition Support Fund.

On the expenditures side, current spending was PKR 5.2 trillion as targeted at the beginning of the fiscal year. Development spending, however, was

TABLE 2.1

Output and Price Developments

	FY14	FY15	FY16	FY17
Real GDP (annual percent change)	**4.1**	**4.1**	**4.5**	**5.3**
Agriculture	2.5	2.1	0.3	3.5
Industry	4.5	5.2	5.8	5.0
Services	4.5	4.4	5.5	4.2
Consumer Price Index (period average)	**8.6**	**4.5**	**2.9**	**4.2**
Fixed Investment (as percent of GDP)	**13.1**	**14.1**	**14.0**	**14.2**
Public	3.2	3.7	3.8	4.3
Private	9.9	10.4	10.2	9.9

Source: GDP and price data from State Bank of Pakistan (2017); Fixed investment data from Pakistan Economic Survey (2017) much higher than originally projected, coming in at PKR 1.7 trillion compared to a target of PKR 1.4 trillion due to high outlays by provincial governments, in particular. In relation to GDP, current spending came in at 16.3 percent and development spending at 5.3 percent. Developments in FY17 raise concerns about the path of fiscal spending in the year ahead as pressures are likely to rise due to impending elections.[4]

on July 5, 2017. Concerned about the implications for debt servicing and price inflation, the Ministry of Finance arranged for intervention over the succeeding days to roll back the depreciation[5]. This led to a period of public discussion about the wisdom of defending the exchange rate at its then value of approximately PKR105 to the dollar. Political developments over the next few months led to a change of leadership at the Ministry of Finance. The second

TABLE 2.2

Fiscal Developments (% of GDP)

	FY14	FY15	FY16	FY17
Govt. Revenue	**14.5**	**14.3**	**15.3**	**15.5**
Tax Revenue	10.2	11.0	12.6	12.5
Non-Tax Revenue	4.3	3.3	2.7	3.0
Govt. Expenditures	**20.0**	**19.6**	**19.9**	**21.3**
Current Expenditures	15.9	16.1	16.1	16.3
Development Expenditures	4.9	4.2	4.5	5.3
Government Overall Deficit	**-5.5**	**-5.3**	**-4.6**	**-5.8**

Source: State Bank of Pakistan (2017)

step occurred on December 10, when the government began to allow the rupee to find a new equilibrium value in the market. Over the next few weeks, the rupee depreciated to an end-December value of PKR110.6.

Widening External Account Imbalances

Three developments in FY17 reflected pressure on the external accounts. First, the current account balance expanded sharply to four percent of GDP as exports continued to decline, though at a decelerating pace. Second, worker remittances declined in nominal terms, indicating a new phase in this important source of foreign earnings. Third, gross international reserves declined by close to US$2 billion.

Normally, such developments are accompanied by exchange market volatility as investors test for a new equilibrium rate for the currency. The guided nature of the exchange market in Pakistan prevents such volatility but cannot prevent ultimate adjustment. This adjustment occurred in a two-step fashion. First, in early July, the State Bank of Pakistan with held intervention over a day long trading period. The rupee declined by close to three percent

Exports declined in nominal dollar terms from $25 billion in FY14 to $21.7 billion in FY17. As a share of GDP, Pakistan's exports declined from 10.3 percent in FY14 to 5.3 percent in FY17. A move of this magnitude sustained over several years draws attention to structural and policy factors. Among critical policy factors is the exchange rate. The real effective exchange rate has been rising since 2010 and the IMF considers it overvalued by between 10 and 20 percent (IMF, 2017, para. 14 and Box 2). Among critical structural factors are soft demand in key export markets in recent years as well as low skills and infrastructure and business environment deficiencies that prevent Pakistan from improving export unit values and competitiveness.[6]

At $19.3 billion, worker remittances declined in nominal terms for the first time in many years, continuing the decelerating trend that began in FY15 as the demand for Pakistani workers faltered in the Gulf Cooperation Council (GCC). Given that oil prices may not rise substantially over the coming years, Pakistan is likely to continue to see declining remittances over the next few years.

There are some very recent and preliminary indications that the export picture has begun to improve in recent months. Provisional data from the Trade Development Authority of Pakistan (TDAP), for the first quarter of FY18 show exports increasing by 10.8 percent over the same period in FY17, from US$ 4.7 billion to US$ 5.2 billion.

TABLE 2.3

External Sector Developments

	FY14	FY15	FY16	FY17
Trade (as percent of GDP)				
Exports	10.3	8.9	7.9	5.3
Imports	17	15.2	14.5	11.1
Current Account Balance	-1.3	-1	-1.7	-4
Foreign Investment ($ billion)	1.6	0.9	1.9	2.1
Worker Remittances ($ billion)	15.8	18.7	19.9	19.3
International Reserves ($ billion)	9.1	13.5	18.1	16.1

Source: State Bank of Pakistan (2017)

International reserves also declined in nominal terms after a four-year period of accumulation. SBP liquid reserves were reported at US$16.1 billion at end-June 2017, down from US$18.1 billion a year before, possibly because of repeated attempts to defend the exchange rate during the year. Though import cover is still above three percent, the reversal of trend is yet another signal of growing pressure on the exchange rate.[7]

One positive development in the external accounts was an increase in foreign direct investment. At US$2.1 billion in FY17, this was similar to the $1.9 billion received in FY16 and a significant increase from the US$0.6 billion recorded in FY15. The bulk of this investment was from China and was related to the CPEC initiative. Of course, the enhanced investment also generated high levels of machinery imports that contributed to a widening current account deficit. The current account deficit reached four percent of GDP, up significantly from 1.2 percent in FY16.

Prospects and Challenges

Macroeconomic Consequences of CPEC

CPEC comprises a large package of investments in energy and infrastructure projected to amount to $55 billion by 2030. This represents about 19% of Pakistan's GDP of US$280 billion in FY16 or, very roughly, about 1.5% or so of GDP per annum over the next ten years. CPEC investments alone should boost the investment ratio in Pakistan from 15 percent of GDP to 16.5 percent over the next decade. The IMF has calculated that first round effects of CPEC related investments should add about $13 billion to the GDP within the first seven years (IMF, 2017, p 36). CPEC investments may also crowd in other private sector investments in which case the impact on output will be even stronger.[8] This would happen, for example, if CPEC investments eliminate power outages for Pakistan's industrial sector. The extent to which this happens will depend on the extent to which higher power generation is successfully transmitted through Pakistan's distribution networks to industries. There remain concerns about the technical and financial ability of Pakistan's power distribution companies to pass through the increased power supply in an efficient and timely manner.

Over the longer run, CPEC investments will generate outflows of dividends and interest payments that will affect the balance of payments. There is a range of financing modalities associated with CPEC investments. The infrastructure projects (roads, railroads and port expansion) are mostly financed through concessional loans from the Chinese government. Associated loan repayment flows should be moderate in size. The energy projects, however, are financed by foreign investment under contracts that involve sovereign guarantees relating to rates of return to the investors. These will generate outflows in the form of profit repatriation and fuel imports. Some savings are also expected as the input mix for the energy sector will shift from furnace oil to coal, gas and renewables. On balance, the IMF estimates that peak outflows in the order of \$3.5-\$4.5 billion will occur by FY2025 (IMF, 2017, page 37).

Fiscal and External Sector Pressures

As noted earlier, fiscal and external imbalances have widened in FY17. The fiscal deficit was higher than anticipated and above the ceiling set by the Fiscal Responsibility and Debt Limitation (FRDL) Act. Improved revenue performance can reduce fiscal pressures and risks. This will require further reducing tax exemptions, raising withholding taxes and improving tax collection at the provincial level. At present, provincial authorities are responsible for collecting taxes on property, agricultural income and services. All three have low yields. Improving revenue performance will also require strengthening tax administration through such measures as widening the scope and frequency of tax audits, using third party information and monitoring financial transactions through withholding taxes on non-filers. According to the IMF, unless these measures are implemented effectively, additional tax policy and administrative measures of around 1.5 percent of GDP may be needed to meet FY18 targets (IMF, 2017, p 14).

On the expenditure side, it is necessary to control the losses of public sector enterprises; these are cumulatively around 3.8 percent of GDP. It was recently revealed that the airline company, PIA, has alone been running losses of PKR 4 billion per year and around PKR 40 billion over the past ten years.

Improving the external position will require policy measures to enhance trade competitiveness. One of these is greater exchange rate flexibility to offset the real appreciation that has occurred in recent years. Others include measures to improve the supporting policy environment for businesses such as: introducing e-payment for transactions with government agencies (such as taxes, customs and property related transactions), establishing more one-stop shop arrangements for business permits, increasing the use of Alternative Dispute Resolution facilities and setting up a registry for secured transactions. Facilitating greater financial inclusion would also help develop a more robust Small and Medium Enterprises (SME) sector that could become a bigger part of the domestic value chain feeding exports. Finally, enhancing energy security for Pakistani industry through both higher generation and better distribution of electricity and gas would help in making Pakistani industry more competitive. This has already happened to some extent in recent years but more needs to be done. Power sector arrears were reduced in FY14-15 but were then allowed to rebuild in FY16-17. The current stock of arrears is around Rs. 374 billion (about 1.2 percent of GDP).[9] Losses due to theft and inefficiencies remain high at around 30 percent.

Prospects

The consensus at the moment is that growth in FY18 will be above the rate of 5.3 percent recorded in FY17, likely touching six percent. This is based on the prevailing economic momentum coming from foreign investment and domestic demand and the improving security and energy supply situation. Moody's recently reconfirmed its B3 rating for Pakistan in July 2017, noting short-term dynamism and the benefits of CPEC. However, several risks loom n the horizon that may affect longer-term prospects. In particular, fiscal balances will come under more pressure in the run-up to the national elections in May 2018. Combined with external account imbalances, these could well lead to exchange rate depreciation, higher inflation and lower growth after FY18. Gross public debt currently stands at 67.2 percent of GDP. Servicing this debt could become more challenging if the exchange rate weakens, interest rates rise and growth falters. Debt servicing costs are expected to amount to 7.5 percent of GDP next year as the Paris Club rescheduled payments come due. These concerns are feeding repeated stories in the media that the country may approach the IMF for a new stabilization program within a year.

Chapter

3 China-Pakistan Economic Corridor: The Global Context

China-Pakistan Economic Corridor: The Global Context

Shahid Javed Burki

Introduction

This is the second time in its 70-year history that Pakistan is participating in a large development program that involves foreign funding. The first time this happened was in the late 1960s and in most of the 1970s. It was then that the country built what are known as the Indus Water replacement works.[1] These grew out of the Indus Water Treaty Pakistan and India signed in 1965 that divided the rivers of the Indus Basin between the two countries. Three rivers in the west — the Indus, the Jhelum and the Chenab — were assigned to Pakistan while the remaining three — the Ravi, the Beas and the Sutlej — went to India. However, the canal system that provided a significant amount of irrigation to Pakistan's agricultural system was drawn from the rivers allocated to India. One way of replacing this water was to bring it via "link canals" from the western to the eastern rivers. This meant constructing two very large dams and a number of link canals. This large program was financed by a bunch of donors whose participation was overseen by the World Bank. The Bank also oversaw the implementation of the construction program.

The replacement program was an enormous success. This was the case for a number of reasons, one of which was its management by the Water and Power Development Authority (WAPDA) created a few years earlier. It was to function with a great deal of delegated authority and could draw the talent it needed by paying attractive emoluments. We believe that there are important lessons to be drawn from this experience as Pakistan embarks on another large infrastructure-building program financed by China. The China-Pakistan Economic Corridor (CPEC) is large and ambitious in scope. It will be a "game changer" as was the Indus Water program. For it to succeed, it also requires institutional arrangements similar to those made for the Indus Works. But there is one important difference. The Indus program came with most of the projects fully developed before they were launched and implemented. Also, the WAPDA did not make policies; it only oversaw the projects resulting from a major policy decision taken by Pakistan and India. The CPEC is different: it is an idea that will develop into a program in the course of development. And, it will be implemented in a rapidly changing global political and economic environment. The institutional mechanism needed to make CPEC succeed in its objectives will require policy-thinking and program implementation.

The CPEC will bring China and Pakistan even closer than they have been in developing an "all weather" relationship. Politicians from both countries seem to run out of words when they describe the nature of the relationship. They have called it higher than the highest mountains; deeper than the deepest ocean. Whichever way this relationship is described, it will change significantly once the CPEC becomes fully operational. China will provide Pakistan finance, management practices and technologies it does not have at this time but needs for sustained and inclusive development. Once the various projects included in the program have been implemented, it would change the structure of the Pakistani economy and its geographic orientation. Why and how that would happen is the question that we address in this report, the tenth to be issued by the BIPP.

The global context in which we place the CPEC goes beyond relations between China and Pakistan. It also includes Pakistan's dealings with the United States, and how it has been handling the on-going crisis in Afghanistan. We believe that President Xi Jinping launched the Belt and Road Initiative, BRI, as a response to the leadership's belief that it needed a new economic development paradigm in order not to lose the dynamism that had resulted in China becoming the world's second largest economy. The BRI also reflects China's competition with the United States. It will help Beijing to carve out its sphere of influence. In some respects, the BRI is China's Monroe Doctrine, a signal to the world's other major powers, in particular the United States, that they should not venture into the geographic zone Beijing considers to be its own.

The senior leadership in the United States now recognizes that the world has changed, with their country not able any longer to be unchallenged in its ways. On January 19, 2018, a day before Congress failed to reach agreement that would have kept the government open for business, Defense Secretary Jim Mattis spoke at the Johns Hopkins School of Advanced International Studies to lay out the latest thinking on global strategy. He said that America was switching its priority to countering Chinese and Russian military might after focusing on the fight against terrorism. According to Pentagon officials, the strategy Mattis unveiled will provide a blueprint for years to come. "We will continue to prosecute the campaign against terrorists, but great power competition — not terrorism — is now the focus of U.S. national security," Mattis explained to his audience of academics, policy analysts and students.[2]

Pakistan in a Geographically Precarious Place

These days Pakistan finds itself precariously placed. In order to deal with its geographic location, Islamabad needs to show some deft handling of its external relations. In a book published by Macmillan of New York earlier this year, I went into some considerable detail on how the world was changing rapidly. The book appeared with the title of *Rising Powers and Global Governance* and looked at the changing relative positions of the United States, China, India, Iran, Russia and the European Union.

The main theme of the book was that the realignment of the relative positions of several global and near-global powers had created a situation that could not be handled by the existing global structures. The institutions that were fashioned after the conclusion of the Second World War had lost much of their relevance. The structure then created was meant to deal with the world that then existed. The war had ended with the United States replacing the United Kingdom as the dominant economic and military power. The Soviet Union, the other victor of the global conflict, chose to stay out of the system. With it collapse in 1991, the United States was left alone to dominate the global scene while Moscow struggled to retain some influence in the global system.

The book was written in the summer of 2016, a few months before the election of Donald Trump as the United States president. Trump won the election by promising to "make America great again." This was interpreted by those who opposed him as "making America white and Christian again." Once in office the new president moved quickly and unthinkingly to dissolve several parts of the old system without putting anything new in their place. The result is global chaos, particularly in the area in which Pakistan is located. Pakistan has to be mindful of what is happening in the United States, China, India, Afghanistan, Russia and the Middle East. It neighbors four of these six political entities. They are in throes of enormous transformation and it is hard to predict which way they will go. A great deal of this change can be attributed to the arrival of Donald Trump in the White House.

America was to become great again by focusing on only its own interests. Not given to deep thought or reflection, some of what Trump did could not have been in America's long-term interest. Within days of taking office, Washington walked out of the Trans-Pacific Partnership (TPP) agreement negotiated by Barack Obama. The TPP would have created a trading system that would have given enormous advantage to American corporations. Trump also got involved on the wrong side of the Middle East equation and left the Afghan issue in the lap of the generals. And, he changed his approach to China.

Two moves by President Trump – one with respect to Afghanistan and the other relating to the Middle East – will greatly matter to Pakistan. For the former the decision concerning the number of American troops, who will operate in the country, has been left to the Defense Chief, Jim Mattis. The generals have admitted that the 16-year war is not being won. In his appearance before the Senate Armed Forces Committee, Mattis accepted that "the Taliban had a good year last year, and they're trying to have a good one this year." US military officials expressed growing concern about the war. He indicated that the course could change. The previous surge took place under Obama when he announced in a speech at the U.S. Military Academy in 2009 that he was sending 30,000 additional troops to the country. At the same time he gave a timeline for the withdrawal of the US forces. This indication of a withdrawal time-table was controversial. Many experts believed that it emboldened Taliban who began to map out their long-term strategy. While the indication is that the American strategy is still being thought-through, the idea seems to be to provide just enough American presence to help President Ashraf Ghani to keep the Taliban at bay. Over the last several weeks the insurgents have mounted daring and costly attacks in the middle of Kabul,which have shaken the Ghani government. Would the arrival of more American troops change the balance between the government and the Taliban? One answer to the question was provided by retired army Lt. Gen. David Barno who led the American war effort in Afghanistan for 19 months beginning in the fall of 2003. "I'm skeptical," he said. "I know the region and the environment and the sanctuaries they have and the amount of resilience they have. None of these things are amenable to a large number of troops being able to defeat the insurgency."

Mattis seems to accept that much more than a military approach to solving the Afghanistan is needed. "We would have to change the priorities, we would have to factor in a more regional construct."[3] And when the American authorities speak of a regional construct, they have both Pakistan and China in mind. It is not clear however what they have in mind that Pakistan and China should do to bring peace to this land destroyed by decades of war. These two as well as other Afghanistan neighbors will need to confront another reality: the arrival of the Islamic State in Afghanistan. Raqqa, the IS capital in eastern Syria, is likely to fall soon. Deprived of a physical presence, the Islamists would wander into other troubled and weakly governed areas such as Afghanistan.

China, the United States and the Thucydides Trap

China is making the BRI investment for its own reasons while not necessarily to help Pakistan and other countries to its west. Beijing is now operating in a world very different from the one in which it saw its economy takeoff. It is now the world's second largest economy, still behind the United States. But it is closing the gap. Even with a much lower rate of GDP growth than the one that resulted in increasing the size of the economy 32-fold in the quarter century after the country began to open itself to the world in the early 1980s, it will continue to catch up with the United States. For the next decade or two, the rate of increase in its national income will be twice that of the United States, and most experts believe that in the not too distant future China will become the world's largest economy.

According to Thucydides, the great Greek historian, when a rising power threatens to displace a ruling one, the most likely outcome is war. He wrote: "It was the rise of Athens and the fear that this instilled in Sparta that made war inevitable." Today, an irresistible China is on course to collide with an immovable America. Will this result in an open conflict and war? Some historians including Harvard University's Graham Allison, whose book *Destined for War* is based on the findings of a research program carried out at Harvard University, reached a relatively optimistic conclusion. The research concluded that war between the United States and rising China is not inevitable.[4] They came up with a number of prescriptions on how conflict could be avoided. But would these prescriptions become the basis of the formulation of public policy in the contending powers, the United States and China? This is a difficult question to answer given the fact that the U.S is currently governed by a maverick and unpredictable president.

But academics are not the only ones who are worried. Equally worried are some prominent diplomats including Antonio Manuel de Oliveira Guterres, currently the Secretary General of the United Nations. He was interviewed by Gillian Tett of *the Financial Times* for the newspaper's weekly "lunch conversation" that appears every Saturday. "If there was ever a time when the world needed coordinated and outspoken leadership, it is now," wrote Tett in her report on the lunch. Good leadership is needed in both, the country that is being pressed and the rising power that is challenging the status quo. To avoid possible destructive conflict will need a certain type of leadership. To identify what is requited, Guterres , in the Tett interview, recalled the words of the late Brazilian politician Tancredo Neves. "He was once asked, 'What are the 10 most important qualities for a politician?' He said he didn't know 10, only knew seven: patience, patience, patience, patience, patience, patience and patience!"[5] Patience is not an attribute Donald Trump, the current United States president, can claim to possess in great abundance.

Is Trump fit to govern a country as powerful as the United States? This question is important for the purpose of this report since we believe that the nature and scope of Pakistan's relations with China will be determined in many ways by Trump's behavior on the world stage. "Many euphemisms are deployed to describe President Trump's state of mind — erratic, unpredictable, temperamentally unfit — but this book takes a riskier stance," wrote *The Washington Post's* book reviewer Carlos Lozada. He was referring to a collection of essays edited by Bandy X. Lee. The book has contributions by more than two dozen psychoanalysts and psychiatrics.[6] They found Trump's perceived traits consistent with symptoms of narcissistic personality disorder, sociopath, and other maladies. "Anyone as mentally unstable as Mr. Trump simply should not be entrusted with the life-and-death powers of the presidency," wrote Judith Lewis Herman of Harvard Medical School and Bandy X. Lee of the Yale School of Medicine in the co-edited book's prologue. Trump's state of mind and his behavior in office is relevant for the story we tell in this report. As we discuss in the section on Islamabad's dealings with Washington, Pakistan has already been deeply affected by some of the decisions taken by the United States president. The way his administration is dealing with the worsening situation in Afghanistan has pushed Pakistan further into the extended arms of Beijing. However, before getting to that part of the story, I will briefly discuss how the new American president views the Asian continent.

Trump's Asia Visit of November 2017

On November 3, 2017, Donald Trump left for a 12-day visit to Asia. It took him to Japan, South Korea, China, Vietnam and the Philippines in that order. South Asia was to be left off the itinerary since the Afghanistan-Pakistan policy announced from a military base on August 21 had already dealt with the region. In Japan and China, Trump met with Prime Minister Shinzo Abe and President Xi Jinping. Both leaders had gained stature in their own countries, the former by winning a lob-sided victory in the national election and the latter by presiding over the Congress of the Communist Party that meets in Beijing every five years. The meeting that ended on October 24 gave new strength to an already strong leader; the "Jinping thought" was included in the party's constitution that gave him the stature occupied by such greats as Mao Zedong and Deng Xiaoping. The added phrase to the party's constitution was somewhat wordy — "Xi Jinping Thought for the New Era of Socialism With Chinese Special Characteristics" — but it was significant that it included the words "new era," which Xi used repeatedly in the Congress's deliberations.

President Xi has divided Chinese history since 1949 into two parts — the three decades after Mao seized power in a revolution that established a unified People's Republic ending nearly a civil war and foreign invasions and the three decades after Deng took power in 1978 and focused on developing the Chinese economy. As one analyst wrote, "in his report to the congress Mr. Xi suggested that if Mao made China independent, and Deng made it prosperous, he would make it strong again — propelling the country into its 'new era'."[7] Since the BRI, of which the CPEC is one component is the signature policy move by President Xi, his increasing control over the Chinese state will have considerable significance for this program. It will be an important part of the economic program that will be managed by Beijing.

It was not clear what the American leader wished to achieve from the Asia trip. He seemed not to have prepared himself well for the visit. As the news magazine. The Economist put it on the eve of President Trump's departure, "America's president is descending on Asia without an agenda."[8] But the Asian leaders were clear on what they wanted. They were interested in an open trading system and in containing North Korea's nuclear ambitions without provoking the Pyongyang leadership by adopting the aggressive tone the American president had used in addressing the North Korean problem. In Seoul the main item on the agenda was the development of North Korea's nuclear weapons program that showed no sign of slowing down in spite of the threats lobbed at the country by Trump. Japan tried and succeeded to keep alive the Trans-Pacific Partnership agreement that Trump had attempted to scuttle by walking out of it. The TPP members met without the United States shortly before Trump arrived in Tokyo. The revised program was dubbed the TPP- Minus One.

It was the visit to Beijing that ultimately would be really consequential for the United States and its relations with the Asian Continent. Did Trump avoid heading towards the Thucydides trap by visiting Beijing? The question at this stage does not have a clear answer. He lavished praise on the Chinese leader in front of the press and in the presence of Xi. A few days later, in a speech at Da Nang in Vietnam when both Trump and Xi addressed the heads of state of several Asian nations represented in the Asia Pacific Economic Cooperation (APEC), he took a stance completely opposite to that adopted by the Chinese president. While Xi talked about the need for a world order in which individual nations subjected their national interests in favor of working for the global good, Trump once again talked about "America First" as the defining concept of his approach in international affairs. "We are not going to let the United States be taken advantage of anymore. I am always going to pout America first that same way that I expect all of you in this room to put your countries first. The United States is prepared to work with each of the leaders in this room today to achieve mutually beneficially commerce that is in the interest of both your countries and mine. This is the message I want to deliver here." Xi advanced "globalization" as a way of managing the world; Trump was clearly in favor of bilateralism.

While Trump may have gone to Asia without much preparation and without a clear view of what he wished to accomplish, some foreign policy experts believe that the trip may prove to be historic but probably not in the way the president intended. According to David Ignatius writing for *The Washington Post*, the Asia visit "may signal a U.S. accommodation to rising Chinese power, plus a desire to mend fences with a belligerent Russia — with few evident security gains for the United States. If the 1945 Yalta summit marked U.S. acceptance of the Soviet Union's hegemony in Eastern Europe, this trip seemed to validate China's arrival as a Pacific power. As Xi put it to Trump, "The Pacific Ocean is big enough to accommodate both China and the United States."[9]

This surrender of the United States position in the Pacific did not please some veteran American political leaders. The critics included John McCain, the Republican Senator from Arizona and the chairman of the Senate Armed Services Committee. He sent a letter to Defense Secretary Jim Mattis with a strong message. "We now confront the most complex security environment in 70 years," he wrote. "Misplaced priorities and acquisition failures have left us without critical defense capabilities to counter increasingly advanced near-peer competitors....We no longer enjoy the wide margins of power we once had over competitors and adversaries. We cannot do everything we want everywhere. We must choose. We must prioritize." The McCain letter provides a pertinent background for examining how Pakistan's relations with the United States are evolving.

It is not clear whether the Belt and Road Initiative came up for discussion in Beijing or in the other capitals visited by the American president. As more information was becoming available, it was clear that the BRI would decisively improve China's presence not only in western Asia but eventually also in Europe and Africa. This will occur at the expense of the United States. By making available this space for China and by focusing on "America First" as the guiding force for designing the approach to the world, Washington was moving back behind a wall.

Pakistan and the United States

Until about Pakistan's 70th birthday, Islamabad looked to Washington for support. Help came when the United States was interested in Pakistan for its own strategic reasons. Suddenly this changed when Donald Trump became the US president. Even before the current president took up residence in the White House, Pakistan's relations with the United States were complex. There were many ups and downs; relations cooled and warmed depending mostly on Washington's strategic needs. On three occasions, the United States walked away, leaving Pakistan to its own devices. This happened in 1965 when Pakistan fought one of its many wars with India; in 1988, when the Soviet Union pulled out of Afghanistan and Pakistan was not needed any longer as a partner in the West's struggle against the Communist power in Asia; and in 1998, when Pakistan defied the US pressure not to test nuclear bombs and indicated its intention to develop a large arsenal of nuclear weapons along with medium-range missiles that could deliver them.

The United States was back in September 2001 when it needed Islamabad's support to punish the Taliban regime in Kabul. The Taliban had not only welcomed Osama bin Laden, a renegade Saudi prince, to establish a base in their country for his organization, the Al-Qaeda, it also looked the other way when Osama's supporters launched devastating terrorist attacks on the United States. Pakistan provided its airspace for the American warplanes and missiles to fly to Afghanistan. Islamabad also made available its road network so that the Americans could ferry their troops and equipment to Afghanistan. But Washington felt Pakistan was not doing enough. "Doing enough" meant clearing the Pakistani territory of extremists of all strips some of whom were able to use the sanctuaries in Pakistan's tribal belt to launch attacks on Afghanistan. While some of this was done by the country's military launching operations such Zarb-i-Azb in North Waziristan, the United States wanted much more.

If Islamabad failed, America threatened not only to leave Pakistan again but to punish it as well. The forms of punishment were hinted at but were not spelt out in detail for a while. Nicki Haley, the United States ambassador to the United Nations and a person of Indian descent, suggested that India — her country of origin — should keep an eye on Pakistan. Washington seemed to be tilting towards New Delhi. The United States seemed to be working towards another departure from Pakistan — the fourth since Pakistan was born and became an independent state.

Washington's earlier departures worked since they were the result of what the Americans regarded as "missions accomplished." In the late 1960s, Washington saw that it had succeeded in blocking the advance of Communism in Asia. In the late 1980s, it was happy with the humiliation suffered by Moscow in its Afghanistan adventure. In fact, it was the defeat of the Soviet Union occupying forces at the hands of the Pakistan and U.S-aided freedom fighters (the mujahideen) that contributed to the collapse of the Soviet Union in 1991. In the late 1990s, the United States was taking what it believed was a principled position on the spread of nuclear weapons. This time around in 2017-18 — the occasion of the fourth American exit from Pakistan — it appeared that the rift between the two countries had deepened to the point that the Americans would stay out for a very long time. Also, it was very unlikely that the new Afghan policy announced by President Trump on August 21, 2017 would work and that that country would be pulled together again and governed effectively from Kabul.

It is clear from his many pronouncements that President Donald Trump does not have much love for Pakistan. The latest evidence of this came on January 4, three days after the American leader had sent a tweet threatening Islamabad with dire consequences if it did not line behind Washington and fully support America's redefined mission in Afghanistan. "The United States has foolishly given Pakistan more than $33 billion in aid over the last 15 years," he wrote, "and they have given us nothing but lies and deceit, thinking of our leaders as fools. They gave safe haven to the terrorists we hunt in Afghanistan, with little help. No more!"

This threat was translated into action with the announcement by the State and Defense Departments that nearly all security aid to Pakistan was being frozen. Administration officials emphasized that the freeze was temporary and could be lifted if Islamabad could satisfy Washington that it had changed its behavior. “It is hard to argue that the status quo is working, so we are looking at changing it to advance our security objectives,” said State Department’s director of policy planning. Heather Nauert, the department’s spokeswoman, said the administration was still working out the process of dollar amounts that would be frozen. The suspension included about $1.1 billion in Coalition Support Fund (CSF), which the Pentagon provides to help Pakistan meet the costs of counterterrorism operations in Pakistan. Suspension of the CSF payments could lead to a disruption of the flow of American equipment into Afghanistan. This would affect the war against the dissidents operating in the country. Pakistan’s military preparedness and its ability to fight terrorists working in the country would also be compromised. Under the freeze, the United States will not deliver military equipment to the country. It had already held up $255 million in State Department military financing. “Pakistan has the ability to get this money back in the future, but they have to take decisive action,” continued Ms. Nauert.

The reaction from Islamabad was swift. Khawaja Muhammad Asif, Pakistan’s foreign minister, said that there was a need to revisit the nature of his country’s relations with the United States. In an interview with a local news network, he said the United States was “acting like neither an ally nor a friend.” It was obvious to many with good knowledge of Afghanistan and Pakistan that these moves could be costly for the American Afghan enterprise. To take one example of an informed reaction, Richard G. Olson, a former special representative for Afghanistan and Pakistan during the Obama administration, noted that the American military effort in Afghanistan was heavily reliant on Pakistan’s consent. Almost every military flight into Afghanistan, including those of attack aircraft, goes through Pakistani airspace. Most supplies travel along Pakistani roads and rails. Our choices in Afghanistan are already difficult, but if you want to make them even more difficult, continue to taunt the Pakistanis, Pakistanis could effectively shut down the war,” he told *The New York Times*.[10]

The same sentiment was expressed by *The New York Times* in its editorial: “But President Trump cannot afford to walk away from Pakistan, which has often provided vital intelligence and has the world’s fastest growing nuclear arsenal. Whether Pakistan will cooperate after the aid squeeze remains to be seen.” The newspaper advocated diplomacy rather than arm-twisting or the use of abusive language to work with a country that could provide valuable assistance or become a major obstacle for the United States to achieve its stated objectives. What is required are “quiet negotiations, not shouting.”[11]

With the CPEC initiative taking form and with the Americans pulling back from Pakistan, it is clear that a fundamental reconfiguration has begun to take shape in Asia, in particular in South Asia. By moving closer to New Delhi, Washington was deepening the existing divide in the Sub-Continent. Trump and his administration were going out of the way to show their closeness with India. This was in part because of the business interests the family had in that country. Annie Gowen of *The Washington Post* reported on the Trump family’s business dealing in India. “Along with the Trump Towers Delhi NCR (National Capital Region) in Gurgaon, construction on which is expected to begin in three to four months and finish in 2023, the projects include two residential towers in the low-key city of Pune, a tower with a glittering gold facade in Mumbai, a planned office tower in Gurgaon and another residential project in the eastern city of Kolkata.” The family, in doing all this work in India, was not inhibited in selling the Trump name. One of the developers associated with the Trump company had announced that Donald Trump Jr. will host the first hundred buyers in the United States. He claimed that he had racked up $23 million in sales of more than 20 residential units on the first day.[12]

Pakistan and China

For both China and Pakistan, making the CPEC a central component of the BRI makes a great deal of sense given the close relations between the two countries that have lasted for more than half a century. Pakistan's current difficult relations with the United States will undoubtedly draw the two states even closer. Islamabad has maintained a steady relationship with Beijing. There were no ups and downs in this relationship as was the case with the United States. That said, the reason why the two countries stayed steady on their course had a great deal to do with their own strategic compulsions.

Although Pakistan initially reached out to Washington — Liaquat Ali Khan, the country's first prime minister, chose to go to Washington rather than to Moscow upon being invited by both — to obtain badly needed financial and military support. Capital was needed to quicken the pace of economic development. Military assistance was required to balance India's growing strength with which Pakistan had already fought a war in 1948 over the state of Jammu and Kashmir. However, it soon became clear to the Pakistani leadership that the United States was less inclined to pay much heed to Pakistan's needs. It was much more interested in developing its own interests. This approach found clear expression in Donald Trump's slogan, "America First." Beijing on the other hand was much more interested in basing its contacts with Islamabad with the clear intention of not allowing any surprises to affect the relationship. As Henry Kissinger emphasized in his work on China, the Chinese put great store on historical continuity. For them history matters a great deal.[13] Kissinger had based this conclusion by closely watching how the Chinese leadership made decisions.

China's attraction for Pakistan was based on a number of interacting considerations. Of the country's early leaders, it was Zulfikar Ali Bhutto who seemed to have realized that Pakistan needed to balance its approach for obtaining outside support. He served Field Marshal Ayub Khan, Pakistan's first military president, initially as Commerce Minister and then as Foreign Minister. In both positions, he was able to influence the orientation of Pakistan's foreign policy. The overall approach was to dilute America's presence in Pakistan. Ayub Khan used the title of his autobiography— he titled it *Friends Not Masters* — to indicate that his country's relationship with the United States was not of a servant following his master. It was based on friendship and mutual respect.[14] Bhutto contested this view in his book titled *The Myth of Independence*.[15]

While he was a minister in the Ayub Khan cabinet, Bhutto reached out to both the Soviet Union and China. Moscow had some interest, but it was clearly inclined to work with New Delhi. Jawaharlal Nehru, the Indian prime minister, was the founding member of the Non-Aligned Movement (NAM) that, despite its nomenclature, tilted towards Moscow rather than towards Washington. The NAM was a counter-point to the United States' near obsession with controlling the spread of Communism into the parts of the Asian continent not affected by that ideology. That stance obviously appealed to the Soviet leadership.

During the first part of President Ayub Khan's eleven-year tenure, Pakistan remained closely aligned with the United States. That did not prevent Minister Bhutto to reach out to Moscow for help. The Soviet leadership was receptive to shaking Bhutto's extended hand. They, for instance, agreed to finance and construct a steel mill near Karachi. At that time steel manufacture had become a symbol of economic progress. But it was Bhutto's outreach to China that had long-lasting consequences for Pakistan. China responded eagerly to Bhutto's overtures. Pakistan was a neighbor that could help the country to breakout of the American imposed isolation. It helped China to get linked with the world. Its efforts were both symbolic and substantive. The symbol was the inauguration of flights to China from Pakistan by the Pakistan International Airlines, PIA. Of real substance, however, was the help Pakistan provided in building a bridge between China and the United States. The secret and dramatic visit to Beijing in July 1971 by National Security Advisor Henry Kissinger was facilitated by Pakistan. General Yahya Khan, the country's military president took personal interest in organizing the Kissinger visit. The Kissinger initiative set the stage for the visit the following year by President Richard Nixon to China and the normalization of relations between the two countries. Up until then Washington had not recognized the Communist regime in Beijing as China's legitimate government, treating Taiwan as the National Republic of China. Following Nixon's meeting with Mao Zedong, China's Supreme leader, Washington adopted the "One China policy" which effectively treated Taiwan not as an independent country but as a renegade province of China. The "one China policy" was embedded in the Shanghai Declaration issued by China and the United States at the conclusion of the Nixon visit.

China paid off Pakistan well in helping Beijing to reach that point in its relationship with Washington. However, it exercised caution when Pakistan would have wanted help from Beijing in its quarrels with India. Nixon would have liked China to help Pakistan when India provided military support to the Mukti Bahini, the separatist forces operating in East Pakistan with the aim of detaching the province from West Pakistan and making it an independent country. The story is well told by Andrew Small in his book, *The China-Pakistan Axis*.[16] But Beijing demurred, and Nixon was disappointed. The Chinese had correctly read the situation and had concluded that to save Pakistan from disintegrating would have required it to get more closely involved in the affairs of South Asia than was good for its longer-term interests in the Sub-Continent.

Pakistan army's defeat in East Pakistan brought Bhutto back to power in December 1971, this time first as president at the head of a military government and subsequently as prime minister. The first was an unusual arrangement for a civilian politician, and Bhutto knew it could not be sustained over any length of time. He worked hard to provide the country with a constitutional arrangement that would bring civilian control over the country. A new constitution was written and once adopted in the summer of 1973, Bhutto stepped down and became prime minister. The stage was thus set for him to push his China policy.

While China may not have saved Pakistan in East Pakistan, it saved it in a different way. It gave valuable assistance to Islamabad for it to develop its nuclear arsenal. The form China's help took is described at some length in *Eating Grass*, a book by Feroze Khan, who had worked in the military unit that kept a close watch on Pakistan's nuclear weapon effort.[17] The title of the book draws on the statement by Prime Minister Bhutto when, in 1974, India exploded a nuclear device. Bhutto declared that Pakistan will match India's program even if that meant the country would have to "eat grass." Pakistan's perennial resource shortage meant that sacrifices will have to be made to match India. A quarter century later by testing six bombs, following India's test of five weapons, Pakistan delivered on Bhutto's promise. There are many in Pakistan, including some serious scholars, who believe that the nuclear balance of power in the South Asian Sub-Continent has prevented the two countries from going to war again.

Now once again China is reaching out to the world but this time in a different way. Compared to its opening to the West, after the visit by President Richard Nixon in 1972, China's "new opening" has a different geographic orientation. Then Pakistan played an important role. It is once again involved as Beijing is opening itself to the West in a different way. It has put its faith in land-based commerce to provide a different set of stimuli to its economy. What the World Bank in a 1993 study called the "East Asian miracle" model has run its course.[18] China is no longer a low-wage economy and there are no longer rapidly growing markets in Europe and the United States for its low-cost manufactures. The Chinese wages have increased several-fold since it began to develop its economy. There are also other compulsions that the leaders in Beijing must take into consideration to move forward their economy. Making the economy geographically inclusive is one of the objectives being pursued by the country's current leadership.

China can no longer continue to develop the narrow strip of land that stretches from the northern port of Dalian to Guangzhou in the south. It must diversify its economy and spread development to the provinces in the country's mid-west and the west. And for that it needs Pakistan's help — an economic corridor that connects it to the sea. This is where the CPEC enters the picture. The corridor is an important component of the BRI, a cluster of projects involving the building of roads, railways, ports, oil and gas pipelines, fiber-optic cables that will link the Chinese economy with the countries to its west.

The new development paradigm China is adopting differs from the "miracle economy" approach in several key aspects. China will look to the development of domestic demand to find opportunities for the productive sectors of its economy. Rapid economic growth in the past three decades has brought in new consumers into its own markets. Their demand is not much different from what the western buyers of Chinese manufactured goods wanted. But these needs will not be satisfied by China's own industry. The Chinese will need to tap cheaper labor supplies in its neighborhood. Pakistan, with a large and growing population, could be an important source of supply of low-cost manufactures. The CPEC is being designed not only to bring in industrial inputs such as minerals China's large economy needs, it will also import cheap manufactures from Pakistan. China, it appears, is looking at the possibility of buying some low-cost manufacturing enterprises from Pakistani owners and link them with its own entities. This is the reason why several industrial estates are being located along with the road network covered by the CPEC.

China is also mindful of the mineral and energy riches available in the vast landmass that makes up the five countries of Central Asia, Afghanistan and western Pakistan. It has plans to exploit and develop these resources for use by its industry. A Pentagon study released a few years ago estimated Afghanistan's mineral wealth at one trillion dollars. Afghanistan could become a major supplier of lithium, a metal essential for the manufacture of electronic products. The Chinese have already begun to exploit some of this untapped resource. Large investments have already begun to be made to reach the iron ore available in a resource located not too far from Kabul. Once the metal is extracted it will need to be transported and the least costly way of doing this is by road. Soon Pakistanis will see huge trucks carrying iron ore on the new road system that will connect the country with China.

The work associated with the BRI is progressing steadily in Pakistan. Results will become visible in the next few years as China's initiative knits together the countries of Central and West Asia. While the Donald Trump approach to South Asia would result in diminishing his country's presence in the Sub-Continent, that of China would increase significantly. With the BRI, China would bring together the countries along its western borders into an integrated economic structure.

The BRI is a large program. It has been defined in very broad terms. Details will get filled in as the work on it progresses. We devote a lot of space in this report to discuss the BRI and CPEC. Not unlike other ambitious initiatives, it too has its detractors. Both the United States and India oppose the program but for different reasons. Once the BRI network of roads, railways and ports becomes functional, it will bring Central Asia, Afghanistan and Pakistan closer with China. This will have the consequence of reducing the influence of the United States in the area. The fact that this time Pakistan seems less concerned about what can be called "America's fourth exit" from the country has a great deal to do with the BRI and within it, the CPEC. India also has reasons for opposing the Chinese initiative. An Indian participant in an international seminar I recently attended put it: "the BRI is an effort to isolate my country by locking it in a system it cannot reach."

Both the United States and China have worries about the impact on their countries of those from the Islamic faith to use violence, often in extreme forms, to achieve their objectives. China's problems are more real than those of the United States. It is dealing with an insurgency in Xinjiang that has Uighur speaking people of Turkish origin in near majority. Some of the groups of this ethnicity have the declared aim of seceding from China. The United States has no such problem. Before Trump arrived on the scene, some four to six million Muslims living in the country were comfortable with their situation. But Trump is making a difference. Even before he won the presidency, he had made known his views about what he called "Islamic extremism." Barack Obama, Trump's predecessor, had avoided using the term in his public pronouncements, arguing that extremism is not only Islamic. Equating the two in one phrase will only make more people of the Islamic faith suspicious of the intentions of the United States policymakers.

After assuming office, one of the first acts of President Donald Trump was to ban entry into the United States of the citizens of seven Muslim majority countries. The president's order was challenged in the courts. It was struck down as unconstitutional by a couple of state appellate courts. But Trump was not deterred, and another order was issued that is working its way through the US legal system and will ultimately be resolved by the Supreme Court.

The Chinese approach is to localize the problem it faces rather than give it a world-wide dimension. While keeping the Uighur population under tight control and supervision, the authorities are also attempting to educate the dissidents. According to one account, "thousands have been sent to unmarked detention centers over the past year, usually for two to three months at a time. In the centers they are taught Communist party doctrine and persuaded to forego their ethnic and religious identities."[19] Xinjiang is not the only place where some extremists are operating against the states. There are movements in Central Asia as well. "Concerns about religious extremism in Kazakhstan, to Xinjiang's north, have led authorities to crack down on Kazakhs this year, particularly 'oralmen,' Chinese citizens who hold Kazakh green cards that allow to travel and live in the central Asian state."[20]

The BRI program has both economic and geopolitical contexts. Once the program has become functional, it will create a zone of China-dominated economic activity that will bring Beijing not only to Central and West Asia but also to the doorstep of Europe. These moves concern Washington. The

United States has begun to talk about challenging the Chinese initiative by creating what is called the Indo-Pacific alliance. The alliance assigns an important spot to India. But it is unlikely that the United States would succeed in building up India as a counterforce to the growing strength of China. Rex Tillerson, the United States Secretary of State, described what his government was trying to achieve in Asia as Donald Trump set out for the Asian trip in early November. He proposed a "free and open Indo-Pacific" area in which Australia, India, Japan and even Vietnam will help counter China's maritime expansion. But the idea is bankrupt if America is opposed to free and open trade. As *The Economist* wrote in a report on Trump's Asia visit, "an administration more clear-eyed about what is at stake for America would have taken more seriously China's belt-and-road initiative, linking Asia by land and sea to the Middle East and beyond."

Bringing Technological Development into the CPEC

Initially, China-Pakistan Economic Corridor initiative will focus on two sectors: energy and highways. The bulk of the funds that are coming in are committed to solving Pakistan's energy problem. Energy shortage has crippled the economy and has put a lid on the rate of future growth. It is wise to address this problem even if it means using some of Pakistan's abundant coal reserves. The impact of this focused investment will be immediate. But there are other contemplated investments that will have long-term benefits.

Work has also begun on improving the handling capacity of the port of Gwadar and on building a network of highways that will fan out from it to the country's interior. The roads will come together into one high-altitude highway that will cross into China at Khunjerab, a pass in the Karakoram mountain range. The Karakoram Highway was built decades ago by Pakistan and China working together. The CPEC will bring about major improvements in both the highway's alignment as well as its handling capacity so that heavy traffic can be carried by it.

Developing Pakistan's agriculture sector has also been mentioned as an area of priority for CPEC. The idea behind this is to export agricultural products to China since much of the land in the areas that border Pakistan is not productive. It is a combination of mountains and deserts. China plans to move a large number of people from the heavily populated east to the sparsely occupied west. This migration has already begun. Demand for food and other agricultural products will increase. The intention is to meet some of this from imports from Pakistan.

How many jobs will come to Pakistan as a result of the CPEC? There is an impression in the country that the Chinese entities working on various projects are bringing their own workers. Not many jobs are being created in Pakistan. This is a common Chinese practice. I was once taken to see the work the Chinese were doing in Tanzania, building a railway line connecting Dares Salam, the country's capital, with Mombasa on the coast. There were camps along the way in which workers lived. All of them were Chinese. That is not the case with the Chinese financed projects in Pakistan. According to Zhao Lijian, an official in the Chinese embassy in Islamabad, more than 60,000 Pakistanis are working in different China-financed and China-managed projects in the country.

However, one area where China is making impressive strides is not explicitly mentioned in the CPEC program. This is technology. New technologies embedded in the projects China will be carrying out in Pakistan will certainly help, but it would be prudent for Pakistan to ask for explicit Chinese assistance in this area. In this context, it may be appropriate to appreciate the strides the Chinese have made in developing several technologies.

The United States National Science Foundation and the National Science Board have released their biennial report. It is a voluminous document titled *Science and Engineering Indicators*.[21] While the report has a great deal of data on technological trends, not only in the United States but also in other countries, it notably places focus on developments in China. The country is now the second-largest Research and Development (R&D) spender in the world, accounting for 21 percent of the total of nearly $2 trillion. The United States with 26 percent ranks first. What is particularly impressive is the rate of increase: R&D outlays in China grew at the rate of 18 percent a year between 2000 and 2015 — more than four times faster than the United States rate of four percent. China will soon become the largest spender in the world.

This is one of the findings that should be of interest to policymakers in Pakistan. The country needs to train as many people from its rapidly growing population as it can, using both domestic and foreign institutions. The United States has been the favored destination for the Pakistani youth, but with growing anti-immigration and anti-Muslim sentiments in the country and a rapid deterioration in relations between the two countries, the U.S. educational sector may no longer be welcoming for Pakistanis. China may be an attractive alternative. China has dramatically expanded its technical workforce. From 2000 to 2014, the number of science and engineering graduates went from 359,000 to 1.65 million, almost a five-fold increase. It is now turning out more trained people than the United States, which saw an increase from 483,000 to 742,000 in the same period.

This increase in numbers has resulted in an impressive growth in technical output. There has been an explosion of published technical papers by Chinese scholars. Since the government is heavily involved in selecting the areas of concentration, the country has made impressive strides in artificial intelligence, telecommunications, robotics, electric cars and renewable energy. Some of these could be selected by Pakistan as areas of its own concentration. To begin with, China's help should be sought in increasing institutional capacity to train the youth in artificial intelligence, robotics, renewable energy and biotechnology. This capacity should be developed in both public and private sectors.

In developing this human resource, Pakistan's policymakers should focus on meeting domestic demand as well as catering to the needs of the human-resource-poor countries in Europe and the United States. To quote from the above-cited report, "industries like computing, robotics, and biotechnology are pillars of the U.S. economic competitiveness, sustaining and creating millions of high paying jobs and high-value exports. The loss of global leadership in these future drivers of growth would weaken the American economy. America does not have the human resource needed to maintain a position in these important areas". In the United States, its bias against immigration notwithstanding, there is a move to overhaul immigration to favor high-skilled newcomers. Pakistan could contribute to meeting this deficit.

Pakistan's Afghanistan Nightmare and the BRI

In reflecting on its future, the Kabul leadership seems not to have carefully looked at the world map. It seems not to be even aware of its immediate neighborhood. There are developments taking place around its borders that could completely isolate the country or, conversely, these developments could bring Afghanistan into the world and into the twenty first century. The most important of these is the Chinese sponsored program of connectivity, the BRI.

As already discussed, the BRI was launched by President Xi Jinping in a speech given in 2013 while on a visit to the Central Asian state of Kazakhstan. Two years later, President Xi arrived in Islamabad, and Pakistan and China agreed to implementing a development program that was to be called the China-Pakistan Economic Corridor, CPEC. This program will bring in at least $50-60 billion worth of Chinese investments into Pakistan over the next decade and a half. The program is not yet fully developed and could grow in size beyond the investment amounts already indicated. It could also be enlarged in scope. While the initial focus will be on increasing power generation in order to relieve Pakistan's grave energy shortage, ultimately it is the development of the communication sector that will bring about real change. Eventually, Pakistan will become an important component of a network of highways, railways, oil and gas pipelines and fiber optics cables that will connect China with the world beyond its western border.

For three reasons Afghanistan was not initially included as a component in this large, trillion dollar endeavor. The first is Kabul's inability to govern all parts of the country. Afghanistan was never a centralized state, but the central authority is now weaker than ever before. Almost half of the country's territory is controlled by the Taliban. The Islamic State, having been mostly dislodged from Iraq and Syria, is now looking at Afghanistan to revive its political fortunes. It has developed a base in the southeastern province of Nanagarhar from which it has begun destructive operations. Second, Kabul has opted to rely on the United States for bringing peace to the long war-torn country. President Donald Trump has reversed the position taken by Barack Obama, his predecessor in the White House. Obama had set a time limit to his country's military presence in Afghanistan. Trump has signaled his intention to stay on as long as the Taliban and other extremists are not beaten. This may mean indefinitely. The new Afghan policy, announced by the American president on August 21, 2017, will only bring more war to the already war-torn nation. Third, Afghanistan is not making a serious effort to work with Pakistan. In fact, the government headed by Ashraf Ghani finds it convenient to blame Pakistan for its problems.

This is also the line adopted by the Trump administration. On October 24, Secretary of State Rex W. Tillerson made a short stop in Islamabad on his way to New Delhi. In the few hours he spent in the Pakistani capital, he scolded the country's leadership. He was reported to have told the Pakistani policymakers: "Stop funding or providing shelter to terrorist groups. Now." According to one account: "It is a message the United States has been giving the Pakistanis in various forms since the September 11 attacks, and it is one the Pakistanis have by turns harkened to, bristled at and shrugged off — sometimes in the same meeting — for yeas." Washington's policy community also shows exasperation with Pakistan. "What do you do when your allies are part of the problem?" asks Daniel L. Byman, a counter-terrorism expert at Georgetown University. "The desire to turn our backs on these people is there, but then you worry that terrorists will have more operational freedom and it will cost you more in the long run."

Rather than participate in scolding Pakistan for not helping to bring peace to their country, the Afghan leadership should take a good look at the way their neighborhood is changing. The change underway involves China. Kabul should look at what the Chinese are doing to the border they share with Kazakhstan to draw some lessons of how they could benefit from China's involvement in their country. What promises to be a bustling center of international commerce is going up on the Chinese side of the border with Kazakhstan at a place near Khorgos. An entirely new town Nurkent is being built a few miles inside the Chinese border, a few miles from Khorgos. The under-development town currently has only 1200 residents, but there are plans to expand it to accommodate more than 100,000 people. This barren wilderness close to the border with China stands near the Eurasian Pole of Inaccessibility, meaning that nowhere on the landmass of Europe and Asia is more distant from the sea. The long railway being built to connect this city-in-the-making will carry Chinese merchandise to Europe while bringing into China the products of Central Asia including the region's minerals.

Kazakhstan's border area with China was a sealed military zone during the Cold War, when the armies of China and the Soviet Union fought briefly in 1969. After the breakup of the Soviet Union in 1991, the Kazakhs distanced themselves from the Russians. Among the steps taken by Nursultan A. Nazarbayev, the country's president for 27 years, was to break an export pipeline monopoly held by Transneft, Russia's state-owned pipeline company. A program of this size that President Xi Jinping has called as the "project of the century" can't be implemented in a political vacuum. On paper, Russia is on board with President Xi's BRI program but Vladimir Putin, the country's president, put up a serious obstacle when in retaliation to Western sanctions over its annexation of Crimea, it banned the import to and even transit through Russia of many European goods, particularly food. But the Russian president relented and ultimately gave a big boost to the BRI by pushing to establish the Eurasian Economic Union, a Russian answer to the European Union. He would like to see the EEU linked with the BRI. Starting in 2015, Moscow has allowed cargo trains from Kazakhstan to pass into Russia without laborious customs inspections.[22]

To Afghanistan's south, work has already begun on a system of highways that begins in Gwadar, the deep sea port on Pakistan's Baluchistan coast, fans out in three different directions and converges before reaching the border with China. The system will thus connect Gwadar with Kashghar, the old Central Asian town in China's Xinjiang Autonomous Region. What is missing in these plans are north-south links that should run through Afghanistan. If that were to happen, Afghanistan could become one of the main arteries of commerce than a place that breeds extremists and terrorists. While that could happen, a prolonged struggle for controlling the country could isolate Afghanistan. Once again a look at the map would help Kabul's policymakers.

The BRI plans could include eventually a road that in the east would connect Pakistan with Khorgos, bypassing Afghanistan. In the west, a road could link Gwadar in Pakistan with the China-Kazakhstan corridor, crossing Turkmenistan and Uzbekistan. With these projects, Afghanistan would be left out of the economic plans that are being drawn up for developing Central and West Asia. For Afghanistan to be included, Kabul would need to focus on nation-building involving all segments of the population and all parts of the country. This is the direction the leaders of Afghanistan need to take rather than continue to indulge in a blame-game directed at Pakistan.

Afghanistan has been Islamabad's nightmare ever since Pakistan's birth 70 years ago. The nightmare needs to end and that would need changes in three policy areas: for Afghanistan to take much more responsibility for what is happening in the country; two, for Pakistan to undertake some honest discourse with the Afghan leadership based on a better understanding of how cooperation could bring benefits to the two countries; three, for the two countries to partner with other nations in the region that have a strong interest in the Afghanistan-Pakistan area. I, along with two other fellow researchers at the Institute of South Asian Studies, told the Afghanistan-Pakistan story in a book published in 2014.[23] In it we proposed the establishment of a multi-country group made up of Afghanistan's immediate neighbors along with India, Turkey and the United States. This group could be assigned the responsibility to steer Afghanistan out of its current difficulties and also to help it develop a representative political system.

Those who are in charge of making the Afghan and Pakistan policies in Washington have background in the military. They were involved in some manner or other with the long war in Afghanistan. Retired General John Kelly, appointed by President Trump to the important position of the White House Chief of Staff, is one of the policymakers. He lost his son when he stepped on an improvised explosive device (IED), which was believed to have been made in a factory in Pakistan's North Waziristan. Out of this personal tragedy has grown the strong belief that Pakistan needs to do much more to clear the border areas of all Islamic groups. Not only that, Pakistan is required to move against the non-state groups active in other parts of the country. President Trump is said to have little knowledge of Afghanistan and Pakistan. The result is the militarization of the making of foreign policy affecting this part of the world. For obvious reasons, military leaders believe that force works better than diplomatic engagement.

The policy as laid down by President Trump in his August 21, 2017 speech has three features, none of them totally new. The slightly strengthened American force in the country will not be engaged in fighting the Taliban insurgents. They will train and advise the Afghan force that will be rebuilt and significantly increased in size. There are reports from the field that it is proving difficult to build a credible Afghan force. According to Najim Rahim and Mujib Mashal writing for *The New York Times*, while the exact data on Afghan forces has been classified by both the Afghan government and the United States, officials from some provinces report that recruitment is down by as much as 50 percent. The Taliban have been successful in dissuading young men from joining the army. "The drop in recruitment is a major setback to a force that is suffering from drastic losses of men and territory," they write. "Some of the units struggle so much that they had to be entirely rebuilt. The fighting has also laid bare the leadership woes of the Afghan forces, with many officers proving corrupt or inadequate to the new ways of fighting."[24]

The militarization of the United States' policy towards Afghanistan is changing the nature of the conflict in that country. When Barack Obama left office, there were 8,500 American troops in Afghanistan. They were stationed away from the areas of active conflict, thus leaving the fighting to be done by the Afghans. The Trump-endorsed plan has already increased the number to 15,000, and there are reports that another one thousand may be dispatched. There are plans to push military advisory teams to the front lines that, undoubtedly, will result in American casualties. A senior U.S. military official told *The Washington Post* that the plan is to send the Army's first Security Force Assistance Brigade to Afghanistan. This is a relatively new and untested concept. The brigade does not come with junior enlisted soldiers or junior officers and is broken up into 36 units, each consisting of 12 soldiers who can be parceled out among the forces they are advising.[25] Would this work? Gen. John W. Nicholson Jr., the top U.S. commander in Afghanistan said that additional U.S. advisers and firepower will allow Afghan security forces, military as well as police, to take control of 80 percent of the country by 2020. At the start of 2018, the Afghan government controls two-thirds of the country, with most of the rest controlled by the Taliban or contested.

Second, the Americans will use their air force to assist the Afghan military whenever the latter is engaged in fighting the enemy. The use of air power to overcome resistance on the ground had been controversial for the collateral damage it inflicted on the civilians. This tactic was deeply resented by Hamid Karzai, the former president, who believed that the Taliban were successful in using civilian deaths to advance their cause with the people and bring in more recruits.

There are reports that Donald Trump's thinking about Afghanistan has been deeply influenced by the conversations he has had with Narendra Modi, the Indian Prime Minister who in an Oval Office meeting in 2017 told him, "Never has a country given so much away for so little in return," as the United States in Afghanistan."[26] To Trump Modi's statement was proof that the rest of the world viewed the United States as being duped and taken advantage of in Afghanistan." This no doubt influenced Trump's approach to Pakistan as discussed elsewhere in this work.

The military solution, on which the United States embarked in the late spring of 2017, was not likely to bring peace to Afghanistan. A negotiated settlement was needed. The groups that have rebelled against Kabul will have to be brought in as full partners in the process of governance. China was likely to play the role of a leader in this effort working with a number of other countries in the area, most notably Pakistan, Iran and Turkey. Some moves in that direction have begun to be made. In December 2017, the foreign ministers of Afghanistan, China and Pakistan met in Beijing to discuss how they could work together to bring peace to the long-troubled country. They also agreed to extend the CPEC program to Afghanistan.

Included in the BRI is a network of roads that would provide high-quality road links among the landlocked areas of Central and West Asia. What is intended is a system such as the Interstate Highways System in the United States planned during the Eisenhower presidency (1953-61) and completed over several decades. For the road component of the BRI to work efficiently will require stability in Afghanistan and good relations between that country and Pakistan.

Conclusion

It would be appropriate to conclude this chapter with a quote from Evan Osnos, who now writes for *The New Yorker* from Beijing. "China has never seen such a moment, when its pursuit of a larger role in the world coincides with America's pursuit of a smaller one. Ever since the Second World War, the United States has advocated an international order based on a free press and judiciary, human rights, free trade, and protection of the environment. It planted those ideas in the rebuilding of Germany and Japan, and spread them with alliances around the world. In March, 1959, President Eisenhower argued that America's authority could rest on military power alone."[27] The president saw a trade-off between what his country could do in the world outside and what it could do at home. "We could be the wealthiest and the most mighty nation on earth and still lose the battle of the world if we do not help our world neighbors protect their freedom and advance their social and economic progress," he said. "It is not the goal of the American people that the United States should be the richest nation in the graveyard of history." President Trump would not understand these sentiments. Under the banner of "America First," he is reducing U.S. commitments abroad and in the process alienating some of its old allies. This is apparent in the way he has handled relations with Pakistan.

The Pakistan-United States spat and the withdrawal of America from the global scene, in particular from the Asian mainland, set the stage for China's increased interest in Afghanistan. The Afghanistan government headed by President Ashraf Ghani also wished China to move into the area. Beijing had already entered this space by beginning work on the massive China-Pakistan Economic Corridor and making a large investment in iron ore mining. In the closing days of 2017, China was ready to exploit the opportunity created by President Donald Trump's America. On December 16, the Chinese hosted a trilateral meeting to lay the ground for greater collaboration among Afghanistan, China and Pakistan. The meeting chaired by the Chinese Foreign Minister Wang Yi was attended by Salahuddin Rabbani and Khawaja Muhammad Asif, his counterparts respectively from Afghanistan and Pakistan.

The three countries agreed to establish a trilateral mechanism for bringing about cooperation in politics and economics. The minsters held a press conference after their meeting at which they announced that they will meet regularly. The next meeting will be held in Kabul in 2018. During the press conference, Wang announced that "Afghanistan and Pakistan had agreed to improve bilateral relations as soon as possible and to realize harmonious co-existence, promising to resolve their concerns through comprehensive dialogue and consultation."

The Chinese minister also announced that China and Pakistan had agreed to extend the CPEC to Afghanistan. "In the long run, through Afghanistan, we will gradually connect the CPEC with the China-Western Asia Economic Corridor. According to Charlotte Gao writing for The Diplomat, "China's active support for Pakistan and Afghanistan in multiple fields will undoubtedly challenge the United States role in the region. In addition, China and Pakistan announced that they will support the Afghan government to push forward peace talks with the Taliban." Once Afghanistan becomes a part of the CPEC program, it will become a truly multinational effort.

The CPEC has already begun to yield dividends. Political rewards are materializing before those that are economic. China seems eager to work with Afghanistan and Pakistan to resolve their differences. The two countries with a great deal in common, face common dangers. An extended CPEC could draw Kabul into an economic alliance with Islamabad.

Once the communication network of which CPEC is a component in the much larger BRI is in place, it will provide impressive economic returns. However, as we emphasize in this report, the BRI and CPEC successes will depend on serious institutional involvement in various countries that these programs will touch. There is the need also to establish international mechanisms, supported by high-quality expertise, to coordinate various country programs and keep a close watch on their implementation. This is by far the most important message of this report.

Chapter

4 Belt Road Initiative — China's New Global Undertaking — Review and Analysis

Belt Road Initiative — China's New Global Undertaking — Review and Analysis

Daud Ahmad

Background

The historic Silk Road was a network of trade routes, formally established during the Han Dynasty (206 BC-220 AD). The road originated from Chang'an (now Xian) in the east and ended in the Mediterranean in the west, linking China with the Roman Empire. It was not just one road but rather a series of major trade routes that helped build trade and cultural ties between China, India, Persia, Arabia, Greece and European and the Mediterranean countries. It reached its height during the Tang Dynasty (618-907 AD), but declined in the Yuan dynasty (1271-1368 AD), established by the Mongol Empire, as political powers along the route became more fragmented. The Silk Road ceased to be a shipping route for silk around 1453 AD with the rise of the Ottoman Empire, whose rulers opposed the West.

The Belt Road Initiative is a recent undertaking of the Chinese Government to create a new mega silk road. It is also often referred to as 'One Belt One Road' (OBOR). It is an evolving long term Chinese vision of infrastructure development, connectivity and economic cooperation covering the vast continents of Asia, Europe, Africa and the Pacific. The initiative was first announced by the Chinese President Mr. Xi Jinping in Beijing, in September 2013 in a gathering of dozens of state leaders, including President Vladimir V. Putin of Russia. President Xi later proposed the building of the New Silk Road Economic Belt during his visit to Kazakhstan, and in the same year in Indonesia, he proposed the building of the 21st Century Maritime Silk Road. These two proposals are now collectively called the 'Belt Road Initiative', BRI for short. At the Boao Forum on 28 March 2015, China released the "Vision and Action on Jointly Building Silk Road Economic Belt and 21st Century Maritime Silk Road" (Vision and Actions for short).[1] It was jointly issued by the National Development and Reform Commission (NDRC), Ministry of Foreign Affairs, and Ministry of Commerce with State Council authorization, indicating that the BRI initiative has officially become one of China's national strategies.

At the heart of BRI lies the creation of an economic land belt that includes countries on the original Silk Road through Central Asia, West Asia, the Middle East and Europe, as well as a maritime road that links China's port facilities with the African coast, pushing up through the Suez Canal into the Mediterranean. The plan aims to connect Asia, Europe, the Middle East and Africa with a vast logistics and transport network, using roads, ports, railway tracks, pipelines, airports, transnational electric grids and even fiber optic lines. The scheme involves nearly 65 countries, which together account for nearly one-third of global GDP and 60 percent of the world's population (about 4.5 billion).

Objectives

The BRI initiative[2] is a key element of China's national "going out" strategy and is expected to be a critical driver for the country's long-term ambitions. The proposal aims to redirect the country's domestic over capacity and capital for regional infrastructure development to improve trade and relations with Asian, Central Asian and European countries. Through building infrastructure and networks, from high-speed railways to university accommodation, China aims to boost free trade and development in regions traversed by BRI. The initiative aims to promote five major goals among its constituent nation states: policy coordination, facilities, connectivity, unimpeded trade, financial integration and people-to-people bonds.

The strategy was first proposed in 2009 by Xu Shanda, former deputy director of State Administration of Taxation. Faced with the downturn in Chinese exports caused by the global financial crisis, he put forward the idea of a "Chinese Marshall Plan," to create domestic demand in less developed countries in Asia, Africa and Latin America through large-scale overseas investment and loans headed by the government. Almost at the same time, prominent Chinese economist Lin Yifu proposed the "New Marshall Plan" to break down the bottleneck of economic growth in developing countries by increasing infrastructure investment worldwide.

This grand strategy is reflected in Vision and Actions document, which sets out a vision in which China-led infrastructure construction, reduced tariffs, and simplified customs administration would allow trade to flow seamlessly between China and countries along BRI by land or sea. It seeks to achieve different goals, from improving supply chains to developing trade in services to increasing food security for participating countries, and with the building of a community of common destiny as its ultimate goal. The official blueprint is for a circular route connecting the vibrant East Asia economic circle at one end and the developed European economic circle at the other, and encompassing countries with huge potential for economic development. It has been described by the Chinese government as the third round of China's opening up after the development of Special Economic Zones and China's accession to the World Trade Organization. China's economy grew at an unsustainably rapid rate during the past three decades, resulting from developments in technology lowering transaction and market entry costs (allowing China to take advantage of its labor resources) and high government investments.

Explicit Objectives

The objectives of BRI can be summarized as follows:

- Prosperity for under developed western parts of China
- Increased connectivity and economic development along the routes
- Greater integration between China and the participating countries
- Energy security through diversification of import routes

Implicit Objectives

- Outlet for domestic overproduction—both for human resources and construction material
- Outlet for utilization of substantial capital and foreign exchange accumulated by China
- New/ diversified markets for Chinese products and services

Scope

The BRI initiative looms large in scope and scale with little precedent in modern history. It spans nearly 65 countries encompassing 4.5 billion people and about 65% of global GDP. China has not provided an official map of BRI projects or an explanation as to how they will fit together. At the most basic level, BRI is a collection of interlinking trade deals and infrastructure projects along the selected corridors. Six economic corridors (some documents refer to 5corridors), listed below, are proposed as the basic framework of BRI. The first four are mainly land based routes of the new Silk Road Economic Belt, while the last two are part of the 21st Century Maritime Silk Road. A number of Chinese provinces have been designated as "core provinces" to take lead in this initiative: Xinjiang in the northwest, Inner Mongolia in the northeast, Guangxi in the southwest and Fujian on the eastern coast. The location of BRI corridors are shown in the figure 4.1; the exact location/ routing of these corridors varies among different presentations.

1. China - Mongolia - Russia Corridor: This route involves high-speed rail and road links and is divided into two lines: Beijing/Tianjin/Hebei to Russia (via Hohhot, Inner Mongolia) and Dalian to Chita in Russia (via Shenyang, Changchun, Harbin, Manzhouli and Inner Mongolia).
2. New Eurasian Land Bridge: Also known as the Second Eurasian Continental Bridge, this rail link runs from the port of Lianyungang in Jiangsu province, all the way to Rotterdam in Western Europe via Xinjiang and Central Asia. . The New Eurasian Land Bridge is "faster than sea and cheaper than air."

FIGURE 4.1
Location of BRI Corridors

Source: Bigital Silk Road Project Cargo Network: The Economist

3. China - Central Asia - West Asia Corridor: This will be an important gateway for oil and natural gas, running to Xinjiang from the Arabian Peninsula, Turkey and Iran. The China-Central Asia gas pipeline is the world's longest. It starts at the border of Turkmenistan and Uzbekistan, runs through Uzbekistan and southern Kazakhstan, and ends at Horgos in Xinjiang. From there it will be connected to China's second West-East gas pipeline, which is under construction.
4. China - Pakistan Corridor: Linking Kashgar in Xinjiang with the deep-sea port of Gwadar in Pakistan. This corridor could afford China a shortcut to the Middle East and Africa via Dubai and Oman, bypassing the Strait of Malacca.[3] China and Pakistan reached agreements reportedly worth approximately $46 billion during President Xi Jinping's visit in April 2015, covering energy, ICT and transport infrastructure, among others.
5. Bangladesh - China - India - Myanmar Corridor: This corridor will connect China with South Asia. China sees India as an important partner for integration with Western Asia and beyond. A cooperative mechanism has been set up for the development of this corridor, and railway construction, industrial cooperation and professional training services are expected to be pursued.
6. China - Indochina Peninsula Corridor: This corridor will link the Pearl River Delta Economic Circle (around Guangzhou, Hong Kong and Shenzhen) with the South-East Asian countries of Cambodia, Laos, Myanmar, Thailand and Vietnam. New high-speed railways and motorways will run from the Pearl River Delta in South China to Singapore via Nanning in Guangxi Province and Hanoi in Vietnam.

Cost and Financing

The scope of BRI investments is still evolving, so are their likely costs. The financing for BRI projects will require large scale capital investments. An estimate by the Chinese Government suggests that the total investment needs of the large BRI program could be of the order of $4 trillion. At the moment, a cost of $1 trillion over the next 30-40 years is being talked about. To put things in perspective, China's annual internal investments are reported to be around $5 trillion; one trillion over 10-15 years is a modest amount. On the demand side, Asian Development Bank (ADB) estimates that the infrastructure needs in Asia over the next decade are about $1.6 to 1.7 trillion per year; the current funding gap on this is about $800 billion per year.

Another aspect of BRI activities is the increased acquisition-linked investments. While the overall volume of Chinese overseas mergers and acquisitions has dropped significantly in the recent years as a result of tightened regulations, the pursuit of acquisitions along the BRI corridors is on the increase. Chinese Government and Banks are allocating funding for this purpose. By mid-2017, it is reported that 109 acquisition deals were made in the BRI countries, compared to 175 in 2016 and 143 in 2015.[4]

A broad overview of the BRI investments is shown in the figure 4.2.

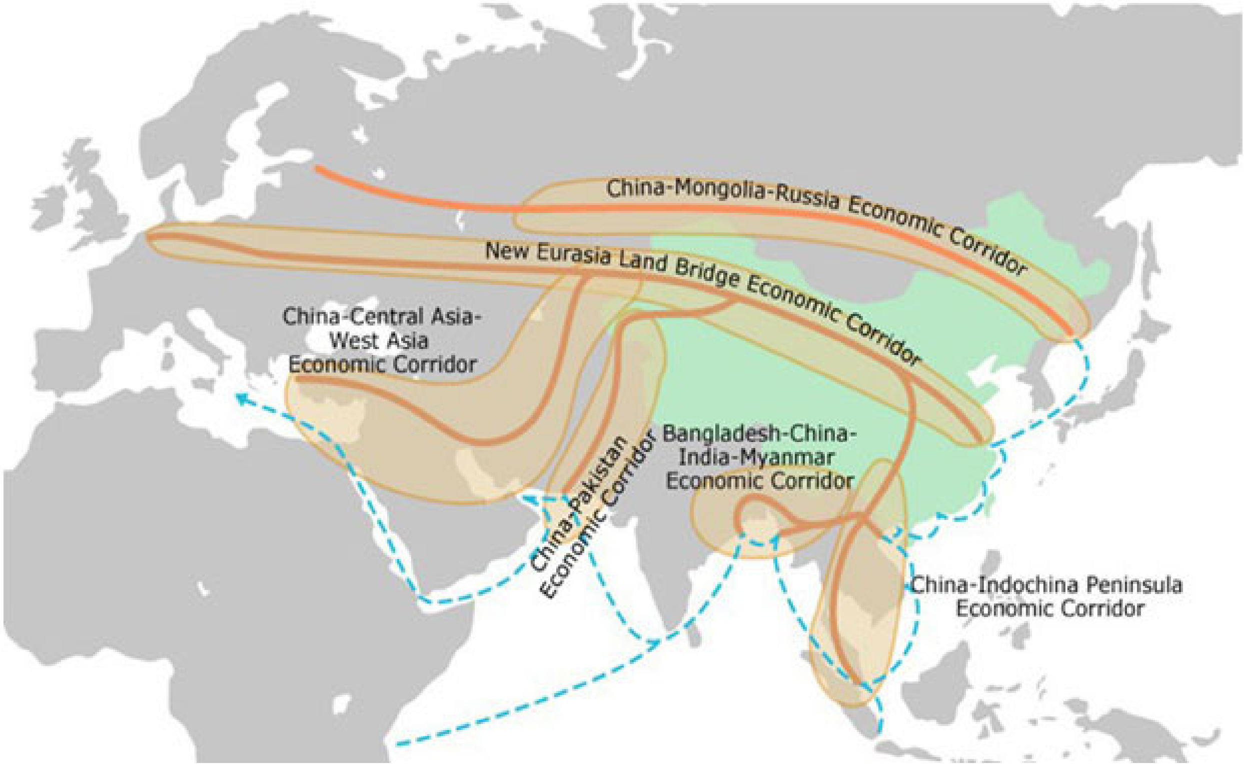
BRI investments are different from the conventional regional economic cooperation programs, as these do not prioritize investment and trade concessions. Instead, the emphasis is on regional infrastructure connectivity. Bulk of the investments would be through commercial contracts between corporate entities on both sides with commercial loans from Chinese sources. The funding mechanisms are also emerging; China has so far identified three financial institutions for this purpose. These are described below.

Silk Road Infrastructure Fund

Launched in February 2014, the China-led US$40 billion Silk Road Infrastructure Fund will directly

FIGURE 4.2

Overview of BRI Investments



Source: Hong Kong Trade Development Council

support the BRI mission. The fund is capitalized mainly by China's forex reserves and is backed by the China Investment Corporation (China's sovereign wealth fund), China Development Bank, the Export-Import Bank of China and the State Administration of Foreign Exchange. It will be used to finance infrastructure, resources, industrial and financial co-operation projects, probably with an initial focus on Central and Southeast Asia. Transport infrastructure such as railways, roads, ports and airports will be a particular focus.

Asian Infrastructure Investment Bank (AIIB)

Founded in October 2014, AIIB aspires to be a global development institution with 21 Asian member countries, with a registered capital of US$ 100 billion. AIIB will focus on medium-and long-term equity investment in infrastructure, energy development, industry cooperation, and financial cooperation. The fund is designed to support Chinese outbound investment to countries within BRI, particularly companies exporting high-tech and high-quality products.

New Development Bank (NDB)

BRICS is a collaborative organization composing: Brazil, Russia, India, China and South Africa. The NDB is a multilateral development bank established by BRICS in July 2014. The Bank was seeded with an initial capital US$ 50 billion, expected to be increased to $100 billion. The Bank is located in Shanghai, with each country having equal voting power.

Implementing Arrangements

There is still no official timetable for BRI. The Vision and Actions document suggests that China will consult with other countries to work out relevant timetables and road maps. A recent report from Renmin University says that China was to launch five years of strategic planning in 2016, with implementation expected to begin in 2021. The report estimates, if carried out at full scale, BRI will be constructed over 30 to 40 years. BRI is divided into three phases. The first is the strategic mobilization period (from 2014 to 2016). The second is the strategic planning period (from 2016 to 2021), during which China will take the lead to establish coordination groups such as a policy coordination group, an infrastructure group, an energy and trade group, and a monetary and financial group. The third phase concerns strategy implementation.

The BRI initiative is being managed by a small group under the chairmanship of Vice-Premier Zhang Gaoli. In the Chinese government, the National Development and Reform Commission (NDRC), Ministry of Foreign Affairs and Ministry of Commerce have been tasked to deliver BRI, with the NDRC playing a coordinating role. Internally, China will need to establish permanent institutions such as an official Council and Secretariat to coordinate policies and regulations among different provinces and regions; externally, it has to strengthen cooperation with the World Bank, AIIB and the NDB to fully implement infrastructure construction, trade integration, human resources and administrative capacity.

The implementation of the BRI initiative will be a major challenge for China as well as the recipient countries. It is much more than pouring huge sums of money in other countries. It calls for understanding and adapting to the internal processes of BRI participants.

One needs to recognize that neither China nor the participating countries have past experience of an undertaking of this size and scale. It is a big unchartered territory. Also, the operational procedures, being different from conventional investment projects, are evolving and not very clear at the moment. Two major operational risks to the success of BRI initiative are: lack of due diligence in selection of investments and inadequate preparation/design of projects. Recent experience of Chinese funding of infrastructure projects in Myanmar, Sri Lanka and Pakistan would support this concern. There is much to learn from this experience.[5]

Current Status

BRI implementation began in 2015, and the opportunities for overseas businesses in China and along the routes are now becoming apparent – a process which is expected to last for several decades. An official document providing a list of on-going projects and their schedule is not readily available from any Chinese source. The website of NDRC, the main coordinating agency, has no status information. So far media reports are the main source of this information.

The scope of BRI is constantly evolving. A number of existing projects at planning or implementation stages are being incorporated in the BRI initiative in different countries. Some of the well reported ongoing BRI activities are listed below:

- A 418-kilometer rail link with Laos, is already under construction. China is leading a $6 billion investment to build a 260-mile rail line from northern Laos to the capital, Vientiane.
- A collection of infrastructure projects totaling $46 billion (this figure keeps going up), named the China-Pakistan Economic Corridor. CPEC is being labeled as the “front runner” or “litmus test” for BRI and a “game changer” for Pakistan. The first phase includes 21 projects in the energy sector (US$ 33.8 b), four projects in the transport infrastructure sector ($9.8 b) and eight projects for the Gwadar Port, valuing $792.62 million.

- A freight train service is linking China and Europe. The China-Europe Railway Express includes 51 rail links connecting 27 Chinese and 28 European cities, with freight trains that offer shorter transport time than sea routes.
- China is financing more than a third of the $23.7 billion cost of the Hinkley Point C nuclear power plant on the Somerset coast of southwest England. The project was recently added to BRI plan to give added prestige.
- China signed bilateral agreements in 2016 with Hungary, Mongolia, Russia, Tajikistan, and Turkey.
- China financed most of the $4 billion cost of Africa's first transnational electric railway, which opened this year and runs for 466 miles from Djibouti to Addis Ababa, the capital of Ethiopia. Chinese companies designed the system and supplied train cars and also the engineers who built the line over a six-year period. The Africa initiative also includes a 471-km railway between Nairobi and Mombasa on the Indian Ocean.

BRI Benefits and Risks

An interesting debate is going on about potential benefits and risks associated with BRI on both sides – its supporters and opponents. The initiative is still evolving and being defined. As such, much of the debate is speculative. BRI is being labeled as a 'win-win' proposition with substantial potential benefits for China (economic and political) as well as for the participating countries. The list of potential risks is also long. Below is a selective listing of benefits and risks being associated with BRI.

OBOR could stimulate Asian and global economic growth and make it more sustainable. In particular, countries along the corridor — especially those with underdeveloped infrastructure, low investment rates, and low per-capita incomes — could experience a boost in trade flows and benefit from infrastructure development. China would be able to better secure its energy and raw materials supply, which now predominantly gets shipped through the Strait of Malacca and the South China Sea.

Perceived Economic Benefits to China

- It could help China achieve its long term strategic interests of securing alternate trade and energy routes.
- It will generate wide range of corridor investment opportunities for Chinese enterprises – from oil & gas companies to railway construction.
- It would open new markets for Chinese goods, shoring up the country's economy against any potential slowdown in demand from Europe or the US. As its runaway economic growth has slowed in recent years, China has suffered from widespread overcapacity in heavy industries such as steel, cement and aluminum.
- It could help China to ship its own domestic overproduction offshore. In 2016-17, domestic job cutting in China is reported as 1.2 million. China is looking for ways to ship about $100 billion/year of domestic overproduction.
- It could help stimulate the domestic economy via exports from industries with major overcapacity such as steel, cement and aluminum. China's current excess capacity in steel alone is estimated at $60 billion per year.
- It could promote prosperity for the under-developed regions of China, particularly in the western and southern parts.

Perceived Political Benefits to China

- BRI has often been compared to the Marshall Plan — the huge redevelopment initiative undertaken by the US to rebuild Western Europe in the wake of World War II, after which it emerged as a global superpower. China could be looking for similar gains. The Chinese state media has often rejected this analogy.

- It may create the new China 'empire' — informal and largely economic, posited on cash and held together by hard infrastructure.
- The Initiative could be a diplomatic effort for China to win friends and influence people, rather than a strictly economic program.
- BRI could be part of a plan by China, focused on "restoring its historical status as Asia's dominant power."
- BRI would give China international clout as it attempts to spearhead international policy and improve relations with partner countries. If successful, BRI could see China supplant the US as the main superpower in much of the world.
- In the long run, BRI could boost internationalization of the renminbi by encouraging its use in both trade and financial transactions.

Perceived Benefits to the Recipient Countries

- Huge investment of $ 1-4 trillion will drive integrated economic growth through large infrastructure projects along the land belt routes and maritime routes flowing through South and Southeast Asia.
- Much needed foreign direct investment in recipient countries will be enhanced.
- It will contribute to higher economic deployment/growth.
- It will enhance regional integration — internal as well as external.
- Economic upliftment of backward areas will take place.
- The Initiative will stimulate greater stability/security, if local governments utilize the capital for inclusive and sustainable growth

Potential Risks

Implementing BRI will entail significant risks and challenges for China and its partners. The mere size and complexity of BRI poses a wide range of political, operational and security risks, such as:

- Given the vast size of the BRI initiative, if things go wrong, it could be a major blight on China's reputation in much of the world.
- China has a mixed record of their recent investment overseas, particularly some projects in Sri Lanka, Myanmar, Venezuela and Pakistan have faced serious criticism. These projects, in particular are characterized with very little economic rationale and inadequate preparation. Ensuring due diligence in selection and appraisal of investments/projects will be a critical factor for success of BRI.
- Many key countries targeted by BRI, in central Asia, Africa and Southeast Asia, are prone to economic and political instability and corruption. If a series of projects fail at the same time, then the whole thing could collapse. A recently concluded UN Economic and Social Commission for Asia and the Pacific St udy (UNESCAP) has warned of financial risks in countries in south and central Asia, where China's announced investment value is high compared to the relative size of the economy of the recipient country.
- Some projects in Asia also carry significant security risks, particularly the China-Pakistan Economic Corridor, where more than 15,000 Pakistani troops have already been deployed to protect the projects, which run through the South Asian country's restive tribal regions.
- Japan, India, and Russia. Moscow is particularly concerned about the initiative translating into increased Chinese influence in Central Asia, an area it has long view ed as within its sphere of influence and where Sino-Russia competition has been noticeably intensifying of late. Meanwhile, India has been especially alarmed by Chinese investments under CPEC as well as in Sri Lanka, which New Delhi views as part of its backyard. USA has also raised concerns about the CPEC proposal.

- External account indicators for some of these economies are relatively weak. In Kazakhstan, the account deficit amounted to about 6% of GDP in 2016, while external debt stood at over 80% of GDP in 2015. In Pakistan, foreign external reserves are rather small at about four months of imports in early 2017.

Conclusions

BRI is a large undertaking with big challenges. If implemented successfully, the economic and political benefits for China and the recipient countries would be tremendous. The need/demand for infrastructure and related investments in the selected areas is clearly there. China has the financial capacity to support these investments. The main challenge is going to be 'doing the right things, and doing those right'. Due diligence in project selection and appraisal will be critical. At this stage, China itself may lack the professional expertise for this scale of undertaking. Weak governance, parochial politics, corruption and security will be the key issues for the recipient countries. Less politics and more professionalism would help.

Chapter

5 The China Pakistan Economic Corridor: Review and Analysis

The China Pakistan Economic Corridor: Review and Analysis

Daud Ahmad

Introduction

China-Pakistan Economic Corridor (CPEC) is part of China's new global initiative, known as the Belt Road Initiative (BRI); it is also often called the One Belt, One Road Initiative (OBOR). In this paper, the term BRI is adopted. BRI reflects China's grand vision of connectivity extending from China to the Middle East, Africa, Southeast Asia and the Baltics in Europe. Under BRI, announced in 2013, China is planning to invest US $[1] 1-3 trillion, over the next 30 years or so, in 60 countries all over the world to establish possibly six different economic corridors. CPEC is a key part and the 'front runner' of this grand scheme. It could be a "game changer" for Pakistan and usher in a new era of economic development. Unlike the old Silk Road, BRI is a framework of regional connectivity. CPEC will not only benefit China and Pakistan but should have, in due course, positive impact on Iran, Afghanistan, India, Central Asian Republic and the region.

CPEC is a part of China's efforts to deliver security through economic development. It is part a broad development scheme, part a strategic gambit. Pakistan and China formalized plans[2] for the CPEC in April 2015, when they signed 51 agreements and memoranda of understanding on Chinese investments totaling $46 billion to be made in three phases over the next 10 – 15 years. Now even larger amounts are being talked about. Some projects are already underway, including highways and energy projects where partial completion has taken place.

Although Beijing and Islamabad have been close partners for decades, the CPEC is a reflection of intensified and expanded bilateral cooperation at a time of rising Chinese geopolitical ambition and persistent concerns about Pakistan's security and development.

The CPEC is 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. Eventually, the CPEC will also facilitate trade along an overland route that connects China to the Indian Ocean, linking the Chinese city of Kashgarin Xinjiang province to the Pakistani port of Gwadar, in Baluchistan province (see Figure 5.1). The concept of a 'corridor', inevitably evokes images of a transit route and geopolitical speculation about Chinese access to the warm waters of the Indian Ocean. The cross-border dimensions of the CPEC plans, at the moment, are very modest. There are some ongoing energy and

FIGURE 5.1

China Pakistan Connectivity

Source: https://www.dawn.com/news/1231852

road upgrade projects, but fiber optics, pipelines and railways to Xinjiang are only at the planning stages. The rogued physical conditions pose serious capacity constraints; it is entirely conceivable that land route to China may only assume limited commercial significance. Bulk of the projects in each proposed phase are largely intra-Pakistan in nature. Achieving long term benefits form the CPEC will require transit linkages to the other neighboring countries as well.

Pakistan's economy continues to grow, and with economic expansion comes both new opportunities for international cooperation and geopolitical implications. Simultaneously, China is seeking to increase its regional influence both economically and politically. China's BRI strategy seeks to increase its economic and political ties in Asia, the Middle East and beyond. The CPEC is one project under the broader BRI umbrella. The billions of dollars that will be invested in projects related to CPEC in Pakistan pose a number of opportunities and challenges for the nation.

Main Components of CPEC

The CPEC is an evolving package of competitive economic initiatives to enhance trade and economic development. The ambitious CPEC program has two main components: i) a new trade and transport route from Kashgar in China to Gwadar port in Baluchistan and ii) special economic zones along the route, including power projects and other auxiliary facilities. The first-phase projects will receive about

US $46 billion in concessionary and commercial loans, for which financial facilitation to the Chinese companies is being arranged from different Chinese sources. The Figure 5.2 provides an overview of CPEC projects as conceived now. The CPEC projects can broadly be listed in four categories: infrastructure, energy, industry/trade and others.

In November 2017, a summary version of the Long-Term Plan was released, which focuses on vision, goals and guidelines for cooperation in key areas. Detailed project information is yet to be released. A recent report from the United States Institute of Peace[3] provides the most comprehensive overview and analysis of CPEC. Besides the official list of projects, the media reports are loaded with 'wish list' projects from all over the country. With respect to Chinese financing, the feeling one gets in Pakistan is that: Santa Claus has come to town; you can ask for whatever you wish for. The total CPEC financing is now reported to be $60 billion plus. As the composition of CPEC investments is still evolving, it is too early to envisage how these fit together as a comprehensive development package.

A safe/efficient transit corridor between Gwadar and Kashgar is a critical prerequisite of the overall scheme. Currently, there are three possible existing land routes, all part of the national road network, which are developed to different standards. Each one of those would require new construction and upgrading to serve CPEC needs. The northern portion (Karakoram Highway, Kashgar – Burhan, near Islamabad, 850 km) is common to the three routes. It was developed in the 1960s, with China's help, over a rugged and crumbling mountain terrain. Portions of this highway are now being upgraded.

From Islamabad onwards to Gwadar, the three possible routes as shown in the Figure 5.3:

- Western alignment (2,520 km, Kashgar - Gwadar), via Quetta, comprising existing section of highways N50, N85 & M8.
- Central alignment (2,190 km), via DIG Khan, N55 and M8.
- Eastern alignment (3,050 km), mostly existing motorways via Lahore, Multan, Karachi.

The CPEC alignment has been a controversial issue from the beginning, given the provincial interests. Pakistan, in consultation with China, has now prepared a plan to develop all three corridors over time. The current official position is that all three alignments will be developed, but the longest Eastern alignment has reportedly been selected for development in the first phase. Article 3 of July 2013 MoU on Long Term Plan of CPEC explains the rationale behind favoring the Eastern corridor. "Long-Term Plan should be developed under the principle of scientific planning, steadily developing, and take the easiest the first," it states. Security concerns along other alignments are also cited as a factor for giving the eastern route a higher priority.

China envisages CPEC more as an investment package than as a set of transport connections. The sectoral breakdown of the $46b package is: infrastructure 28%, energy 70%, industrial estate and others 2 %.

Transport Infrastructure

The original $46 b plan included roughly $14.82 b for transport infrastructure — $4.65b for five roads and $8.57b for railways.[4] Another $0.79b is allocated for 12 Gwadar port development projects. The infrastructure projects, particularly roads are labelled as the "early harvest projects."Two critical bottlenecks of the selected route — Thakot-Havelian (northern section) and Multan-Sukhar motorway (eastern alignment) are already under construction at a total estimated cost of $3.65b.The huge railway investments aim to upgrade the existing Peshawar to Karachi main line; the proposal is at feasibility stage.

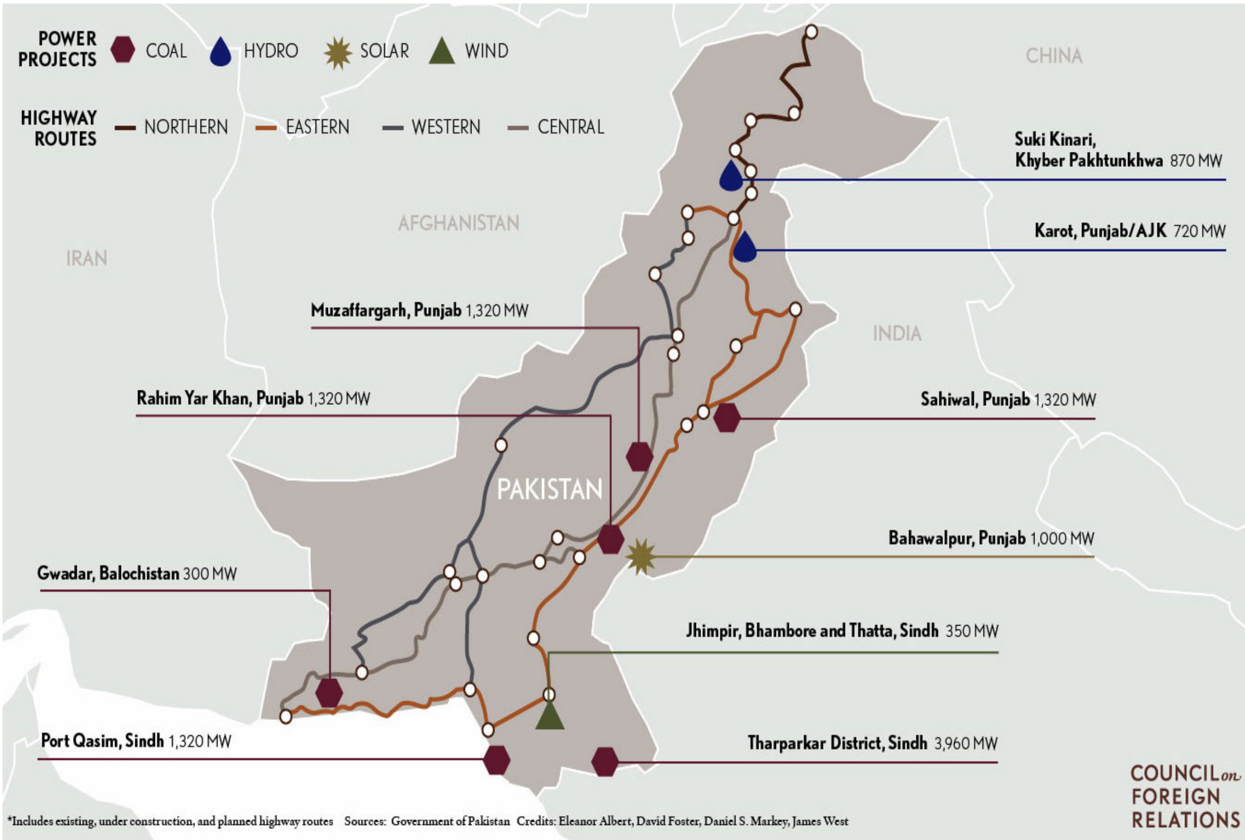
Development of the Gwadar port is a critical link of CPEC. Gwadar is a natural warm water deep port facility in western Baluchistan, purchased by Pakistan from Oman in 1958 for $8.4m. The port's potential was identified in 1950s, but effort to seek financing for its development did not succeed for a couple of decades. A small wharf was completed in 1992, and formal proposals for a deep sea port at Gwadar were unveiled a year later in 1993. China finally agreed to financing the development of Gwadar port during the Musharraf era. Phase I covered building of three multipurpose berths and related port infrastructure and port handling equipment and was completed in December 2007 at a cost of $248

FIGURE 5.2

Overview of CPEC Project

FIGURE 5.3

Major Projects of the China-Pakistan Economic Corridors



Source: Government of Pakistan: Credits Eleanor, David Foster, Daniel S. Markey, James West

million. Its operations were first handed over to the Port of Singapore Authority. This port is now being operated by a Chinese company. The second phase of construction, consisting off our container berth terminals, a bulk cargo terminal, oil and grain terminals and related facilities, is currently underway as part of planned improvements under CPEC and other ancillary projects. The total project is expected to cost $1.02 billion. A 'build, operate, transfer' (BOT) agreement is currently being worked out. It is being reported in the press that this will be a 40-year arrangement during which the Chinese investors would be entitled to 91 % of Gwadar port income. It should be mentioned that India is actively supporting the development of Chabahar port in Iran, only 170 km away. India is providing $500m investment financing for this deep sea port to compete with Gwadar. Timely completion of the Gwadar port projects will be crucial for the success of CPEC.

Energy Projects

The lion's share of China's investment — roughly $32 billion (70%) —is expected to go to energy projects, including coal, solar, hydroelectric, liquefied natural gas and power transmission. If all goes according to plan, about twenty projects will generate nearly 17, 000 MW of additional energy by 2020, and nearly double Pakistan's installed capacity. This is an ambitious target; already a number of projects are facing delays and the target is slipping to 2023. A number of ongoing China-financed power projects[5] are included in the CPEC list; few of which have since been completed. CPEC will significantly impact Pakistan's energy mix. According to the United States Institute of Peace (USIP) report, reliance on coal will increase during 2015 — 2020 from a negligible amount now to about 24%, LNG share will increase from 4 % to 13 %, solar and wind 1% to 6 %. Share of hydel will fall from 31% to 26%. Successful implementation of the ambitious energy generation program will depend on other activities as well – transport improvements to move coal and gas and the power transmission/distribution networks. Already, a number of proposed power projects are being put on hold for lack of feasibility.

Industry/Trade

Nine "Special Economic Zones" (SEZs) are being proposed located one each in the four provinces and various special areas – FATA, Gilgit, AJK, Port Qasim and the Capital regions (location marked on Figure 5.3). Most of these SEZs are at planning stages. Each one of these will need to have a special focus based on comparative location, material inputs and market linkage advantages. An ongoing controversy surrounding these SEZs is their ownership. According to a recent press report, a committee in the National Assembly was informed that "only Chinese industrialists would be allowed to set up their industries in the proposed economic zones along the corridor."

Other Components

These include fiber optic networks and various educational facilities.

Financing Arrangements

CPEC financing falls under the umbrella of BRI. China has accumulated over $3 trillion in foreign exchange reserves. It can be used both for investment and for buying influence around the world. Bulk of the investments would be through commercial contracts between corporate entities on both sides with commercial loans from Chinese sources. China has so far identified following three financial institutions for this purpose:

Silk Road Infrastructure Fund

Launched in February 2014, the China-led US$40 billion Silk Road Infrastructure Fund will directly support the BRI mission.

Asian Infrastructure Investment Bank (AIIB)

Founded in October 2014, AIIB aspires to be a global development institution with 21 Asian member countries, with a registered capital of US$100 billion. Pakistan is among the first set of countries that joined this institution. AIIB will focus on medium-and long-term equity investment in infrastructure, energy development, industry cooperation, and financial cooperation.

New Development Bank (NDB)

BRICS is a collaborative organization made up of Brazil, Russia, India, China and South Africa. The NDB, located in Shanghai, is a multilateral development bank established by BRICS in July 2014. The Bank was seeded with an initial capital US$50 billion, expected to be increased to $100 billion.

CPEC projects are being negotiated on a government-to-government basis, with Chinese firms selected by Beijing. The infrastructure projects are covered by low or zero-interest concessional loans that include financing from China's Export-Import Bank and the Silk Road Fund. All the Chinese loans will be insured by the China Export and Credit Insurance Corporation (Sinosure) against non-payment risks, and the security of the loans is guaranteed by the state. The details of the financing, primarily in the form of loans, but also a small number of outright grants, have not been publicly released, and the terms vary considerably. A good analysis of the CPEC financing is made by Dr. Ishrat Husian in an article in the Daily Dawn.[6] The bulk of CPEC financing is for energy projects, which will be executed in the IPP (Independent Private Power) mode. Foreign investors are guaranteed a 17% rate of return in dollars on their equity investments. The loans will be taken by the Chinese companies, mainly from the Chinese Banks, against their own balance sheets. These borrowings would not impose any liabilities on Pakistani government. The infrastructure components of CPEC are to be financed through government-government loans on concessionary terms, reportedly 2%; debt servicing would be Government of Pakistan's (GoP) responsibility. Number of other reports in the media paint a different and unfavorable picture of the financing arrangements and resulting debt burden. According to the USIP report, the current financing types for CPEC can be summarized as: foreign direct investments 64%, concessional loans 24%, commercial loans 6% and grants 1%. The financing arrangements will, no doubt, have a major impact on success of the project.

Implementation Arrangements

The current information available for CPEC implementation arrangements is very rudimentary. A joint cooperation committee has been established co-chaired by Pakistan's Minister of Planning Development and Reforms and the Chinese Vice-Chairman of the National Development and Reform Commission. Under this umbrella, five 'working groups' have been established for: Planning, Transport Infrastructure, Energy, Gwadar Port and Industrial Parks/ Economic Zones. For each project a responsible agency, a supervising agency and executing agency are designated, but few details are available on the due diligence process — feasibility, design and construction details. The provinces will, no doubt, have a key role as they will provide land for development projects and provision of allied facilities. Pakistan army is taking the responsibility for project security.

The scale and scope of CPEC program would warrant a transparent and robust implementation framework, which involves all stakeholders, particularly the provincial governments. It is a huge challenge which will require strong commitment at all levels. The Indus Basin Project of 1960-70s, in current terms, was an equally large undertaking, which Pakistan handled successfully. The operational risks section of this report gives some suggestions about possible implementation arrangements.

Current Status

The web site of MoPDR[7]: provides basic information on the status of various projects under CPEC. Also, it provides a good additional source of current information on CPEC projects.[8] This information is captured in the attached Table 5.1. The long CPEC list has over 40 projects. It is reported that China has committed to 30 early harvest projects of which 16 are under construction, adding up to between $10-14 billion. CPEC should be seen as "work-in-progress" rather than a single mega-package. In summary, construction works are underway on a couple of road projects – one in the northern section of the Karakoram Highway (Thakot – Havelian); the other on the eastern alignment (Multan- Sukhar). A number of ongoing power projects (Sahiwal Coal and Bahawalpur wind), which were added to CPEC, are at completion stages. Gwadar port projects are receiving high priority. Rest of the projects are mostly at feasibility/preparation stages. It should be recognized that CPEC will face serious financing and implementation capacity issues. It is a huge undertaking on both sides – Pakistan and China. Pakistan has not undertaken foreign investment projects of this scale before. Just to put things in perspective, between 2001 and 2011, a sum of $66 billion of financial assistance was pledged by Chi-

TABLE 5.1

Overview of CPEC Projects: Infrastructure Projects

No	Project Name/ Description	Location	Size/Capacity	Cost: $ Million /Financing	Executing Agencies[a]	Status/ Remarks
1	KKH Phase II (Thakot-Havelian section)	Gilgit / Baluchistan	118 km	1,305 m GoC Loan, terms N.A	RA:MoC SA: MoC EA: NHA	Construction started in September 2016 CD: December 2019
2	Peshawar Karachi Motorway (Multan – Sukhar section)	Punjab/ Sindh	392 km, 6 lanes.	2.980 m	RA:MoC SA: MoC EA: NHA	Construction started in August 2016 CD: April 2018
3	Khuzdar – Basima Road N-30	Baluchistan	110 km	80 m	RA:MoC SA: MoC EA: NHA	Feasibility study completed. Letter of intent forwarded to Chinese
4	DI Khan (Yarik) –Zhob N-50 Upgradation.	KPK/ Baluchistan	210 km	195 m	RA:MoC SA: MoC EA: NHA	Early preparation stages. PC! Approved; land acquisition underay Framwork agreemen being worked out
5	KKH Thakot- Raikot N 35 136 km	KPK	136 km	720 m	RA:MoC SA: MoC EA: NHA	Preparation underway
6	KHI-LHE- Peshawar Rail line, Rehabilitation/ Upgrade of existing ML1 line.	KPK/ Punjab/ Sind	1872 km	8,172 m GoC concession loans	RA:MoR SA: MoC EA:MoR	Feasibility completed, framework agreement signed

TABLE 5.1

Overview of CPEC Projects *(Contd....)*: Gwadar Port Projects (Partial List)

No	Project Name/ Description	Location	Capacity	Cost: $ Million / Financing	Executing Agencies[b]	Status/ Remarks
1	Gwadar East Bay Expressway Linking port with main artery of National Highway – N20	Gwadar,Baluch-istan	6 lanes + 30 m wide railway corridor	140 m Financing: Mix of concessional loans and grants.	RA: Gwadar Port Authority SA: MoPS EA:	Agreement signed.
2	New Gwadar International Airport	26 km east of Gwadar City.		230 m GoC grants	RA: SA: EA:CAA	Agreement signed
3	Construction of Breakwaters	Gwadar		123 m Conces-sional loans/ grants.	RA: GPA SA: MoPS EA:	Planning stages; feasibility study being completed.
4	Dredging of Berthing areas & Channels	Gwadar' Baluchistan		27 m GoC con-cessional loans	RA: GPA SA: MoPS EA:	Planning stages
5	Free Zone Development • Gwadar Port Free zone • GIEDA Industrial Zone • EPZA export Processing	Gwadar	6,280 acres for 3 zones	32 m Concessional loans	RA: SA: P&D, GoB EA:	Ground breaking done. Phase I completion: December 2017.
6	Faculties for Water Supply/Sewage Treatment.	Gwadar		130 m Grants	RA: GPA SA: EA:	Preparation stages; feasibility com-pleted. Framework agreement being finalized.
7	Pak China Friendship Hospital	Gwadar	50 beds + 50 beds phase II	100 m Grant	RA: SA: P&D, GoB EA:	Feasibility study completed, grant request submitted
8	Gwadar Technical and Vocational Institute	Gwadar		10 m Grant	RA: SA: MoPS EA:	Preparation stages

[a]RA: responsible agency; S.A: Supervising Agency; EA: executing Agency GoC: Government of China CD: Completion date; MoC: Ministry of Communica-tion; NHA: National Highway Authority; MoR: Ministry of Railways.

[b]RA: responsible agency; S.A: Supervising Agency; EA: executing Agency GoC: Government of China; MoPS: Ministry of Ports and Shipping; CAA: Civil Aviation Authority; GPA: Gwadar Port Authority; P&D: Planning and Development Department; GoB: Government of Baluchistan.

na, but only 6% of it ever materialized. It is easy to reach "Banquette Deals" but extremely difficult to convert those into real projects/investments. On the positive side, CPEC has been accorded the status of a "flagship project " / " front runner" for the BRI, as it arguably presents the most developed set of plans to date among the various proposed corridors. In February 2015, Mr. Wang Yi, the Chinese Foreign Minister, stated "If 'One Belt, One Road' is like a symphony involving and benefiting every country, then construction of the China Pakistan Economic Corridor is the sweet melody of the symphony's first movement".

There is no reliable information source available on actual implementation status and disbursement of funds under the CPEC projects. The official government position[9] is that CPEC projects of about $18b are currently in the implementation phase while another $17b worth of projects are in the active pipeline. In the original plan, CPEC completion target was 2030. Early harvest energy projects were to be completed by 2020. This is unlikely to be achieved. Already 3-5 year completion delays are anticipated on the energy and infrastructure projects. The World Bank in its biannual South Asia Economic Focus Fall 2016[10] report has noted delays in the completion of CPEC projects, as evident from the first year's performance. The twice-a-year bank report considered the lack of consensus on the CPEC projects as one of the risks posed to high-growth potential of the country's economy. China has also started raising concerns over delay in the implementation of CPEC projects, notably energy sector transmission and generation projects. The latest State Bank of Pakistan[11] report on foreign direct investments (FDI) shows a surge of 65% in the 3rd quarter of 2017 (July- September) compared to the previous year. China's contribution to this FDI is reported as $430m out of $662m, for the reported quarter. The annual disbursement under CPEC umbrella will have to be $3-4 billion on a sustained basis.

Regional Implications of CPEC

The success of CPEC, in the long term, would depend on larger regional cooperation with neighboring countries: Afghanistan, Iran, India and the Central Asian Republics. India, with current support of the USA is objecting to the scheme on political grounds. The United States will also have its own long-term concerns about the CPEC, as it represents the leading edge of China's expanding access to neighboring regions and Eurasia. Afghanistan is going to be a critical link in future development of CPEC, even though at this stage it is not clear how Afghanistan fits into future BRI vision. The October 2015 International Monetary Fund (IMF) Regional Economic Outlook report on the Middle East and Central Asia estimates that China is committed to $100 million in OBOR investments in Afghanistan – a small amount of the total $890 billion planned. China is gradually increasing its presence in Afghanistan, mostly through economic investment. Whereas China's foreign aid to Afghanistan in the past decade is miniscule, compared to the global foreign aid of nearly $25 billion, China is fast emerging as a major foreign investor in Afghanistan. It is reported[12] that during 2005-13, China's share of net foreign investment in Afghanistan was 79% of the country's total. A Chinese joint venture won a large $3.5 billion contract to develop the Mes Aynak copper mine, reported to be the largest undeveloped copper resource in the world. China is fast seizing a substantial share of Afghanistan's natural resources.

Potential Benefits

Much has been said and written about the potential benefits of CPEC on Pakistan's economy, security, regional development, and linkages with neighboring countries etc. China has also to gain in terms of its long-term global political and economic objectives. The BRI is a key element of China's national "going out" strategy and is expected to be a critical driver for the country's long-term ambitions. The proposal aims to redirect the country's domestic overcapacity and capital for regional infrastructure development to improve trade relations with Asian, Central Asian and European countries. China's key objectives in promoting BRI can be listed as: secure shipping lanes, development of Western China, utilization of China's surplus construction and materials capacity, creation of new export markets, and establishment of goodwill with neighboring countries. It is too early to estimate the impact/outcome of CPEC projects, although some efforts are underway.

CPEC, a part of BRI, offers great strategic advantage to China as it gains physical access to the Indian Ocean and closer proximity to the Middle Eastern oil resources. Other BRI projects around the world do not offer such early advantages to China. As Pakistan has the potential to serve as a nexus for BRI, Beijing labels CPEC as a "flagship project". Although Beijing is quick to downplay geo strategic motivations behind the CPEC, many commentators have noted that over the long run, an overland link across Pakistan to the Arabian Sea could help alleviate the "Malacca dilemma" — China's vulnerability to the fact that roughly 60% of its international trade and 85% of its oil imports travel through the single choke point of the Strait of Malacca.

The CPEC projects and related developments pose numerous economic opportunities for Pakistan and neighboring countries. The projects, if implemented in an efficient and timely manner, will boost Pakistan's role in global trading networks and augment Pakistan's GDP growth rate. The infrastructure development is a first step in linking China to the Arabian Sea via an efficient route, enhancing connections between numerous South Asian states, and streamlining trans-shipment projects through Pakistan. Simultaneously, the expected substantial increases in regional trade and trans-shipment require an understanding of the trade security implications of CPEC. For trade purposes, the Gwadar Port will be designated as a Free Trade Zone, providing the area with economic benefits for foreign traders and manufacturers.

The total amount of investment that Pakistan is expected to receive will amount to 20% of its annual GDP. According to the World Bank, Pakistan's economy is projected to grow comfortably, in a modest five percent range, in each of the next few fiscal years buttressed by growing domestic demand and a rising services sector. With factoring in of CPEC investments, the GDP rate is expected to rise to 5.5 percent by 2018 and to 5.8 percent in 2019.[13] This will, if successful, contribute to an already steady GDP growth rate in the country. This includes a 4% growth rate in 2014 and 4.2% in 2015. Pakistan continues to investigate ways to increase its competitiveness and ability to connect with foreign trading partners, and CPEC is increasingly viewed as an important part of that growth strategy by many Pakistani officials. CPEC will be the best chance of transforming Pakistan's economic outlook if it sparks a wave of foreign investment from other countries, boosts industrial export, and create jobs.

At the moment, CPEC is mainly being seen as a series of project investments along the selected corridors. To achieve maximum benefits, Pakistan has to look at a comprehensive package to make the most of internal and external linkages as well as development benefits. This will require national consensus, an enabling policy and institutional environments. The investments alone will not yield the required results unless supporting policy changes are made to facilitate export growth, investments in manufacturing, skills development etc. Since the bulk of investments are in the energy sector, supporting power sector reforms and improvement of the transmission and distribution system will be essential. CPEC planners need to focus on the potential long-term regional benefits as well, involving Afghanistan, Central Asian countries, Iran and India.

Potential Risks

The CPEC project is huge and complex. Naturally there are risks associated with it which need to be recognized and mitigated. These risks are summarized below.

Political

There are both internal and external political risks. Pakistan's politics is highly polarized by competing provinces and regional, tribal, religious divisions. Building national consensus on an undertaking like this is a huge challenge. The success of the scheme on the other hand will depend on building a national consensus. The debate on the alignment of the CPEC corridor is an early example. Selection of CPEC projects/investment would pose further challenges. The fact that India is openly opposing the scheme, and a number of other countries including USA have apprehensions about it presents another set of political risks.

The CPEC also faces domestic political opposition in Pakistan, with infighting between provinces and the central government over the allocation of investments. Opposition parties have leveled accusations of preferential treatment along the eastern route, claiming the government's proposals for the distribution of services, industrial parks, and special economic zones deny some provinces access to investment opportunities and only benefits Punjab. The lack of transparency surrounding the negotiated deals has heightened concerns that only a select few, if any in Pakistan, will benefit from the investments. The best way to mitigate the political risks is to introduce transparency in the system and ensure sustained implementation progress.

Security Risks

The CPEC routes, especially the highway infrastructure, must transit through increasingly complex territory and some insurgency areas. The Pakistan Army has taken over the responsibility for securing the project areas and are working diligently on this. A special security division (13,000 + troops) comprising army battalions and Civil Armed Forces (CAF) wings has been deployed as a dedicated force for Pakistan-China economic projects. Security risks are, in a way, linked to political risks. To overcome these, the local population in the concerned areas has to see and be convinced of the potential economic benefits of the scheme.

Financial Risks

These include overall size of foreign investments having the implication of future debt burden. This is a hot topic in Pakistan with different views and analysis fueled by lack of transparency in financing arrangements. Suitability/competitiveness of financing terms of individual projects will have implications on their future success. Inflation and foreign exchange risks will have additional implications on debt repayments. In the past, Pakistan's annual FDI have been well below $1 billion. Pakistan's economy could very well have difficulties in absorbing $3-4 billion a year of FDIs, projected under CPEC. At this stage, it is very difficult to project future debt servicing burden with reasonable accuracy as the composition of the projects is uncertain and the implementation schedule is already slipping. Dr. Ishrat Hussain has attempted to make preliminary projections on CPEC's disbursements and debt liabilities.[14] He estimates that the debt burden from energy and infrastructure projects would be of the order of $3.5 billion per year (about 7% of current total F.E earnings) for a 15-20-year repayment period. Energy projects are likely to save about $1 billion a year in foreign exchange from imported fuel costs.

Operational Risks

The implementation capacity of Pakistan, and for that matter of China, for a huge undertaking of this kind is going to be a key factor. Special implementation arrangements will have to be thought through and put in place. Currently there is a perceived lack of transparency in selection, design and contracting of the projects. The normal due diligence process is essential for success of any scheme. The situation is complicated by the fact that BRI investments are different from the conventional regional economic cooperation programs, as these do not prioritize investments and trade concessions. Instead, the emphasis is on regional infrastructure connectivity. Bulk of the investments would be through commercial contracts between corporate entities on both sides with commercial loans from Chinese sources. This approach in itself poses few risks. Mitigation of the operational risks would require a comprehensive implementation frame work on the following lines:

- At the very top, there should be something like a "Council of Common Interests" to do the program oversight.
- The overall ownership of CPEC should rest with the MoPDR, and its focus should be to articulate national objectives and benefits from the project. It should not be involved as a "line agency" in project implementation. It should establish a "CPEC Secretariat" of experienced professional & to manage the program.
- The ownership of individual projects should rest with concerned provincial and local agencies. They should be responsible for project design, implementation and financial obligations.
- MoPDR should set up a special task group of professionals/specialists to review and vet the scope and design of the individual projects. They would need to make sure that each proposal is technically sound, economically feasible, financially viable, environmentally sustainable and organizationally implementable. This Group could be set up with a fixed life of say five years.
- An independent monitoring set up, in an academic setting, should be put in place to serve as an "information warehouse" for the overall scheme. This group should also monitor broad implementation progress and impact/benefits of the program.

Summary and Recommendations

The CPEC has been widely welcomed in Pakistan. It is labeled as a unique opportunity and a game changer that Pakistan has waited for quite some time. If successful, it can have long-term positive effects on Pakistan's economy, security and regional trade. The main challenge is going to be effective and efficient implementation of the scheme. The recent US-Afghan policy shifts make it essential for Pakistan to align its interests with China and others. Timely and successful implementation of CPEC becomes even more important in this scenario. To this end, following recommendations are being made.

1. Pakistan needs to recognize China's interests/objectives in promoting this initiative and define its own objectives in the best interest of the country. China's main interest is in developing an efficient and safe transit corridor from Kashgar to Gwadar for its long term geopolitical and economic interests. Pakistan must facilitate this. CPEC, in return, provides opportunities for large Chinese investments in Pakistan for its economic growth and security. Pakistan needs to develop a clear strategy on how best to achieve this at the national level.
2. The CPEC has to be depoliticized. It must be seen as a "national undertaking". Keeping politicians out of the micro decision making process will be a big challenge that has to be faced. The role of the politicians should be to define the broad framework and strategy for the scheme. The responsibility for project selection and design should be left for the professionals and stake holders.

3. Essential due diligence process for vetting the selection and design of projects must be put in place. This should be the key role of the Planning Commission (now MoPDR). This would be critical for the success of the individual projects and curbing possible corruption.
4. The CPEC projects need to be made transparent. The public needs to know what is being financed under the scheme, at what cost/terms and by whom? It might be a good idea to set up an independent "CPEC information center" in an academic setting, which can be a comprehensive warehouse for all information on this huge and long-term scheme.

Chapter

6 CPEC Scope, Status and Potential Impact

CPEC Scope, Status and Potential Impact

Khalid Sherdil

Introduction

China's global Belt Road Initiative is labelled as "1+4 strategy" consisting of the one Belt and Four Pillars. The Belt Road Initiate (BRI) has already been defined in Chapter 4. It comprises six Economic Corridors (four land based and two ocean-going), while the Road, paradoxically, is the Maritime Silk Route (and not the Silk Road, as is widely believed). China Pakistan Economic Corridor is one of the key corridors of BRI. This chapter looks at the four pillars of CPEC: (i) The Gwadar Port (ii) Infrastructure (Roads, Railways) (iii) Energy (Power, LNG) and (iv) Industries & Commerce.

The Long Term Plan (LTP) for CPEC defines seven major areas of cooperation between China and Pakistan:

1. Connectivity through an integrated transport system, and information network infrastructure
2. Energy (oil, gas, power)
3. Trade and Industrial Parks through SEZs (Special Economic Zones)
4. Agriculture development and Poverty Alleviation
5. Tourism
6. People's livelihood and non-governmental (P2P) exchanges
7. Financial cooperation in financial markets/institutions

These areas are the manifestation of the 1+4 strategy. The first three areas of cooperation (Ports, Infrastructure and Energy) provide the ingredients for achieving the seven areas of cooperation. The fourth pillar is the Industries and Commerce, which is also cross listed in the seven areas.

The current CPEC proposal, as enshrined in the LTP, proposes a total investments[1] of $53.7 billion, over the next 10-15 years.

TABLE 6.1

Current CPEC Investments

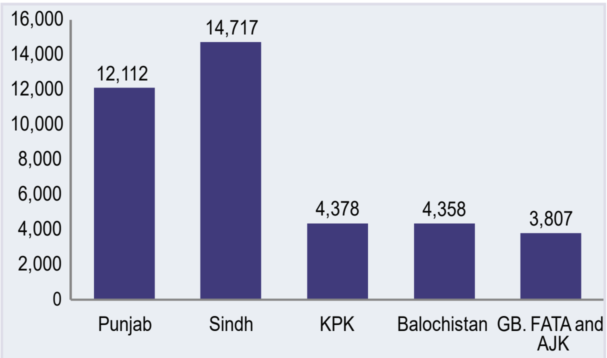
Sector	Allocated Amount $Billion	Percentage of Total
Energy	36.00	67%
Railways	10.79	20%
Roads	6.10	11.3
Gwadar Port	0.80	1.5%
Fiber Optics	0.04	0.2 %
Source: www.cpec.gov.pk		

The LTP forecasts that initial shape of CPEC will be visible by 2020, and the construction work will "be basically done" by 2025. By 2030, CPEC building strive will have been entirely accomplished: including the endogenous mechanism for sustainable economic growth in place.

Figure 6.1 depicts distribution of the CPEC investments[1] by provinces and sectors.

FIGURE 6.1

Amount Allocated by Province (Million of USD)

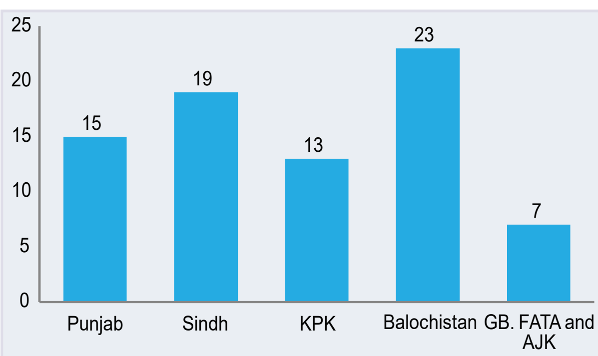


Source: www.cpec.gov.pk

The breakdown of the distribution by province indicates that Baluchistan has the greatest number of projects as shown in Figure 6.2. However, this figure covers all the projects associated with the construction of the port including construction of breakwaters, dredging of berthing channels, Gwadar East-bay expressway, construction of an internal airport and smart city development plan.

FIGURE 6.2

Provincial Distribution of Projects by Numbers



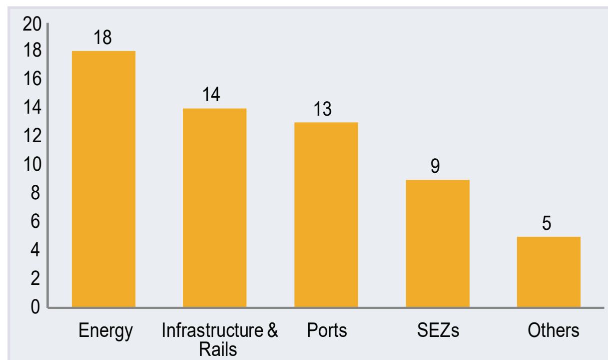
Source: www.cpec.gov.pk

Sindh has been allocated 19 projects while Punjab has a share of 15 projects. The main priority area for projects in Sindh will be allocated to the energy sector (53%) with large scale projects including the Thar Coal Block and SEC Mine Mouth Power Plant ($ 3,300 million), Enrgo Thar Coal Block II ($ 2000 million) and Matiari-Faisalabad Transmission Line Project (USD 1,500 million). In the Punjab, a significant proportion of the amount is allocated to projects dedicated to the energy sector including Sahiwal Coal-Fired power plant ($1802 million), Rahim Yar Khan power plant ($1600 million) and Quaid-e-Azam Solar Park ($1302 million).

Figure 6.3 shows that there are 18 projects allocated to the energy sector and 14 projects for Infrastructure & Rail which confirm the purpose of CPEC to firstly, support the energy needs of the country and secondly, provide channels for trade. The 13 projects allocated to ports include the supplementary projects for the running of the Gwadar and Keti Bunder Port and the infrastructural developments necessary to ensure their success. SEZs make for only nine projects suggesting that economic zones are not the key component of the CPEC.

FIGURE 6.3

Sectoral Distribution of Projects by Numbers



Source: www.cpec.gov.pk

Infrastructure Components of CPEC

A safe and efficient transit corridor between Kashghar and Gwadar is a key objective of China, which in turn would determine the success of the CPEC program. The common elements in this chain are the nearly 850 km northern part of the Karakoram Highway (KKH), from Kashghar to Burhan near Islamabad and the Gwadar port on the other end. These two happen to be the weak links in the transit chain. KKH, currently two – lane highway, passes through a rugged, unstable mountain terrain with limited cargo transit capacity. The Gwadar port has all the natural endowments but need to be developed for its full potential. If all goes well, Gwadar is projected to reach its peak cargo handling capacity in 2045.

Between Islamabad and Gwadar, there are three possible road routes, all existing to different standards. These routes called Western, Central and Eastern. For the moment, the Government has decided to designate all three alignments for development in phases.

Distance Between Kashgar to Gwadar:

- Western alignment (2,520 km, via Quetta, comprising existing section of highways N50, N85 & M8.
- Central alignment (2,190 km), via DIG Khan, N55 and M8.
- Eastern alignment (3,050 km), mostly existing motorways via Lahore, Multan , Karachi.
- The northern portion, Kashgar-Burhan , near Islamabad 850 km KKH, is common to the three alignments and is also a physical weak link.

In the first phase, preference is being given to developing the longest eastern route. The current list of CPEC roads project is mainly focusing on this route; there is only one small project for the Central route in the portfolio. It needs to be mentioned that development of the Eastern route, passing near Karachi, will undermine the development of Gwadar port. It is clearly not the cost effective solution for road transport between Kashgar and Gwadar. Strictly looking from the point of view of 'logical comparative advantage', focus of CPEC should be to upgrade the freight rail facilities on this route.

The railway component of CPEC is large, $10.8 billion, 20 % of the total program. The main element is the major upgrade of existing Peshawar–Karachi railway line, ML1, estimated to cost $8 billion. The other physical rail component is development of a 'dry port' at Havelian to link with the road system to Kashgar. These project are at feasibility stages (see Figure 6.4).

Inclusion of mass urban transport schemes for Karachi (Circular Rail) Lahore (Orange Line), Peshawar and Quetta also received due attention within CPEC framework.

Gwadar Port: The Core Component

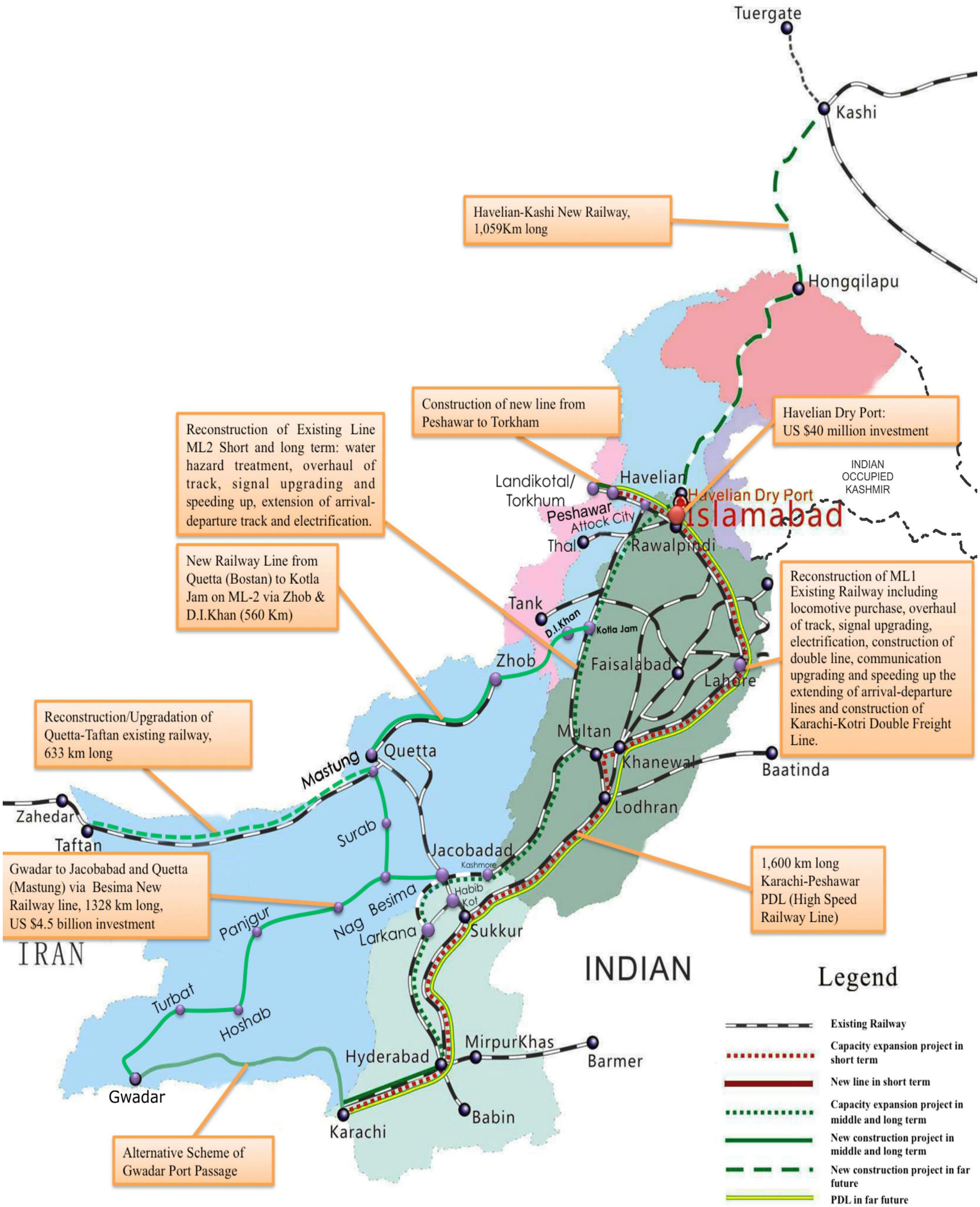
Gwadar port, located in western Baluchistan, will have a channel depth of up to 20 meters, with 80 berths. It will also have off-shore oil loading/unloading facility. Compared to Karachi, the draft and number of berths is significantly higher. Aerial view of Gwadar port is shown in Figure 6.5. The Gwadar port projects included in the current CPEC program include: dredging of the berthing areas, construction of breakwaters, development of free zone, an international airport and ancillary facilities. Most of these proposals are at planning stages. However, the following land used planning figures prominently in Gawadar port development.

The Multi-Use area 1 (146 hectares) will have a multi-purpose terminal with storage. Multi-use area 2 (924 hectares) is reserved for free zone and will have container storage and provision for commercial development. Industrial area 1 (2,620 hectares) is for port related industrial land for clean dry bulk: liquid bulk, chemical factories, food processing, oil & fat related industries, etc. It is also the potential location for Export Processing Zone (EPZ). Industrial area 2 (5,000 hectares) is for port related industrial land for heavy industries, including oil refineries, petrochemicals, LNG, power, steel, cement, ship breaking, minerals, etc.

Gwadar is expanding at a rapid pace. Gwadar is

FIGURE 6.4

Railway Network of CPEC



Source: http://cpec.gov.pk/maps

FIGURE 6.5

Aerial View of Gwadar port

Source: Google Earth

surrounded by sea from three sides, and the fourth northern side is the coastal highway. Along the entire coast, the Eastern Bay Expressway and the Western Bay Expressway will provide the road network. The new proposed airport, and the cantonment, however, will be even beyond these boundaries. The old Gwadar town is at the hammer head and the area adjoining to it. However, it is being shifted out, and land has already been acquired. Although there is no construction near the coastal highway, giving a barren deserted look, the prices of land have increased significantly due to speculative trading.

Energy Components of CPEC

Energy has been a major focus for the ruling Government. As mentioned above 67% of the available CPEC funds are allocated to the energy sector. The BRI developments in other countries/corridors do not reflect such high emphasis on energy sector. Pakistan, no doubt, is suffering severely from energy shortages. The rationale behind the proposal is that energy is needed to drive the industrial and commercial growth envisioned by CEPC. This huge energy program is going to pose serious challenges in terms of financing and implementation. The financing for the energy projects is going to be on commercial lines, i.e. IPP mode. (17 + rate of return on equity investments of foreign investors and a risk free return through Sovereign Guarantees by the federal state). A number of ongoing energy projects have been incorporated in the CPEC umbrella; net energy investments are thus going to be less. Past Chinese experience in energy projects in Pakistan and elsewhere has had some serious problems. Special efforts need to be made to learn from the past experience. A complete list of proposed energy projects is given in Annex 1. These include thermal, hydro, solar and wind projects. Most of the new projects proposed are at planning stages and will have a long gestation period.

Industry and Commerce components of CPEC

One of the major challenges for the government is to formulate the Commerce Policy, and the Industrial Policy with emphasis on realistic incentive structure and relief on trade tariffs, subsidies or tax reliefs to the industries etc., based on long term objectives as opposed to short term gains e.g. tax receipt targets established by Ministry of Finance and FBR. Similarly, the Free Trade Agreements (FTA) need to be executed and well thought out with a view to stimulating commerce and trade, and decreasing trade deficit with the signatory country. The combined bilateral trade is less than 0.5% of China's total foreign trade. During the negotiations for Pak-China FTA, Pakistani policy makers should have included livestock (frozen boneless meat), garments and value added textile items, which are our inherent export strengths. At the same time, there is a need to rationalize the tariff structure of our top exports such as leather goods and cotton yarn which seem to have higher tariffs than the ASEAN countries. It may be noted that our primary exports are raw materials or primary products (or labor intensive products) such as cotton yarn ($889 mill, 47%), rice ($133 mill, 6%), woven fabric of cotton ($88 mill, 5%), ethanol ($73 mill, 4%), etc.[3] Our imports from China are industrial products. In 2015, our exports were $1.93 billion while imports were $11 billion, giving a trade deficit of $9.08 billion (increased to $12.09 billion in 2016). When the FTA was signed in 2007, the deficit was only $2.41 billion (2006).

There is also an urgent need to improve customs mechanisms and institutional capacity to check illicit trade and cross border smuggling. The CPEC transit trade from Gwadar to Sust over a 2500 km route, is likely to diffuse within Pakistan rather than reaching its ultimate destination of China or elsewhere. This would have grave implications on the legal trade as illicit and smuggled goods will not only be highly detrimental to sustainability of (already high-tariff) legal trade but will also decrease the revenues generated by import duties, causing further harm to the exchequer and forex reserves.

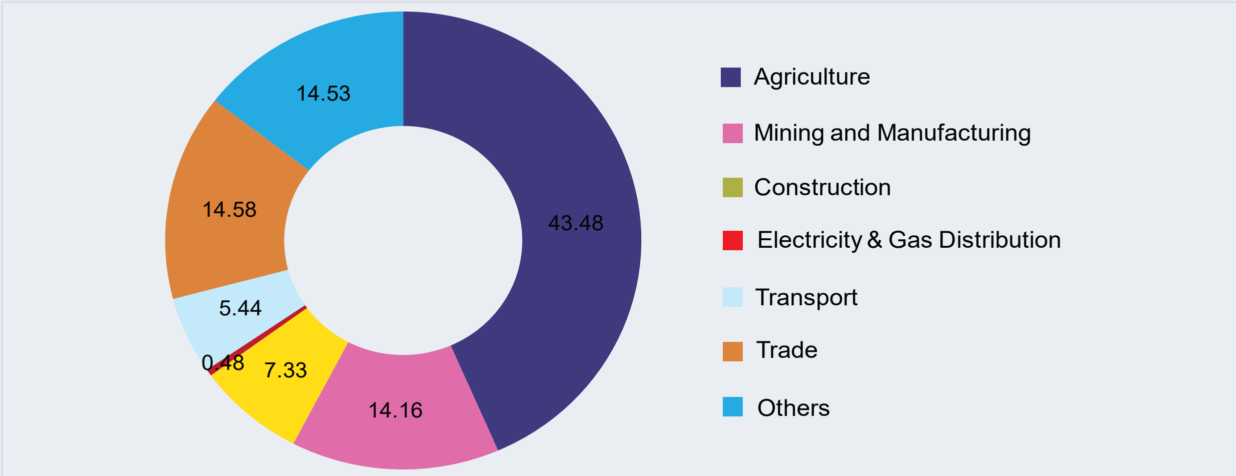
The other challenge for Pakistan is the lack of global competitiveness of our industry primarily owing to poor economies of scale, non-existent Research & Development, absence of appetite for innovation and technology, lack of legal reforms and credit financing, etc. This makes our industrialists vulnerable to the deluge of Chinese competitive products. Proponents for globalization, free trade and open economies would argue that it is better for the end user/consumer to have an efficient open economy rather than protecting the uncompetitive local manufacturers. The Pakistani reality, however, is that besides the economic and financial calculations, the social and environmental costs of displacing local jobs and burning fossil fuel to transport the items from other countries must be factored in. Without going further into this global debate, it is of utmost importance to renegotiate the FTA with China to avail the full benefits of CPEC and to stimulate the local manufacturing sector and economic activity.

Labor Force and Unemployment: Pakistan has world's 5th largest population of over 210 million (after addition of AJK/GB populations), of which 55% is below the age of 30.

Pakistan has the 10th largest labor force of 61.05 million (2015), of which 57.42 million are employed. Consequently, the unemployment is merely 6% as per the official narrative. But an in-depth analysis (Figure 6.6) will show that 43.8% of the employment is in Agriculture, where the real data is not available.[4] In most cases, our farmers

FIGURE 6.6

Sector Wise Employment



Source: www.cpec.gov.pk

TABLE 6.2

Pakistan's Total Labor Force vs Employed and Unemployed (in Millions)

Year	Total Labor Force	Employed	Unemployed	Unemployed (%)	Yearly Increase in Labor Force	Yealry Increase in Unemployment
2014-15	61.04	57.42	3.62	5.9	0.94	0.04
2013-14	60.1	56.42	3.58	6.0	0.36	-0.15
2012-13	59.74	56.01	3.73	6.2	1.25	0.33
2011-12	58.49	54.93	3.565	6.1	**1.25**	**0.17**
2010-11	57.24	53.84	3.4	5.9	**0.91**	**0.28**
2009-10	56.33	53.21	3.12	5.5	2.61	0.19
2008-09	53.72	50.79	2.93	5.5	1.94	0.24
2007-08	51.78	49.09	2.69	5.2	1.45	0.01
2006-07	50.33	47.65	2.68	5.3	0.28	-0.42
2005-06	50.05	46.95	3.1	6.2		
	Average	52.6405	3.2415		1.22	0.08
	Decade Total	10.47	0.52		10.99	0.0578
	2005-15	95.3%	4.7%			

520000 unemployed added per year, or 5.2 million in one decade Labor Force increased by 10.99 million of which 4.7 percent or 520,000 did not get jobs

are indicated as fully employed but actually are under-employed, with large families working on small sized farms.

According to government estimates, the unemployment has fallen from 6.2% down to 5.9% over last decade. It is also advocated that this unemployment rate is not alarmingly wrong, since various developed countries generally experience unemployment rate of 7-8%. However, a deeper analysis reveals that due to our exceptional youth bulge (55% of population below 30 and rapidly increasing) and a steeply growing work force, on average 520,000 unemployed are added in the market annually. Hence during the last decade, another 5.2 million unemployed were added i.e., the labor force grew by 11 million, from 50 million in 2005 to 61 million in 2015 thus adding 5 million unemployed in our streets.

CPEC and the accompanying projects should therefore be so conceived as to ensure creation of job opportunities for the youth as also accompanied with prudently designed additional investments especially in the high unemployment areas to spur inclusive growth.

Special Economic Zones (SEZs): There seems to be little realization that in the immediate and medium term horizon, the solution to the unemployment issue and to the ever increasing trade deficit is to incentivize agricultural and industrial growth. CPEC provides us with an opportunity to stimulate agro-industrial growth which if not properly utilized it is likely to lead to merely commerce and trade growth at the cost of agriculture and industry and to the deluge of cheaper goods from China and other FTA countries. This entails formulation of robust policy frameworks for agriculture and industry of which Special Economic Zones (SEZs) are the most potent instruments.

Pakistan should also take advantage of China's industrial restructuring, entailed by its declining labor force competitiveness, to establish or incentivize relocation of, for example, small scale low-tech industry to Pakistan. As such, SEZ should be so scaled and planned to cater to such a translocation.

Industrial development is one of the key drivers of economic growth as exemplified by the case of the Asian Tigers. Special Economic Zones (SEZ) are a critical strategy for the promotion of trade, employment and economic growth in a country. According to the ILO (2010), there has been significant growth in SEZs in the last three decades from 176 SEZs in 47 countries to 3500 in 130 countries in 2006.[5] With the market in Pakistan suitable for investment in energy, automobile, textile, surgical equipment, infrastructure, engineering, agriculture, minerals and SMEs and a population of 210+ million people, the economy has an increasing demand for multiple products. Pakistan is, therefore, a key market for investment in Asia. Pakistan offers various exemptions on taxes and duties in the SEZ for developers and enterprises.

In Pakistan, the SEZ Act was promulgated on 13th September, 2012. As opposed to other industrial estates, an SEZ provides the following benefits:

- Tax holiday on income, for 10 years, for industries within the SEZ which begin business operations by 2020 (and 5 years thereafter): this makes the products competitive compared to non-SEZ industries
- One-time exemption from all initial custom duties and taxes on import of plant and machinery. This includes exemption from initial duties, GST and import surcharges, saving on average 22%. Hence, a factory which costs PKR 1 billion would have to pay an additional PKR 220 million (PKR 22 crores) if it's not in an SEZ. Since several industries use bank financing, this means that they have to pay interest on 22% extra for the entire financing Term-Sheet. Hence at times, it is this 22% factor alone, which can change a feasibility for an industry from positive to negative

However, an ideal SEZ may provide the following benefits:

- Provision of captive power as primary source, with the secondary power coming from DISCOs. In fact, all the existing Industrial Estates of Pakistan are running on primary power from DISCOs and are susceptible to load shedding. And none of them as yet has even secondary captive power generation, to make up for any disruptions in the primary supply. Further, none of the Industrial Estates as yet (including Sunder) has Distribution License for providing power to their industries even if they can install a captive power generation plant. This position is going to change soon, in light of recent NEPRA ruling which now allows for Industrial Estates to obtain Distribution rights, though that too at times after obtaining an NOC from the DISCOS (something which the DISCOS don't want to allow).

- Wheeling of power: once the distribution license is obtained, the SEZ can also resort to Wheeling, a process in which a power plant (say a coal fired plant) may be set up at the coast, and the power wheeled to Attock, without actually physically being transported, hence saving line losses.
- Lower electricity tariffs, down to 8 cents per unit (watt-hours), compared to the average tariff of 14 cents paid by the Punjab Industrial Estate Development and Management Company (PIEDMC) industrial estates. In fact, at 14 cents, Pakistani industry does not remain competitive with neighbors such as India and China, which provide cheaper power.
- Cutting of all the expensive power taxes, because the power will be used from a captive source instead of the grid. It is important to note that some sources of Ministry of W&P claim that they provide power to industrial estates at less than 10 cents, but they fail to consider the tax, and the various slabs, which raise the rate to 14 cents
- Provision of centralized quota of gas. With the advent of LNG, the only bottleneck in provision of gas is a quota in the gas pipeline. Once the planned 1.2 billion cfd pipeline from South to North is completed (which is likely within the next three years), the SEZ would be able to provide ample quota of gas supply. LNG will be slightly more expensive than CNG (or the Sui Gas), but will be considerably cheaper than LPG.
- Cheaper centralized water treatment facilities
- Provision of steam, as a by-product of the Power Plant. Steam is needed by several industries, including garments sector, and is more economical when centrally produced and shared
- Provision of large amounts of water for industrial processes, such as for cooling. In case of Attock, this can be through ample river water
- One Window Operation, whereby various government offices, such as the Labor, Police, Post Office, etc., can be requested to provide their help desks within the Industrial Estates
- Ready to move in environment, for quick plug-n-play deployment of industry, as opposed to adopting a tedious process of developing your own land
- Certain industrial parks even provide a pre-fabricated building (in form of large sheds) which can be customized by individual industries. This saves extensive construction time, and can also be shared collectively by smaller industries

Unfortunately, Pakistan has one of the poorest incentives structure in the entire region for promoting industries. A regional comparison shows that it is more expensive to install and maintain industries in Pakistan as opposed to our competitors such as China, India, Vietnam, Sri Lanka, Bangladesh, etc. Hence, SEZs provide the only alternative for industrialists to launch any new venture.

Some of the above mentioned competitors provide the following benefits to their industries which Pakistan does not provide:

- Provision of free land (including free ownership and not just lease). Note that China also provides free land, but technically all land in China is owned by state, and hence it is leased for 40 years. However, since feasibility studies of industries usually take 30 to 40-year life for an industry, such a long lease may be considered as free
- Whereas Pakistani industrial estates do provide leasing option, the lease cannot be transferred

nor put up for mortgage, something which is possible in China

- In China, for foreign investors, the construction land is exempt from land-use fees for five years, and thereafter the fees are halved (50%) for another five years. In Pakistan there is no such exemption for local nor for foreign investors
- Upon termination of the 10-year tax holiday, Pakistan has the highest corporate income tax structure in the region, of 31% (recently revised down to 30%). Some of our regional competitors charge not more than 22%
- Various competitors specify categories of specialized industries which have even higher incentives. Since Pakistan does not have any industrial policy, it treats all industries at equal footing. In China, for example, the following industries are given extra incentives:
  - Industries with investment of over $10 million
  - High-Tech or Technologically advanced industries
  - Industries with major influence on the local economic development. For example, the Vehari industrial state should have incentives for industries which add value to the produce of local farmers

Pakistan's Ease of Doing Business ranking is 144, one of the lowest in the world, and is on decline. A comparison of incentives between China and Pakistan, is given in Table 6.3.

Pakistan's Existing SEZs: Currently Pakistan has notified the following SEZs.

- Khairpur Special Economic Zone, Sindh (136 Acres)
- Korangi Creek Industrial Park, Sindh (240 Acres)
- Bin Qasim Industrial Park, Sindh (930 Acres)
- Quaid-e-Azam Apparel Park, Sheikhupura, Punjab (1,536 Acres)
- M-3 Industrial City, Faisalabad, Punjab (4,356 Acres)
- Value Added City, Faisalabad, Punjab (225 Acres)

TABLE 6.3

Comparison of China and Pakistan's Industrial Incentives

Incentive in China	Incentive in Pakistan
• Corporate Tax of 15% after holiday • A benefit of "2 + 3 years" which means anexemption from tax for the first two yearsand tax at the rate of 12.5% for the next three years. • For certain projects in basic infrastructure, environment protection and energy there is a "3+3" years tax holiday. • Under certain terms enterprises investing in integrated circuits production can get a"5+5" years tax holiday. • 100% owned by foreign capital.	• Corporate Tax of 31% • One-time exemption from all custom duties and taxes for all capital goods imported into Pakistan. • Exemption for Developers from all taxes on income in relation to the development and operation of SEZ for a period of 5 years. • Exemption for Enterprises on all taxes on income for a period of 10 year starting commercial operations by 30th June, 2020. • 100% owned by foreign capital.
• Import license free. • Duty free/bonded for all imported goods (manufacturing and office equipment's, components etc.) • No VAT in the Zone. • Goods (including public utilities) export to EPZ from China qualified for VAT rebate. Simplified customs clearance procedures, • 24/7 schedule.	• Defective goods/waste can be sold in domestic market after payment of applicable duties • Obsolete/old machinery can be sold in domestic market. domestic market available to the extent of 20%. • Presumptive Tax @ 1%. • No sales tax on input goods. Duty free import of machinery, equipment and material.

- Hattar Economic Zone, Haripur, KP (424 Acres)

The most prominent and major ones, such as the M3 Industrial City, were notified as far late as in 2016. Some such as the Quaid-e-Azam Apparel Park, are notified yet never developed. Without gas and electricity, there is no point in developing an SEZ. Table 6.4 shows the status of energy access in our SEZs.

Proposed SEZs for CPEC Pakistan seem to have followed the traditional path of provincialism whereby all the provinces need to be accommodated for establishing SEZs. Two SEZs per province (and one for GB) have been recommended, as shown in Table 6.5. However, even in this list there is a controversy between the Hattar and Rashakai, with KPK trying to convince the Chinese to follow what it believes is better for the province.

TABLE 6.4

Provision of Gas and Electricity in SEZs

S. No.	Name of SEZ	Electricity	Gas
1	Khairpur Special Economic Zone, Sindh	Electricity (5MV) provided by SEPCO in July 2016	Summary for relaxing ban approved by PM
2	Korange Check Industrial Park, Sindh	Developer did apply as they intend to produce through captive power Generation	SSGC agreed to provide gas
3	Bin Qasim Industrial Park, Sindh	4MV provided	Not provided Developer has applied but due to moratorium it is still pending
4	Quaid-e-Azam Apparel Park Sheikhupura, Punjab	120 MV load application under process	Application under consideration Developer requested for waiver of moratorism
5	M-3 Industrial City, Faisalabad, Punjab	Facilty provided through 132KV VAC Grid Station	Not provided as yet
6	Value Added City, Faisalabad, Punjab	Facilty provided through 132KV VAC Grid Station	Not provided as yet
7	Hattar Economic Zone, Haripur, KP	• Application for 132KV grid under process • Partial payment made by KP government • transfer of land of grid station awaited from GoKP	Ministry of P&NR agreed to provide gas for power generation

TABLE 6.5

Proposed SEZs in CPEC

S. No.	Project Name
1	Rashakai Economic Zone , M-1, Nowshera
2	China Special Economic Zone, Dhabeji
3	Bostan Industrial Zone
4	Punjab - China Economic Zone, M-2 District Sheikhupura
5	ICT Model Industrial Zone, Islamabad
6	Development of Industrial Park on Pakistan Steel Mills Land at Port Qasim
7	Bhimber Industrial Zone
8	Mohmand Marble City
9	Moqpondass SEZ Gilgit-Baltistan

Conclusions

In order to utilize the full potential of CPEC, Pakistan needs a "paradigm shift" from a security state to a development state; from parochialism and provincialism to well focused nationalism; from concentrating economic growth to diffusing it more equitably; and from ad hoc reactive to rational and evidence based design of the policy and development frameworks where pursuit of internal peace and harmony and rights and equity based approach promote a culture of internal reform. This demands a reassessment and re-evaluation of three decades of adventurist policies. This would be analogous to the internal socioeconomic reform of China which has brought it peace within and abroad, setting an example of pursuing skillful diplomacy to consolidate development. CPEC should, in particular, generate employment and raise the standard of living of the marginalized poor including the "Naraaz Baloch," bringing them into mainstream for stable, equitable and sustainable development of the country.

Annexure 1
Summary Status of CPEC Projects

Project Name	Amount (in million of USD)	Current Status	Sector	Province
Suki Kinari Hydro-power Station, Naran	1,980	Commercial Operation Date (COD) 2021/2022.	Energy	KPK
Sahiwal 2x660MW Coal-fired Power Plant	1,802	Project completed-Operational	Energy	Punjab
Engro Thar Block II Coal fired Power Plant	2,000	COD June, 2019	Energy	Sindh
Surface mine in block II of Thar Coal field	1,470	COD expected 2018/2019	Energy	Sindh
Hydro China Dawood Wind Farm (Gharo, Thatta)	125	Operational (since 5th April 2017)	Energy	Sindh
300MW Imported Coal Based Power Project at Gwadar	1,302	Need approval of Balochistan EPA	Energy	Balochistan
Quaid-e-Azam 1000MW Solar Park (Bahawalpur) Quaid-e-Azam	1,302	In progress	Energy	Punjab
UEP 100MW Wind Farm (Jhimpir, Thatta)	250	Operational	Energy	Sindh
Sachal 50MW Wind Farm (Jhimpir, Thatta)	134	Project COD (11 April 2017)	Energy	Sindh
SSRL Thar Coal Block-I 6.8 mtpa &SEC Mine Mouth Power Plant(2×660MW)	3,300	COD 2020	Energy	Sindh
Karot Hydropower Station	1,420	COD 2020/2021	Energy	Punjab
Three Gorges Third Wind Power Project	150	COD September, 2018	Energy	Sindh
CPHGC 1,320MW Coal-fired Power Plant, Hub	1,940	COD 660 MW Dec 2018, 660 MW Aug 2019	Energy	Baluchistan

Matiari to Lahore ±660kV HVDC Transmission Line Project	1,500	COD expected in 2018 / 2019	Energy	Sindh and Punjab
Matiari (Port Qasim)—Faisalabad Transmission Line Project	1,500	COD expected in 2018 / 2019	Energy	Sindh and Punjab
Thar Mine Mouth Oracle Power Plant (1320MW) & surface mine	1,300		Energy	Sindh
Kohala Hydel Project	2,397	Expected COD 2023	Energy	AJK
Rahimyar khan imported fuel Power Plant 1320 MW	1,600	Feasibility in process	Energy	Punjab
KKH Phase II (Thakot -Havelian Section)	1,366	Havelian- Abbotabad-Mansehra (39 KM) section will be completed by May, 2018	Infrastructure	Gilgit Baltistan & KPK
Peshawar-Karachi Motorway (Multan-Sukkur Section)	2,980	04 out of 07 sections to be completed by April, 2018.	Infrastructure	Punjab & Sindh
Khuzdar-Basima Road N-30 (110 km)	80	Feasibility and PC-I completed	Infrastructure	Baluchistan
Upgradation of D.I.Khan (Yarik) - Zhob, N-50 Phase-I (210 km)	195	PC-I Approved by ECNEC on 12th April, 2017 Land acquisition in Progress	Infrastructure	KPK - Balochistan
KKH Thakot-Raikot N35 remaining portion (136 Km)	720	Feasibility and PC-I completed	Infrastructure	
Expansion and reconstruction of existing Line ML-1	8.172	Feasibility completed Framework Agreement signed	Infrastructure	Punjab, KPK & Sindh
Havelian Dry port (450 M. Twenty-Foot Equivalent Units)	65	Feasibility completed Request for Chinese financing submitted on 29th Nov, 2016	Infrastructure	KPK
Karachi Circular Railway	-	PC-I of KCR approved from CDWP	Rail-based Mass Transit Projects	Sindh

Greater Peshawar Region Mass Transit	-	PC I is expected to be finalized by the end of first quarter of 2018	Rail-based Mass Transit Projects	KPK
Quetta Mass Transit	-	JWG on Transport Infrastructure has been asked to complete the necessary formalities	Rail-based Mass Transit Projects	Baluchistan
Orange Line - Lahore	-	Construction work underway	Rail-based Mass Transit Projects	Punjab
Keti Bunder Sea Port Development Project		Projects referred to concerned JWGs for consideration	New Provincial Projects	Sindh
Naukundi-Mashkhel-Panjgur Road Project connecting with M-8 & N-85		Projects referred to concerned JWGs for consideration	New Provincial Projects	
Chitral CPEC link road from Gilgit, Shandor, Chitral to Chakdara		Projects referred to concerned JWGs for consideration	New Provincial Projects	KP & GB
Mirpur – Muzaffarabad - Mansehra Road Construction for connectivity with CPEC route		Projects referred to concerned JWGs for consideration	New Provincial Projects	
Quetta Water Supply Scheme from Pat feeder Canal		Relevant Provincial Govts. to work out proposals on implementation of projects	New Provincial Projects	Baluchistan
Iron Ore Mining, Processing & Steel Mills complex at Chiniot		Relevant Provincial Govts. to work out proposals on implementation of projects	New Provincial Projects	Punjab
Rashakai Economic Zone , M-1, Nowshera		Work on SEZs to be initiated on priority	SEZs	KPK
China Special Economic Zone Dhabeji		Work on SEZs to be initiated on priority	SEZs	
Bostan Industrial Zone		Work on SEZs to be initiated on priority	SEZs	
Allama Iqbal Industrial City (M3)		Work on SEZs to be initiated on priority	SEZs	Punjab
ICT Model Industrial Zone		Work on SEZs to be initiated on priority	SEZs	Punjab

Development of Industrial Park on Pakistan Steel Mills Land at Port Qasim near Karachi		Work on SEZs to be initiated on priority	SEZs	Punjab
Special Economic Zone at Mirpur		Work on SEZs to be initiated on priority	SEZs	AJK
Mohmand Marble City		Work on SEZs to be initiated on priority	SEZs	FATA
Moqpondass SEZ Gilgit-Baltistan		Work on SEZs to be initiated on priority	SEZs	Gilgit Baltistan
Gwadar East-Bay Expressway	141	Minutes of EAD-MOFCOM signed	Gwadar	Baluchistan
New Gwadar International Airport	230	Grant request is being processed by Chinese Side	Gwadar	Baluchistan
Construction of Breakwaters	123	Draft MoU for joint Technical and Commercial Feasibility has also been Prepared and being vetted by concerned Ministries	Gwadar	Baluchistan
Dredging of berthing areas & channels	27	Draft business plan has been received from Chinese (COPHCL), under review by MoP&S and GPA	Gwadar	Baluchistan
Development of Free Zone	32	1st phase completion date is December 2017	Gwadar	Baluchistan
Necessary facilities of fresh water treatment, water supply and distribution	130	Draft Framework Agreement shared with Chinese side and likely to be signed soon	Gwadar	Baluchistan
Pak China Friendship Hospital	100	LOE is expected to be signed in 2017	Gwadar	
Technical and Vocational Institute at Gwadar	10	MoU likely to be signed soon	Gwadar	Baluchistan

Gwadar Smart Port City Master Plan	4	The case is being processed on fast track to ensure completion within twelve months	Gwadar	Baluchistan
Bao Steel Park, petrochemicals, stainless steel and other industries in Gwadar		Necessary approval process would be completed at the earliest for inclusion as new CPEC Project under Gwadar JWG	Gwadar	Baluchistan
Development of Gwadar University (Social Sector Development)		Chinese side will identify a leading Chinese university for collaboration with University of Gwadar on marine & maritime related subjects along with other disciplines	Gwadar	Baluchistan
Upgradation and development of fishing, boat making and maintenance services to protect and promote livelihoods of local population		COPHCL would take effective measures for social sector development	Gwadar	Baluchistan
Cross Border Optical Fiber Cable	44	Expected Completion Dec 2017	Others	
Pilot Project of Digital Terrestrial Multimedia Broadcast (DTMB)		Completed	Others	
Early Warning System (EWS), Pakistan Meteorological Department		PC-I for CPEC is being revised in light of CDWP observations	Others	

Chapter

7 China Pakistan Economic Corridor: Trade and Agriculture

China Pakistan Economic Corridor: Trade and Agriculture

Mahmood Ahmad

Part 1
Introduction

China Pakistan Economic Corridor (CPEC) project has, interalia, two dimensions. The first is to develop a new trade and transport route from Kashghar in China to Gwadar Port in Pakistan. The second is to develop special economic zones along the route, supported with power projects. The ultimate objective is to stimulate export led growth for Pakistan. The problem with CPEC at this initial stage, however, is that even after two years of planning, it is largely conceived as a transport and energy project and less as a possible engine of growth with better regional connectivity. It is, therefore, absolutely critical to establish a clear narrative or vision as to how CPEC's potential could be maximized to lay the foundations for sustainable economic development and growth in Pakistan. The experts are of the view that in the short to medium term, it would be more feasible to harvest the low hanging fruit, and for the purpose agriculture sector should be accorded high priority. Recently introduced long term CPEC plan 2017-30 recognizes the need to focus on the agriculture sector.

Against this backdrop, this chapter will discuss briefly: (a) how CPEC can stimulate development of competitive agriculture and agro-industry; (b) what adjustments are needed in the trade regime; and (c) which clusters of agriculture value chains with clear comparative advantage in producing a diversified crop mix need to be promoted in the four corridor zones to fully benefit from the CPEC project.

The major challenge however is to translate the comparative advantage into competitive advantage for which there is not only a need to develop clusters of commercially viable farming, processing and service firms located in specific geographical areas but also to adopt good global production and trade practices. Trade policies are extremely important to establish competitiveness. It may also be underscored that Pakistan's trade is dominated by agriculture and agro-based products and would continue to be so for some time to come.

Trade: CPEC's Mutual Benefits

The CPEC appears to be a very crucial project for both the countries. For China it provides an alternate secure and cheaper route to import energy and find new markets for its goods and services in view of the reduction of distance from Central China to the Middle East by 7580 miles, and more than 10,000 miles from Western China. It would open new trade venues for China at a much lower cost. It will also improve competitiveness of China by minimizing the fuel and travel time from 45 days to 10 days besides avoiding the security and robbery risks via sea bound Malacca route. The opening and associated potential for industrialization of the ostracized Xingjang province is another significant advantage for China. Table 7.1 below captures the savings to China in terms of distance:

TABLE 7.1

Saving in Terms of Distance (via Shanghai vs Gawadar)

Sr No.	From	To	Via Shanghai (miles)	Via Pakistan (miles)	Saved (miles)	Saved (% age)
1.	Central China	Middle East	11206	3626	7580	68
2.	Central China	Europe	17801	10928	6873	39
3.	Central China	Pakistan (Gawadar)	10601	3081	7520	71
4.	Western China	Middle East	12537	2295	10242	82
5.	Western China	Europe	19132	9597	9535	50
6.	Western China	Pakistan (Gawadar)	11932	1750	10182	85

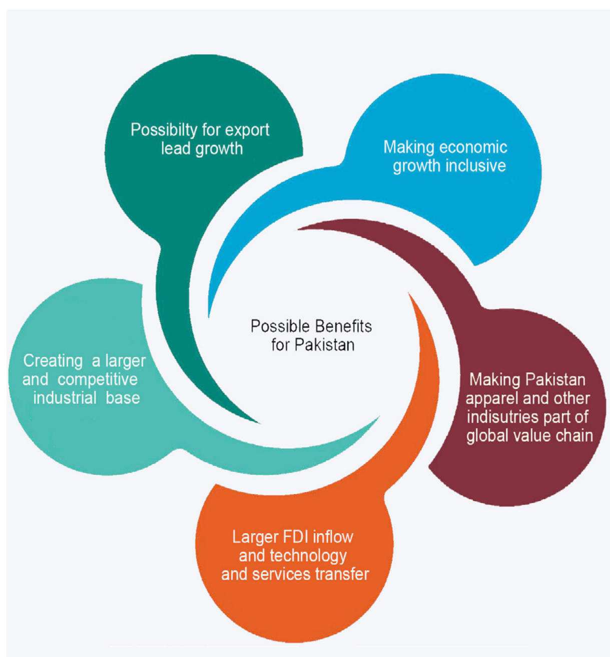
Source: Pakistan's Potential as a Transit Trade Corridor and Transportation Challenges, p. 268

For Pakistan, CPEC will help position itself as a major transit point connecting Eurasian region with South Asia and South East Asia; provide a much needed base to kick start its economic growth; and politically thwart external attempts to isolate Pakistan from the rest of the region. The figure 7.1 provides a summary of expected benefits to the economy.

CPEC is expected to provide a major growth opportunity for Pakistan by improving physical connectivity and functioning of the markets, while generating economies of scale in agriculture and industry. The connectivity through corridors and highways will also provide impetus to public and private investments in "hardware" (transport and business-infrastructure), "software" (policy and regulatory framework), "technoware" (ICT integrated solutions for crop-cycle, supply chain management and marketing) and "orgware" (institutional strengthening and capacity building).[1]

FIGURE 7.1

CPEC Possible Benefits



CEPC and Pakistan Trade Prospects

Pakistan imports more than it exports, a gap which is widening since 2013-14 when exports peaked at $25 billion (UN Com Trade 2017), but since have had a decline of 20%. Never before in our history had we experienced such a large trade deficit, even though the prices of two major imports, crude oil and edible oil have declined over time, thus reducing import cost by significant levels. The causes of this export decline have briefly been documented in Chapter 2 and in detail in BIPP's last year report 2016 and are largely attributed to: over valued exchange rate by at least 20%, a weak global demand for commodities we export, adoption of an import substitution policy rather than export promotion and, most importantly, a declining level of competitiveness indicators.

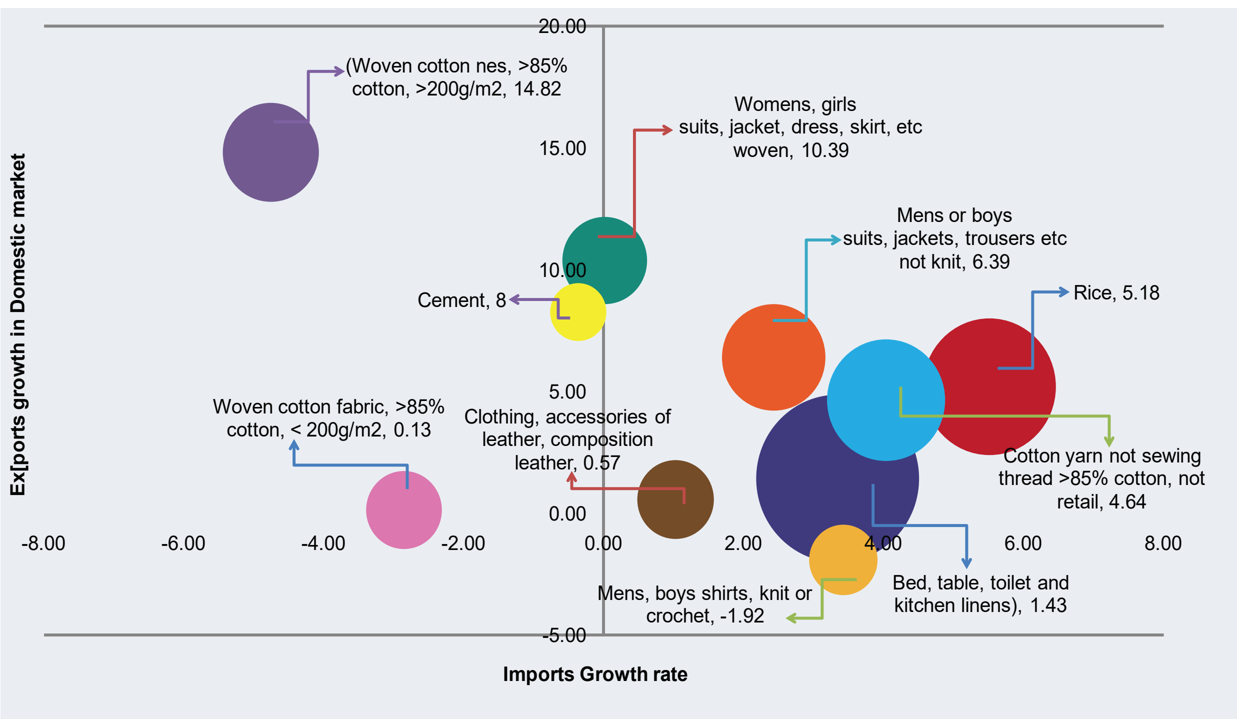
Figure 7.2 provides an insight into competitiveness of our top ten exports. Bed sheets, table clothes, toilet and kitchen linens top the export list in value terms, indicating a clear case where Pakistan's export growth in these commodities is not at par with growth in the world markets. Rice, the second most important commodity, is performing well as growth in export is more than the world average though its share of the world market is on the decline. Cotton Yarn is also doing well with slight growth in its share of the world market.

Then, we have sets of commodities (woven cotton, suits and jackets for men and women) that are growing well in the world market, but exports from Pakistan are showing either a decline or a rate lower in comparison. It is obvious that our market share for these commodities is on the rise. Finally, we have commodities (women cotton fabric) that are growing in a declining world market or the product (men's boys' shirts) which is declining in growing markets. Our analysis indicates that we are trading in low value agriculture commodities with very uncertain markets; most of our competitors are outperforming us on grounds of both quality and price.

How can CPEC help turn export performance around? With back bone energy/transport infrastruc-

FIGURE 7.2

Pakistan Competitiveness: Trade Matrix 2005-15



Source: UN Comtrade - Computation by BIPP Research Team ture in place, Pakistan needs to take a set of both structural and policy changes to undertake deep trade reforms. A cosmetic and half hearted approach followed in the past would mean forgoing another opportunity. We recommend the following:

1. It is advisable for Pakistan to improve breadth of textile production and diversify its exports in other sectors/commodities that are low volume but high value.
2. We need to map countries/regions in terms of potential they offer as trading partners — which commodities they are importing with consistent growth, do we have a comparative advantage and the required competitiveness in commodities they want most?
3. Under CPEC, we should invest in commodities that are not growing in regional or world markets.
4. We should shift to a policy regime that promotes exports rather than existing policy of import substitutions. The commodities that are being promoted for exports are also the one that are affected the most by unfavorable incentive structure — high cost of inputs, lack of supporting infrastructure like electricity, gas, water, feeder roads and access to credit are few to name.
5. Incrementally, we should move out of agriculture based raw products as lead exports or products exported by small and medium enterprises that carry low values and volumes. On policy reforms, there is a need to incrementally devalue the currency; this will discourage import of cheap goods and at the same time provide a competitive price for our exports.
6. To leverage exports to new expanding markets like Economic Corporation Organization (ECO) region and part of Africa, a bigger incentives package should be introduced.
7. The trade or import profile of China and India is important; Pakistan needs to focus more on these two markets, especially China which would provide opportunities under CPEC for better market access and trade integration.

Pakistan Trade Prospects – with Special Reference to China, India, ECO and Beyond

Within a span of three decades, China has become an economic giant, growing at a rate of 6 to 10 %, with exports rising to $2.2 trillion and now is also a major importer of $1.9 trillion. Its exports to Pakistan have also increased from $3.5 billion in 2006-07 to $13.7 billion in 2014-15, showing a quantum jump. On the other hand, Pakistan's exports rose only to $2.1 billion in 2014-15 from $575 million in 2006-07 but dropping to 1.6 in 2015-16, showing a declining trend.[2] A Ministry of Commerce report revealed that Pakistan could not utilize the concessions granted by China under the first phase of China Pakistan Free Trade Agreement (CPFTA). It only exported in 253 tariff lines, where the average export value was $500 or more, which was around 3.3 % of the total tariff lines (7550) on which China had granted concessions to Pakistan.[3] It is clear that Pakistan needs to reposition its trade regime to produce commodities that we can sell to the growing import market of China.

In the CEPC context, three points are important as negotiations for the second phase of CPFTA are under way. First, Pakistan should revise the existing Free Trade Agreement (FTA) on less-than-equal reciprocity principle, meaning that the tariff reduction modalities of the second phase will be independent of the first phase. Second, we should push for value added products — Pakistan's key exports to China were raw material and intermediate products, such as cotton yarn, woven fabric, grey fabric etc. Value-added products were missing despite the fact that some of these products, like garments, were included in the concessionary regime.[4] Finally, a case be made to integrate Pakistan in the global value chains (see Box 7.1).

The Economic Cooperation Organisation (ECO) formed among Iran, Pakistan and Turkey in 1985 was enlarged in 1992 to include seven additional states (Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan). It aimed to promote regional trade and economic development. However, its members have not fully used the regional platform to promote trade as an engine of economic growth. With CPEC being developed, it provides a better opportunity for these land locked countries with improved and cost effective connectivity in promoting intra and inter regional trade.

BOX 7.1

Need for Pakistan to be Part of China Global Value Chains

The trade deal under second round of CPFTA should aggressively promote the idea for Pakistan to be a part of Chinese global value chains. There are two possibilities: first, Pakistan could be part of existing Chinese global value chains with greater intensity. The efforts are aggressively pursued under current negotiations. The focus should be seeking concessions in areas where the strengths of the two countries complement each other thereby encouraging intra-industry trade.

Second, Pakistan to make a case with China to consider relocation of export oriented Chinese industries to Pakistan like garments, solar panels, mobile phones, electrical equipment, electronics and food processing. The CPEC cells created at provincial level can undertake studies to bench mark the cost comparisons for commodities that are feasible from China's perspective to relocate in Pakistan. The selling point may be the low cost of our labor, which would provide Chinese companies an opportunity to expand their operation, though our labor has to develop the Chinese matching skills required for each industry to be set up in Pakistan. It is known that concessions are being requested in Chinese "Sunset" industrial sectors which would incentivize Chinese investors to relocate their production facilities in Pakistan.

Relocating of Chinese industries to Pakistan will not only lead to much needed diversification but also to enhancement of efficiency of low-skilled labor-intensive industry as well as be instrumental in transferring technolog, channelizing the economies of scale and adding value to the production chains in sectors like agriculture, industry and information technology. Above all,it will provide a window to enhance our exports.

It is hoped that CPEC will give a major boost to the bilateral trade between Pakistan and China as industrial and agricultural production would be generated in 29 industrial parks and 21 processing zones all over the country during the first phase of the projects.

Indeed India can also benefit from CPEC. It might come as a surprise that in spite of all political problems, China's trade with India is on a much larger scale. If we look at trade route being developed under CPEC, starting from Kashghar it will pass through either Attock or Hassan Abdal. These two places are not far from well-developed and maintained motor way to Lahore that provides a link via ring road to Wahga Border. So, the trading route is already in place for India to benefit; in fact, the benefits could be mutual. On the other hand, India and China can both benefit as trade can occur at a reduced cost and avoiding the dangerous Malacca Route.

Pakistan, being the founding member has not benefited as much as Turkey and Iran, both maneuvering for economic and political influence in Central Asia. They have sharply expanded their trade in that region. Pakistan's exports to ECO countries have risen from US$ 826 million in 2003 to US$ 2059.97 million in 2015. Exports from Pakistan to the Central Asian Republics, which were already at negligible levels, continue to decline at a time when Turkey and Iran, which now contribute over 85%

of Intra ECO trade, have increased their exports to these countries. Therefore, the issue is not whether there is a market in the ECO, but why Pakistan is not accessing this market.

To promote trade to ECO region, other than insecurity issues in Afghanistan and part of Pakistan, there is a need to address some policy and structural issues. They include development of roads and revival of rail infra-structure in Pakistan, plus development of warehousing and distribution points along the CPEC corridor. Government of Pakistan is also in the process of negotiating comprehensive Free Trade Agreement (FTA) with Turkey to remove barriers to its exports in Turkish Market. So far seven rounds of negotiations have been held. Efforts are being made for an early conclusion of FTA. The negotiation can be seen as an effort to promote bilateral and intra-regional trade.

Thus the specific policy recommendations to promote trade with ECO region include: pro-active engagement by the commercial counselors and trade sections of Pakistani embassies in the Central Asian Republics through detailed market reports on key products; advice to trade associations in Pakistan to arrange Pakistan-product trade fairs and visits by ECO country trade/industry association delegations to Pakistan, friendly visa regime for business persons; tax incentives to attract multinational corporations (MNCs) for investing in licensed manufacture, export of horticulture (mango and citrus) and livestock products (beef) and of auto parts from Pakistan; and better air links.

Part 2 - CPEC and Agriculture Potential

Agriculture as a New Priority

The long term plan for CPEC (2017-30) outlines agriculture, IT connectivity (fiber optic) and tourism as priority sectors. On agriculture, the plan advocates an approach that runs through the typical agriculture value chains with provision of seeds, fertilizer, credit and pesticides and better access to credit and markets. It documents the modality of Chinese enterprises in operating farms, processing facilities for fruits and vegetables and grain value chains. Further, the logistics companies will operate a large storage and transportation system for agrarian produce.

CPEC provides for the following five functional zones for economic activity from north to south: (i) Xinjiang foreign economic zone (ii) northern border trade logistics and business corridor and ecological reserve (iii) eastern and central plain economic zone (iv) western logistics corridor business zone and (v) southern coastal logistics business zone. Most of the node cities, transportation corridors and industrial clusters are concentrated in them.[5]

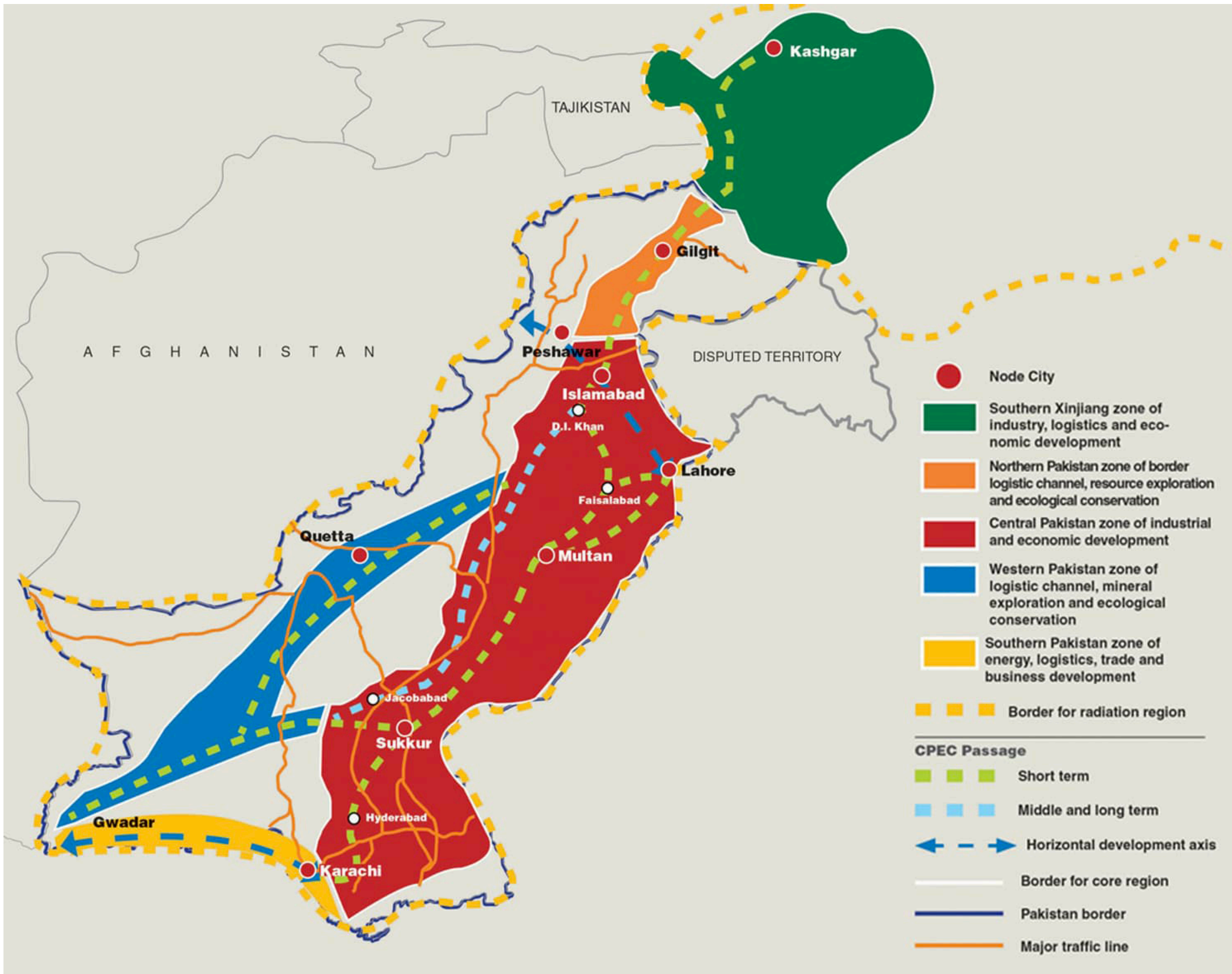
We have however identified clusters of agriculture value chains in four areas classified as Northern, Central, Western and Southern region of CPEC (Figure 7.3). These four regions offer the possibility of raising a diversified mix of an integrated crop/livestock agriculture system. Promoting rural economy in high potential areas would result in fast track rural economic growth as it carries forward and backward linkages and has high multiplier effects in terms of job creation and value addition. Because of the generally perishable and bulky characteristics of agricultural products, many agro-industrial plants and smaller-scale agro-processing enterprises tend to be located close to their major sources of raw materials. Consequently, their immediate socio-economic impacts tend to be exerted in rural areas. Further, it is suggested to direct these efforts to rural economies especially in Baluchistan, KPK and FATA for shared prosperity.[6]

The Corridor Zones

According CPEC Long Term Plan (LTP) , key areas of cooperation in the field of agriculture may include: biological breeding, production, processing, storage and transportation; infrastructure construction; disease

FIGURE 7.3

Zones Identified Under CPEC



Source: UN Comtrade - Computation by BIPP Research Team

prevention and control; water resources utilization, conservation and production; land development and remediation; ICT-enabled agriculture and marketing of agricultural products to promote the systematic, large-scale, standardized and intensified construction of the agricultural industry This section would identify priority value chain in agriculture and related industries, with special focus on horticulture and livestock/fishery that could add value and spur development and growth of the economy.

Northern Zone of CPEC

Gilgit Baltistan (GB) and Baluchistan are important provinces in the context of CPEC as they provide entry and exit node for the corridor. But unfortunately both provinces were neglected in the past and even now when CPEC is being developed. Political and economic stability in these two regions is vital for overall success of the CPEC — we cannot fully realize the expected benefits from huge investments unless these two provinces are made inclusive to CPEC development.

Besides GB being the water bank of Pakistan, Karakoram Mountain Ranges are one of the world's richest ecosystems in terms of biodiversity. Mountains are tourist paradise for fishing, hunting, hiking, skiing, sightseeing and bird watching. In the medium to long term, GB can be promoted as agro-tourism hub. A well-established tourist information center can promote the following tourist resorts: (1) Deosai, as world's highest plateau with hundreds of beautiful wild flowers and pasture lands where livestock population moves up during summer to the top of plateau (2) Cherry Blossom in Gilgit-Baltistan, perhaps, offers the most spectacular scenery and is often termed as heaven on earth. This area becomes even more sublime during cherry and apricot blossom season. We unfortunately do not value this natural gift of God.[7]

As over 90% of the population is engaged in agriculture, the sector holds important place for GB's growth and poverty reduction. Gilgit Baltistan region is organic by default, as a large part is under pastures, forests, wasteland and other kinds of wild land. These naturally organic areas hold great potential for conversion and declaring the entire region as organic that can offer good opportunity for the farmers/enterprises to enhance income. This would only be possible if adjustments/investments are lured in by branding it as organic, proper marketing and initially a process to map zones that can be contested for its certifications.[8]

In the CPEC context, based on initial work undertaken by Ministry of National Food Security and Research/PARC, the following value chains were identified taking into account the agro-climatic potential: producing livestock, dairy products, fish and fish products, vegetable — fresh and processed, wool, plants, nurseries and products, silk and honey.

Due to its seasonal and elevation advantages, there has been a move towards production of higher value cash crops like apricot and grapes (Table 7.2). Tomatoes, apples, cherries also offer huge potential for growth as demand for these products is growing in local and export markets. Under CPEC, a fruit processing industry will be set up in Gilgit-Baltistan considering the region's capacity to produce fruits and vegetables as identified above. Exports of fruits will get a boost as thousands of tons of fruits can be exported to China as a lead growing market in the region.

TABLE 7.2

Identified Fruits and Vegetables to be Promoted

Priority Sub-Sectors	Clusters/ Districts	Total Production of the Cluster (Tons)	Percent Share in the Province (%)	Percent Share in the Country (%)
Apricot	Ghanche, Hunza Nagar, Ghizer	100,790	88	52
Grapes	Gilgit, Diamer, Astore, Ghizer	3,953	69	61

Source: Participatory Rapid Horticulture Appraisal Report 2012 - USAID

Delivering the CPEC potential for this region would, however, require taking the following steps: i) upgrading of agricultural infrastructure in the regions along the CPEC ii) promoting horticulture crops and trout as priority commodities for domestic and export markets iii) investments to provide local connectivity through feeder roads to improve market access to the remote mountain regions and in creating satellite markets with modern storage facilities; iv) maintaining a traditional mix of livestock/crop integrated farming system with adequate and timely supply of agricultural inputs but with improved regulatory mechanism to ensure quality of inputs; and, v) effective dissemination of improved farm technology that maintains a balanced use and conservation of mountain resources such as micro propagation, drip irrigation, greenhouse cultivation, plastic mulching, fertigation, use of bio fertilizer and bio control agents, vermiculture, and organic farming.

Central Zone of CPEC

Selected districts of Punjab, Sindh and part of KPK are included in this zone, which are relatively well developed in terms of backbone and supporting infrastructure. The economy in this region is largely agriculture with clusters of industry reasonably well developed. The various clusters in this region include: light engineering, cotton ginning, ginning and pressing, spinning, weaving, textile processing, apparel and made-up, soap manufacturing and flour mills. It is also repository of a large part of Indus Basin, carrying water as an asset that has contributed enormous value but not to the potential it offers. Further, according to irrigation experts, if rice and wheat are cultivated using raised bed technology instead of flood irrigation, water saving can amount to the cost of building the Kalabagh Dam. It means a trade-off of moving from flood irrigation to high efficiency irrigation system, has a high pay off in terms of value.[9] There is thus a need to promote the development of water-saving modern agricultural zones, and increase the development and remediation of medium- and low-yielding land to achieve efficient use of resources[10].

The identified value chains based on initial work undertaken by Ministry of National Food Security and Research/PARC include: livestock, dairy products, fish and fish products, cereals products, vegetable — fresh and processed, sugar, molasses, fresh-fruits , dried and processed, sugar and gur, spices, animal feed and fodder, tobacco industry, animal skin, seed and meals, pulses, cotton, plants, nurseries and products, vegetable oil and essential oils, silk and honey.

In terms of agriculture potential, however, based on a recent study,[11] mango, guava, potatoes and onions in Punjab; dates and banana in Sindh (Table 7.3) and peaches and tomato in KPK are the priority value chains for the central region. These crops carry high potential to be marketed at the national and international levels, provided a good agriculture production (conservation agriculture and traceability) and marketing practices (meeting the international standards) are adopted. Further, crops like dates and banana create considerable employment opportunities for female population, for example banana entails 9% women involvement and provides livelihood to 12% small farmers.[12]

It may be noted that China is showing interest in improving the rice industry, a strategic export crop for Pakistan. Under the proposed program, the private sector companies of both the countries would cooperate to promote the hybrid rice production that holds promise to enhance land and water productivity — expected to almost double the per acre crop yield — besides increasing farm income and reducing the poverty. Among other kinds of support, it would open the first hybrid rice research centre at International Center for Chemical and Biological Sciences (ICCBS). In Sukkur, Sindh, Chinese are planning to invest in meat processing plants with annual output of 200,000 tons per year and two demonstration plants processing 200,000 tons of milk per year. In transport and storage, the plan aims to build a nationwide logistics network and enlarge the warehousing and distribution network between major cities of Pakistan with focus on grains, vegetables and fruit supply chains.

On part of the Punjab Government, within Ministry of Agriculture, a CPEC cell has been operational to provide policy and investment guide for

TABLE 7.3

Possible Production Clusters of Value Chains

Priority Sub-Sectors	Clusters/Districts	Total Production of the Cluster (Tons)	Percent Share in the Province (%)	Percent Share in the Country (%)
Potatoes	Lahore, Sheikhupura, Nankana Sahib, Kasur, Okara, Pakpattan, Sahiwal, Gujranwala, Hafizabad, Narowal, Sialkot, Gujrat	1,823,613	84	78
Guava	Lahore, Sheikhupura, Nankana Sahib, Kasur, Okara, Pakpattan, Sahiwal, Gujranwala, Hafizabad, Narowal, Sialkot, Gujrat	249,003	57	46
Citrus	Sargodha, TT Singh, MandiBahauddin, Khushab, Jhang and Faisalabad	1,392,942	67.5	67.04
Guava	Faisalabad, TT Singh, Sargodha and Jhang	96,459	24.3	24.67
Mango	Multan, Rahim Yar Khan, Muzafargarh, Khanewal, Bahawalpur	1, 159,993	87.5	67
Dates	Sukkur, Khairpur	253,862	97	46
Banana	Khairpur, Ghotki, N.Feroze	47,973	37	35

Source: Participatory Rapid Horticulture Appraisal Report - USAID

the private sector. The cell has identified six value added commodities, providing information to the private sector as an important starting point of business feasibility. Table 7.4 provides details on the six value chains proposed under CPEC project in Punjab.

Key steps needed to deliver the CPEC potential would, however, require region to place greater emphasis on horticulture and livestock: promoting high value commodities like meat targeting halal market, mango, citrus and dates; promoting olive in Potwar region with solar driven modern irrigation technology; and learning from China the development of low cost modern technology. In the livestock sector, our productivity is one of the lowest, for example Pakistan's famous Sahiwal breed in 1987 was producing 1900 liter of milk per year and during the same period imported Friesian also produced around 1900 liters but in 2017, Friesian is producing 9000 liter while Sahiwal is with a lower productivity at 1300 liters, meaning that during the last thirty years we have not been able to develop successfully in enhancing animal productivity. In fact, undertaking simple and low cost interventions like providing enough and better quality feed, water and space to the animals, the productivity can be enhanced from 10 to 30 %[13].

At the same time, issues related to climate change should be paid more heed to. This will require a series of actions ranging from adjustments in infrastructure, improvement in water conservation practices, better flood management protocols and procedures and cropping and farming systems that can adapt to different weather conditions. In short, the key word is to develop smart agriculture to fully benefit from opportunities provided by CPEC.

Western Zone of CPEC

This region includes Baluchistan, KPK and FATA, a zone least developed of the all four identified regions, though the region offers huge potential to harness mineral and other natural resources such

TABLE 7.4

Punjab – Key Identified Projects from Ministry of Agriculture

Location	Multan, Khanewal & Muzaffargarh	Pothohar	Okara	Lahore	Khanewal	Multan
Objective	The project aims to set up pulping units for fruits and vegetables	The project aims to set-up olive oil extraction units	The project aims to set up potato powder and flakes manufacturing units	The project aims to produce frozen vegetables and fruits using Individual Quick Freeze technology	The project aims to produce dehydrated vegetables using solar dehydrators	The project aims to produce dehydrated fruits and vegetables using fuel-based dehydration technology
Product Line	Mango and guava pulp and tomato paste	Olive oil and virgin oil	Dehydrated potato powder and potato llakes	Individual Quick Frozen (IQF) peas, potatoes, spinach, carrot, bitter gourd, okra, mango slices	Dehydrated onion, carrot, tomato, spinach, chilies	Dehydrated mango, apple, peas, onion and garlic
Technology Employed	-	-	-	IQF through fluidized bed freezing technology	Solar drying	Atmospheric dehydration technology using multistage dehydrator
Target Markets	Export market and local market	Export market and local market	Export market and local market	Export market and local market	Export market and local market	Export market and local market
Export Markets	USA, Europe, Middle East, Far East, Canada, Africa and Sri Lanka	Afghanistan and other neighboring countries	Middle East, Far East, China, Malaysia and other neighboring countries	Afghanistan and Middle East	Afghanistan and Middle East	Afghanistan and Middle East
Total Project Cost (PKR Million)	1,745.36	462.14	870.11	293.4	62.30	290.0
Internal Rate of Return (IRR)	30%	39%	21%	39.00%	27.91%	47.51%

as forests, range lands and renewable energy. The potential cluster regions discussed below are being supported with road infrastructure like E-35, N-50 and N-70 that would provide trade and related connectivity for tourism, mining, agriculture, horticulture and livestock.[15]

The development of agriculture in Baluchistan depends critically on a sustainable and efficient use of its valuable resources base developing a competitive horticulture; access to the fishing areas along its coastal belt (see Box 7.2); the rangelands and forest which stretch across much of the drier areas, the upland areas and in the lowlands. KPK and FATA provides a similar and more diversified commodity mix. FATA, with new roads built and old ones rehabilitated, provides an opportunity to develop its agriculture and mineral resource which have long been deprived of value they offer.

BOX 7.2

Fishery Potential Around Gwadar

The fisheries sector in Baluchistan is the major source of employment for people residing along the coastal belt; this includes fishermen and other associated businesses such as boat building and net manufacturing. Other forms of employment include hawkers, vendors, store keepers, tourist guides, drivers etc. A problem associated with the expansion of the port due to CPEC is that some fishing zones would be dislocated — a serious concern of local people that their livelihood would be finished and forgotten.

Opportunities with CPEC: Pakistan's exports of fishery products stand at about 0.25% of world exports. Other than a huge domestic market, Pakistan has an export market for fish and fish products. About 30% of the total fish catch is exported to 30 countries of the world. A rough estimate based on maximum sustainable yield figures, existing value addition, and foreign benchmarks, puts our total export potential at US$1.0 billion, which can be even more if modern CPEC infrastructure is in place, and if we can exploit the high potential area of aquaculture. Over exploitation of the marine fisheries, especially shrimps, should be avoided to conserve the natural habitat. This is necessary for the commercial development of fishing industry as it keeps open the investment opportunities in the future.

For developing a modern fishery processing Industry, Thailand is a good case to learn from. In Balucistan's coastal areas, fresh fish is packed in ice and sent to Karachi. The advanced processing of fish canning is done at Karachi. There is a great potential for canning industry in Makran areas provided that road links are available for marketing. Modern fish processing facilities should be developed as part of CPEC with China's help. Developing a modern fishing industry is a test case for CPEC that is largely for the benefit of the local population and would make a real and visible change in their livelihood.

The identified value chains based on initial work undertaken by Ministry of National Food Security and Research/PARC include: livestock; dairy products; fish and fish products; cereals and products; edible oil crops; vegetable — fresh and processed; fruits — fresh, dried and processed; spices; animal feed and fodder; animal skin; seed and meals; wool; plants — nurseries and products; silk and honey.

Table 7.5, however, identifies the most promising commodities to be promoted under CPEC. In Baluchistan, although the environment is harsh with little arable land, it is known as the fruit basket of the country, producing 90 percent of the grapes, cherries and almonds; 60 percent of the peaches, pomegranates and apricots; 34 percent of the apples; and 70 percent of the dates. But most of the produce is of low quality and can only compete in low end export markets. The region also carries huge potential to grow apple, olive and cherries. The main reason for low export volume is the absence of technology required to treat and pack the fruit to the international standards. Among other regions, growing edible oil in Baluchistan holds a good promise, as Pakistan is in a state of crisis in terms of oilseeds importing 1.2 metric tons (increased by 16% annually)of palm oil to meet the growing domestic demand and putting a major burden on foreign exchange.

TABLE 7.5

Possible Production Clusters of Value Chains – Balochistan- KPK - FATA

Priority Sub-Sectors	Clusters/ Districts	Total Production of the Cluster (Tons)	Percent Share in the Country (%)
Apple	Kalat, Mastung, Killa Abdullah, Ziarat, Killa Saifullah, South Waziristan Agency, Khurram Agency	226,295	55.4
Dates	Kech, Panjgur DI Khan, Bannu, Lakki Marwat	241,008	43
Grapes	Pishin, Quetta, Mastung, Killa Abdullah, Killa Saifullah	68,089	89
Tomato	Swat, Malakand Charsadda and Mohmand Agency Kalat, Mastung, Killa Abdullah, Chagai	194,681	38
Peach	Swat and Dir Charsadda and Peshawar, South Waziristan Agency (SWA) and Khurram Agency	47,263	66
Melon	Lakki Marwat and DI Khan Bhakkar, SWA and NWA, FR DI Khan	51,794	73

Source: Participatory Rapid Horticulture Appraisal Report – USAID (Quetta, D.I. Khan, Peshawar)

The processing industry is being developed for fruits and vegetables (apple and date processing plants, tomato paste manufacturing, fried/dried onion plants) and promoting cut-flower business and floriculture. Under CPEC, a potential investment company can provide semi-refined form of palm oil to the local market through an oil expeller unit.

Peshawar region offers huge potential in growing peaches, citrus, strawberries, apples, melons and apricots identified as priority value chains. However, tomato and peach cultivation should get the highest priority.

FATA offers a varied microclimate zone to produce good quality fruits such as apples, plums, citrus, grapes, peaches, apricots, walnuts and pine nuts. In FATA a competitive niche can be developed in selected crops by productivity enhancement as newly constructed dam (Gomal Dam) can be instrumental in growing high value crops and promotion of off-season vegetables through Tunnel Farming. Pine nuts provide huge potential to develop as an export crop to China and can be traded through CPEC western routes instead of long route presently being followed — Lahore, Karachi, Dubai and to China.

The rangelands and forest areas in Baluchistan, KPK and FATA provide huge potential to develop livestock. Some 12 million sheep, a similar number of goats and 0.38 million camels (Livestock Census, 2006) depend on vast rangelands for feed and water. The overall condition of rangelands is poor and has been deteriorating rapidly due to both the prolonged drought that occurs from time to time as well as severe overgrazing by animal herders, including the nomads and transhumant tribes/shepherds who travel through these areas on their way to and from their over-wintering areas in the Sibi plains of Baluchistan, Sindh and Punjab.

In short, what needs to be done is to promote agricultural development and agro-processing zones along the Western Corridor including following actions:

1. Collaboration in forestry, horticulture, fisheries and livestock medicines and vaccines to drive

share of benefit.
2. Promotion of high value activities in fruits and fishery subsectors.
3. Development of marginal and environmentally fragile areas, rain-fed agriculture and rangelands.
4. Use of solar energy and mini-hydel projects to power and develop a modern agriculture for domestic and export markets.
5. Promotion of a network of service providers.
6. Using KPK service center model, build agriculture demonstration centers to supply seeds and agricultural machinery and other agriculture services under one window approach.
7. Making use Chinese capital, technology and experience for cooperation in irrigation, reduction in post-harvest losses to farm products, integrated nutrient management, enhancing water use efficiency, promotion of bio-gas technology, medicinal plants, oil, seeds and pulses production.
8. Supporting agricultural cooperation through promotion of linkages between research institutes and industries related to food, livestock and fisheries.

Southern Zone of CPEC

In total, the CPEC project envisages reconstruction of 870 kilometers of road in Baluchistan province alone as part of the Western Alignment. Some sections have been completed with a pilot flow of trade convey from Gwadar to China. After completion of the Makran Coastal Highway, the average journey time between Karachi and Gwadar has been reduced to only 6 to 7 hours from 48 hours and accordingly reduced the transportation cost. This developed infrastructure is expected to boost economic activity along coastline among others to promote tourism and develop a modern fishery industry. The largest potential is to develop the seafood industry along Pakistan's coastline in view of the reduction in time and costs of transporting fresh seafood to major cities in Pakistan and to export processing zones in Karachi and Gwadar.

It may be underscored that fisheries provide a major source of income and employment in the area through 5000 mainly small wooden vessels. Surveys carried out in the coastal belt reveal that the fishery is overexploited and in a poor state. The fishing effort has systematically increased over many years with clearly unsustainable techniques and tools . Commercial production of fishery products for both national and international markets should continue to be the main drivers of economic growth and employment.

There is virtually no large-scale commercial coastal aquaculture in Baluchistan despite having substantial potential. The major attraction for aquaculture is the long coastline with plenty of land that is suitable and relatively unpolluted water. Various attempts at shrimp farming have been undertaken or are ongoing on a small scale. None has resulted in significant commercial enterprises. There are many constraints which need to be removed for a successful fishery and coastal aquaculture in Baluchistan before large scale private investment in the sub-sector can be expected (see Box 7.2). Setting up a technical institute in Gwadar with China's support to teach locals about the changing environment and the latest fishing techniques would be an inclusive gesture and ward off their sense of alienation and exclusion.

Asian Development Bank Initiate on CPEC

To meet the challenges with ongoing implementation of the CPEC and other regional and global economic corridors related to Pakistan, ADB envisages to provide assistance to Pakistan through knowledge and support technical assistance program. The technical assistance aims to produce Pakistan's Strategic Economic Corridor Development (ECD) policy framework in line with best practices — improving competitiveness and undertaking ECD feasibility studies including analytical tools/decision support system. In this context, ADB plans holding a series of consultation workshops at the national and pro-

BOX 7.3

Key Message from ADB Consultation Workshop in Lahore

From Organizer

Ms. Xiaohong Yang, Country Director, ADB,identified four areas of growth to be considered under CPEC: (1) economic opportunities that make corridor a driver of economic growth with inclusiveness (2) how to make it happen (3) what the needed policy actions are and (4) what the role of ADB and others is in this regard. Guntur Sugiyarto, Chief Economist, ADB, indicated that CPEC is critical for Pakistan to move to higher growth strategy by realizing its full economic and social potential by connecting district and Pakistan economy with global production network. Mr. Jehanzeb Khan, Chairman Planning and Development, highlighted that the first phase of CPEC is largely focused on meeting the energy needs, and the Chinese are very clear about our need; the implementation is taking place accordingly. He provided a brief on the progress achieved in the energy and transport projects which are well documented in BIPP report. Progress still needs to be made in industrial and other sub sectors, but has to be done in a structured manner in developing a knowledge based economy.

From Panelists

Dr. Ishrat Husain, Ex Director IBA and the lead Panelist, sent a clear message that Pakistan is strategically located and is a gateway to central Asia. We have not used this geopolitical location for harnessing economic benefits. There is a huge gap between hardware (infrastructure development) and software (policy and institutional failure) under CPEC. There are three reasons why software part is not functioning — policy, market and coordination failures. Under CPEC institution building is needed for better governance and a conducive policy environment by addressing the issues of too many or too little regulations. Dr. Nasir Javed, CEO of the Unban Unit, emphasized the need to reduce the education and higher education gap, mismatch between what we are producing and what market demands; he further highlighted that data collection in preparing sectorial profiles are needed . Salman Shah, economist highlighted the need to create a competitive and outward looking economy. He pointed out that trade policies were not discussed in this workshop. The issue of very rapid urbanization is having serious economy wide implications. Finally, he reemphasized the need for our economy to grow in double digits to meet new challenges. Syed Yawar Ali, CEO, Nestle,identified agriculture, livestock, value added textile and information technology as priority sectors but emphasized the needs to transform our comparative into competitive advantage.

From Participants

The discussion largely centered on agriculture. A number of participants supported developing value added textile and livestock sector. Mahmood Ahmad from LUMS/ BIPP emphasized that Gilgit Baltistan and Baluchistan are important provinces in the context of CPEC as they provide entry and exit node for the corridor. Further, he highlighted the actions needed to exploit fully the natural comparative advantage: providing adequate access to agriculture-supporting infrastructure and developing clusters of commercially viable farming, processing and service firms located in specific geographical areas and clear and specific government policy dedicated to actively supporting sustainable agriculture and recognizing the important role the private sector has to play to implement such a policy.

Key Lesson for Moving Forward: Given the scale of investment, a systematic analysis from each province (or ecological zone) for estimating incentive structure and efficiency of resource use is needed to make our policy/investment decisions based on both economic and financial prices. Our present economic woes are primarily due to lack of credible supporting research in decision making process. For example, for a critical sector like agriculture and livestock , last in-depth policy work was done by World Bank in 1993 by Jim Longmire and Pascale Debord on ”Agriculture Pricing and Comparative Advantage in Pakistan”. LUMS/BIPP can provide the needed policy support using their vast experience in providing support to countries in Central Asia and Near East using policy analysis matrix and other decision tools.

vincial level. The second consultation workshop in Lahore after Karachi was held on 14 December, 2017. BIPP team attended this workshop; the key messages regarding CPEP from the panel and participants of the workshop are summarized in Box 7.3. It may be noted that the workshop, among other topics, touched a number of agriculture issues such as moving from water based economy to outward looking economy to fully benefit from CPEC.

Key Messages

- CPEC is expected to provide a major growth opportunity for Pakistan by improving physical connectivity and functioning of the markets, while generating economies of scale in agriculture and industry.
- The trade or import profile of China and India is important, Pakistan needs to focus more on these two markets, especially China which would provide opportunities under CPEC for better market access and trade integration. Also it would be prudent policy to leverage a bigger incentives package for enhancing exports to emerging markets like Economic Corporation Organization (ECO) region and part of Africa.
- The trade deal under second round of CPFTA should aggressively promote the idea of Pakistan to be part of Chinese global value chains.
- Four functional zones in this report identifies clusters of agriculture value chains classified as Northern, Central , Western and Southern that offers the possibility of raising a diversified mix of an integrated crop/livestock agriculture system.
- Northern Zones holds great potential for conversion and declaring the entire region as organic that can offer good opportunity for GB farmers/enterprises to enhance income. Further, due to its seasonal and elevation advantages, apricot offers huge potential as demand for these products are growing,a good quality Apricot produced in GB can be exported in large volumes to China.
- Central region should make most out of water available under Indus Basin, adding value per unit water, which is at present quite low. Key steps needed to delivering the CPEC potential would require region to place greater emphasis on horticulture and livestock sectors. Promotion of high value commodities like meat targeting halal market, mango, citrus and dates. Mango, Guava, Potatoes and Onions in Punjab, Dates and Banana in Sindh and Peaches and Tomato in KPK are the priority value chains for the central region that offer huge export potential to be captured under CPEC. Chinese experience, technology and financing be positioned under CPEC for this region where our comparative advantage of favorable land and water resources, cheap labor and market opportunities can create a win-win situation for both.
- The development of agriculture in Baluchistan depends critically on a sustainable and efficient use of its valuable resources base– developing a competitive horticulture, livestock (sheep and goat) as rangelands stretch across much of upland areas and in the low lands. KPK and FATA provides a similar and more diversified commodity mix. FATA with new roads built and old ones rehabilitated provides an opportunity to develop its agriculture and mineral resource which have long been deprived of value they offer.
- Southern Zone can become a hub for fishery and its processing industry, Thailand is a good case to learn in developing a modern fishing industry. The advanced processing of fish canning is done at Karachi. Modern fish processing facilities be developed as part of CPEC with the help of Chine se. Developing a modern fishing industry is a test case for CPEC that it is largely for the benefits of local population and would make a real and visible change in their livelihood.

Chapter

8

CPEC Western Route: Potential for Alleviating Poverty and Integrating the Least Developed Areas into National Economy

CPEC Western Route: Potential for Alleviating Poverty and Integrating the Least Developed Areas into National Economy

Shahid Najam

This chapter attempts to highlight the immense potential which CPEC'S western rout has to integrate the least developed areas in the main stream economy of Pakistan and thus address the long standing issues of regional disparity, wide spread poverty and socio-political alienation. In the first part the chapter describes CPECs economic significance for inclusive and equitable growth, the second part dwells on the poverty profile along the western rout especially in the selected most deprived districts; the third part provide s resource base analysis of the selected districts while the fourth part, based on the competitive advantages of agriculture sector outlines the proposed development model for poverty alleviation in the areas along the western route.

Part 1

The China Pakistan Economic Corridor (CPEC) is the key component of the six corridors under China's "One Belt One Road" (OBOR) initiative which was launched in 2013. CPEC, with a length of around 2900 km, will link Gwadar to Kashgar in China's northwestern region of Xinjiang and provide connectivity to major cities of Pakistan through a network of highways, railways and pipe lines. It constitutes the kernel of OBOR initiative and will enable Pakistan to fully harness the demographic and natural endowment of the country by enhancing its agro-industrial capacity, balancing regional socio-economic development, enhancing people's well-being and promoting domestic peace and stability.[1] If prudently managed, CPEC has the potential to generate as much as three or four times the initial $47 billion investment.[2] The Vice Minister International Department of China, Zheng Xiaosong opined: 'The flagship CPEC project will help Pakistan to materialize dream to become Asian Tiger in the years to come'.[3]

CPEC will create a number of opportunities for Pakistan to pursue inclusive and equitable growth via multiple channels. First, within the country, it will connect the far flung but well-endowed production areas to the main markets in Peshawar, Quetta, Lahore, Karachi and Gwadar seaports through a network of road and railways. Second, externally it will decrease illegal across the border trade costs. Third, it will open up many venues of economic cooperation and trade (including SMEs, agriculture and agro-industry) with the world's largest trading nation, China. Fourth, it will link the country to the One-Belt-One-Road and give direct access to the Global Production Networks (GPNs), Global Value Chains (GVCs) and markets of Middle East, Central Asia and Europe especially to members of Economic Cooperation Organization (ECO) and Eurasian Economic Union (EAEU). Other associated benefits include: reduced costs of transportation and travel time and diversification of external economic linkages which are currently with far away countries to become equally OBOR centric.

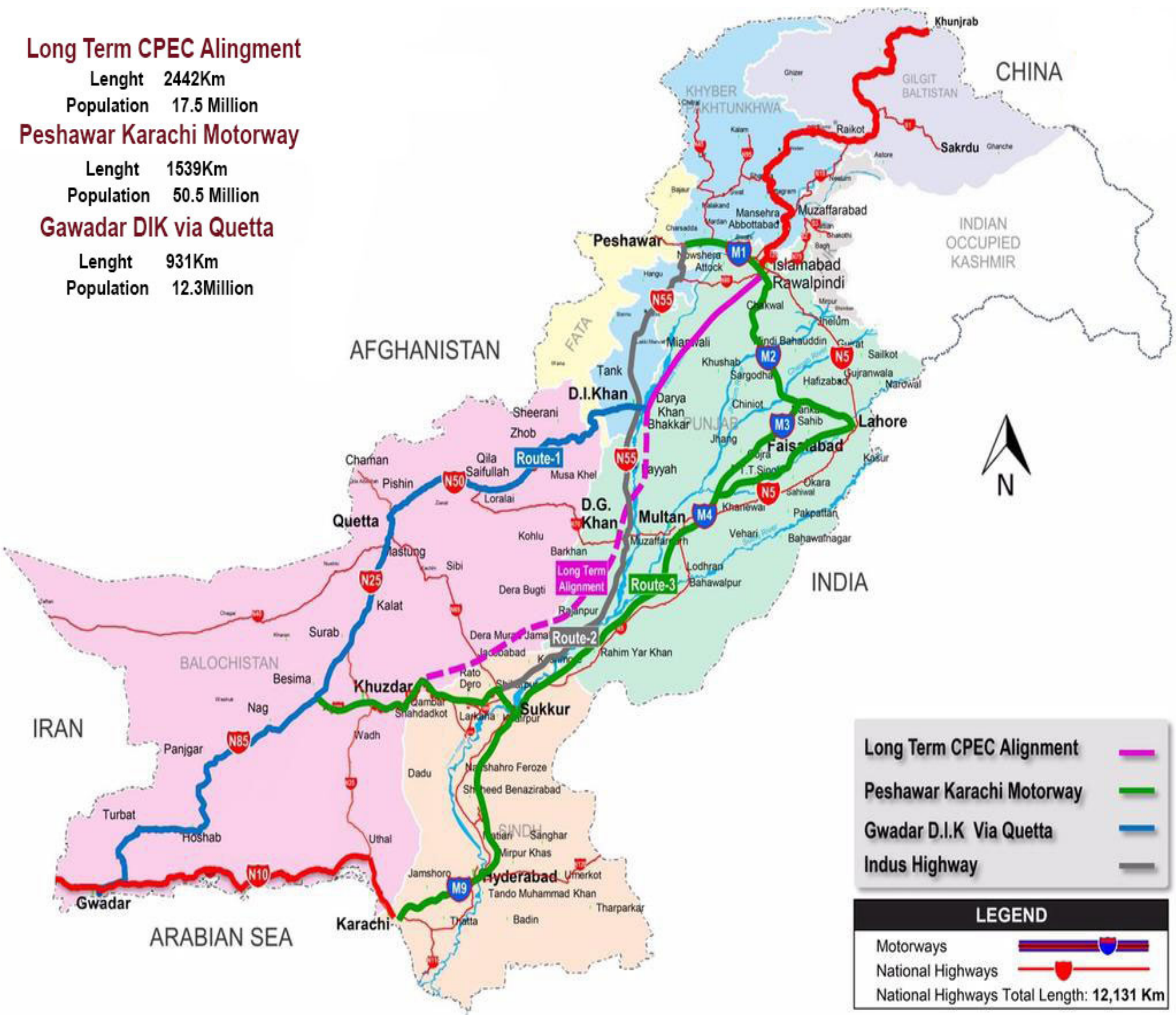
Major CPEC Routes

The Ministry of Planning, Development and Reform, Government of Pakistan has specified the three major CPEC routes as follows:

- Western Route: Gwadar, Panjgur, Quetta, Qila-SaifUllah, Zhob, (Dera Ismail Khan- Peshawar Motorway part for the time being), Abbotabad, Mansehra, Gilgit Baltistan and Kashghar
- Central Route: Gwadar, Karachi, Daddo, RatoDero, Rajanpur, DG Khan, Darya Khan, Peshawar onto Gilgit and Baltistan, Khunjrab and Kashghar
- Eastern Route: Gwadar, Karachi, Hyderabad, Sukkar, Multan, Faisalabad, Lahore, PindiBhattian, Rawalpindi, Abbotabad, Mansehra on to Khunjrab and Xinjiang-Kashghar;

FIGURE 8.1

CPEC Route Alignment

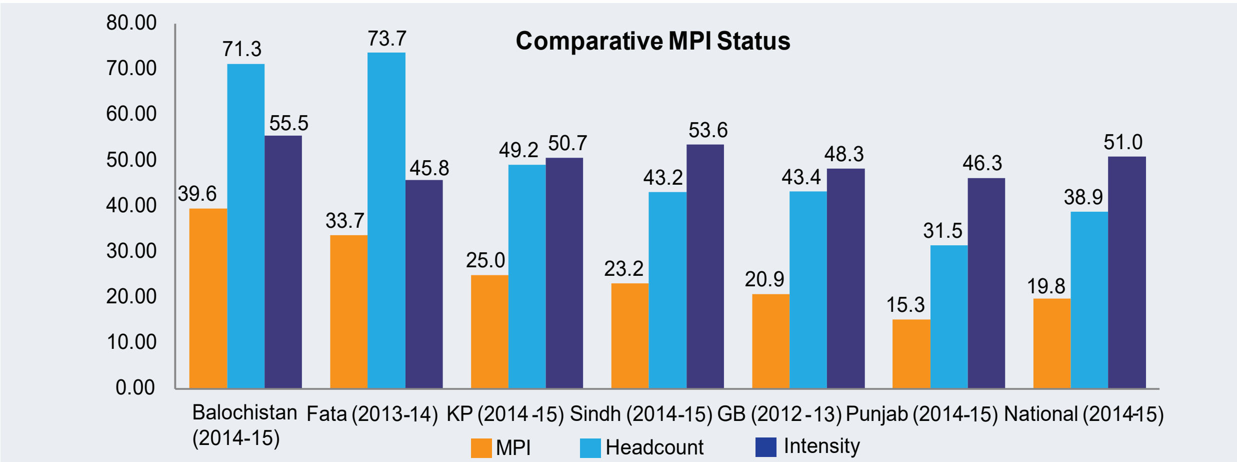


Source: https://www.pakistantoday.com.pk/2015/07/26/balochistan-govt-report/

The CPEC routes, including the priority for construction, initially generated intense controversy among the provinces. After the All Party Conference of 28 May, 2015, consensus was reached on giving due priority to the Western Route which will integrate the under developed areas of the country, including western part of Baluchistan and KPK (with proximity to FATA through network of highways), in the mainstream socio-economic development.

FIGURE 8.2

Province Wise Poverty Spread



Source: Multidimensional Poverty in Pakistan; UNDP Report 2016

Part 2
Poverty Profile along the Western Route

The Western Route has unique development significance as it passes through the least developed regions of Pakistan, several of which have high incidence of multi-dimensional poverty ranging between 70-79%. It is also more feasible in terms of costs associated with acquisition of land and dislocation compensation to the affected people.

A 2016 multi-dimensional poverty (MPI) mapping exercise for Pakistan[4], based on the three internationally recognized dimensions of education, health and living standard and Pakistan specific 15 indicators[5], estimated the overall national MPI at 0.198. This means that 19.8% of people were multi-dimensionally poor. Figure 8.2 shows the province wise spread of poverty in Pakistan and compares it with the national average.

Baluchistan and Federally Administered Tribal Area (FATA) are the worst off on incidence-headcount and intensity of poverty with MPI scores of 0.396 and 0.337 respectively. They also lag far behind the national average.

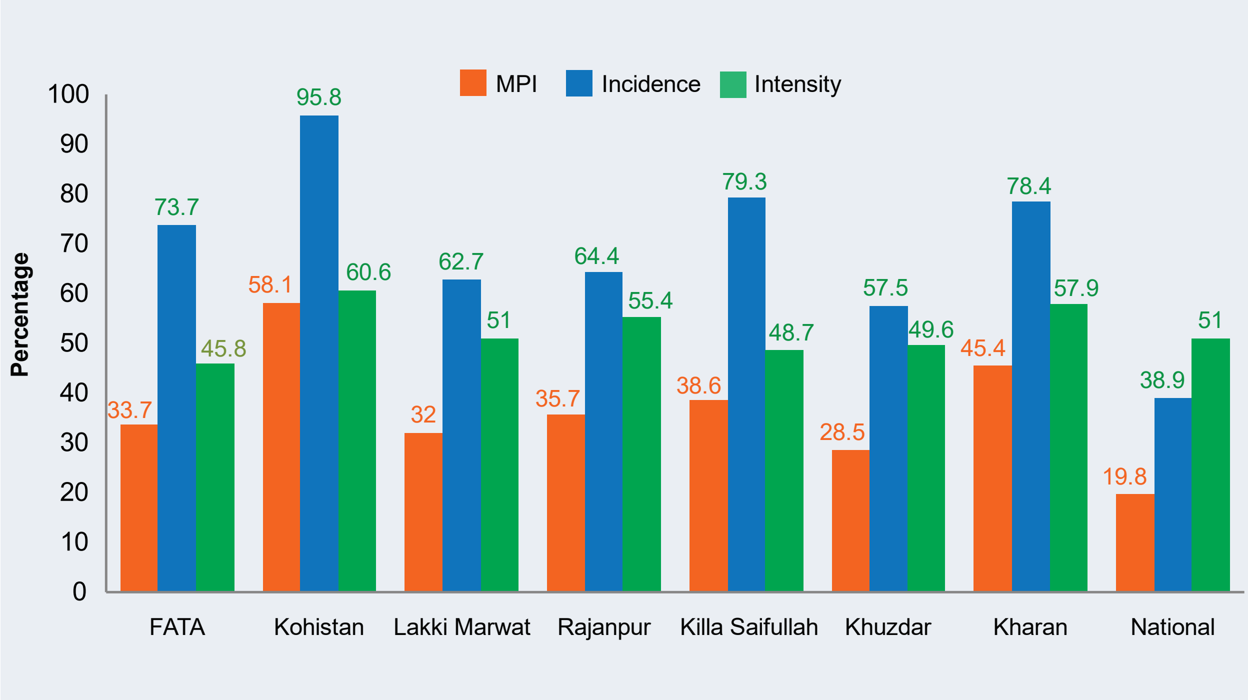
The Western Route, therefore, has a strategic importance for country's development planning especially as envisaged by the Pakistan 2025 Vision, Pillar I (Putting People First - Developing Human and Social Capital) and Pillar II (Achieving Sustained, Indigenous and Inclusive Growth) to alleviate poverty and rectify inequalities. It also advances the CPEC LTP 2017-2030 objectives which specifically factor in inclusiveness and sustainable development as its core principles.

This route, through N55 Peshawar-DI Khan National Highway, provides access to FATA, which before Zarb-e-Azb and military operations was the hub and safe havens for the terrorists.

While all the poverty stricken areas along the

FIGURE 8.3

Selected Districts Adjoining the Western Route and their MPI Estimates



Source: Multidimensional Poverty in Pakistan; UNDP Report 2016

Western Route and FATA will potentially benefit from CPEC and its associated components, some least developed districts (Kohistan, Lakki Marwat, Panjgur, Killa Saifullah, Khuzdar, Kharan, FATA) need special package of interventions to address wide spread poverty and state of deprivation.[6]

Figure 8.3 presents the list of selected districts adjoining the Western Route and their MPI estimates:

The incidence and intensity of poverty in these districts and areas range between 57% to 96% and 45% to 61% respectively. Particularly, the incidence of poverty in Kohistan district of Baluchistan is as high as 95.8%,that of intensity 60.6% and overall MPI .581, which is nearly three times the MPI of Pakistan.

Briefly, the construction of Western Route will therefore: (i) mainstream the existing backward areas (ii) allow access of the poor and deprived areas to market centers (iii) spur sustainable and commercially viable economic activity(iv)generate income and employment opportunities and (v) bring about a transformative change in the life and living standards of the people in the region.

Part 3
Resource Base Analysis of the Selected Districts along the CPEC Western Route

The areas along the Western Route are almost entirely reliant on subsistence agriculture, which is becoming less and less profitable with low land and water productivity. Lack of key infrastructure, on top, prevents the optimization of agriculture potential to make this sector profitable and competitive. CPEC can help harness full potential of the agro-pastoral sector and leverage the production system based comparative advantage by connecting the area with domestic and external markets.

Against this backdrop, following is a brief account of the major production systems and crops of the selected districts.

Killa Saifullah

The district is situated in the upland agro-ecological zone of Baluchistan with an area of 6831 sq km. Average temperature ranges between 10^0c to 32^0c. The annual rainfall is around 271-392 mm. The soils are sandy, loamy and clayey. The major crops grown in the area are as shown in Table 8.1.

Apple, cherry and sunflower crops seem to have considerable potential for growth as shown by Figure 8.4-A.

TABLE 8.1

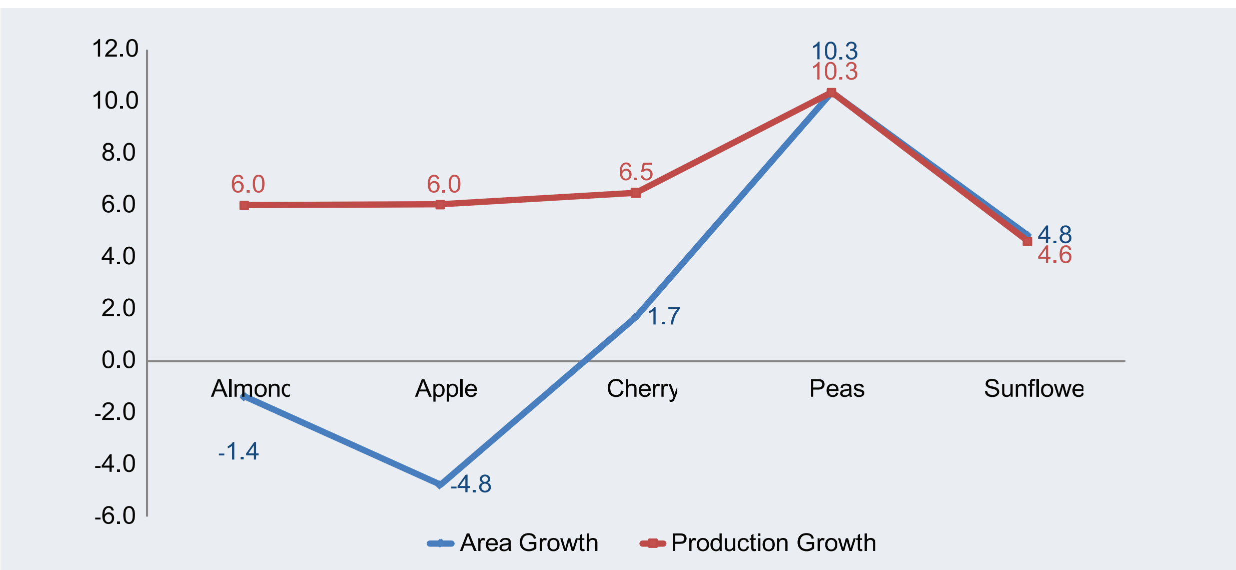
Major Crops of Killa Saifullah

District	Killa Saifullah
Population[7]	(342,814)
Major Crops	Wheat, Barley, Maize, Almond, Apple, Apricot, Grape, Peach, Pomegranate, Cherry, Water Melon, Musk Melon, Sarda, Garma, Onion, Potato, Tomato, Lady fingers, Carrot, Bottle gourd, Pumpkin, Cauliflower, Peas, Brinjal, Lufa, Cucumber, Chilies, Moong, Mash, Sunflower, Kharif and Rabi Fodders
Crops with Growth Potential	apple, grape cherry, carrot, sunflower, pea, cauliflower

Source: http://balochistan.gov.pk/i dex.php?option=com_docman&task=cat_view&gid=1274&Itemid=677

FIGURE 8.4-A

Production and Area Growth of Major Crops in Killa Saifullah

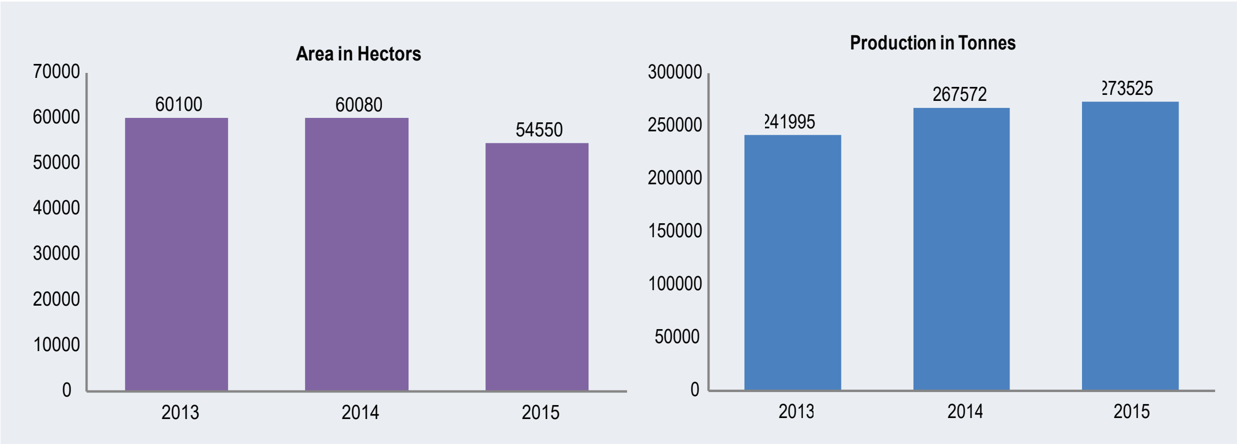


Source: http://balochistan.gov.pk/index.php?option=com_docman&task=cat_view&gid=1274&Itemid=677

The apple crop in particular has shown a consistent growth, despite reduction in its area,with an increase from 240,000 tons (2013) to 275,000 tons (2015) as shown in Figure 8.4-B. This is sufficiently indicative of the farmers' choice and preference for the apple crop.

FIGURE 8.4-B

Production and Area of Apple in Killa Saifullah



Source: http://balochistan.gov.pk/index.php?option=com_docman&task=cat_view&gid=1274&Itemid=677

Khuzdar

The district has an area of 5380 sq km and is located in the upland agro-ecological zone of Baluchistan. The temperature ranges between 28-32^{0}c while annual rainfall is around 250 mm. Clay and silt are the main soil types. The major crops of the area are shown in Table 8.2.

TABLE 8.2

Major Crops of Khuzdar

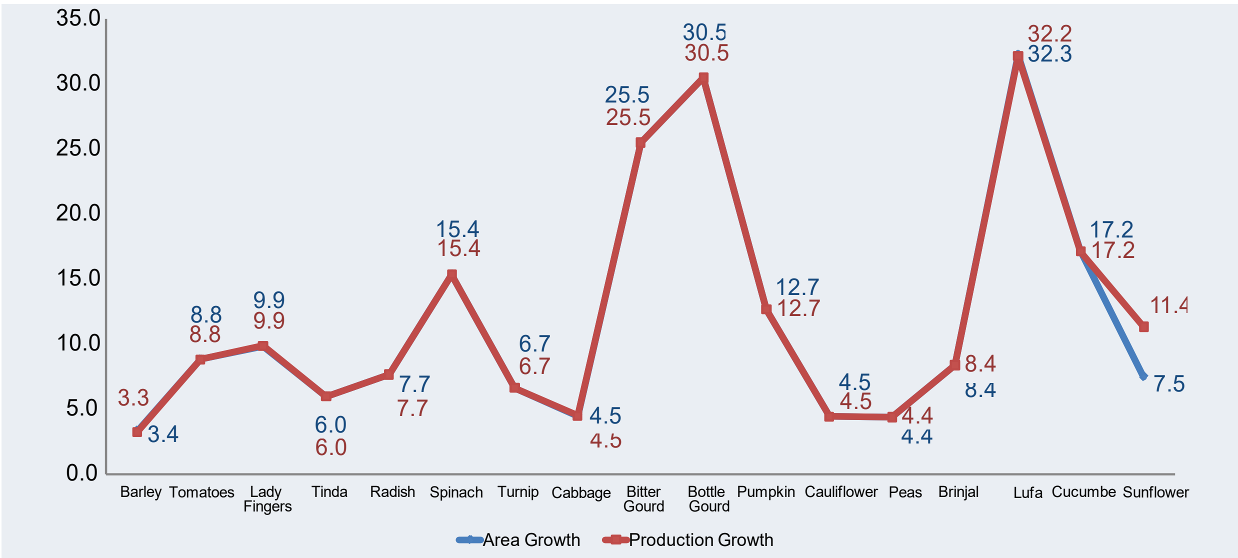
District	Khuzdar
Population[7]	802,207
Major Crops	Wheat, Barley, Jowar, Maize, Bajra, Rice, Almond, Apple, Apricot, Grape, Peace, Pomegranate, Plum, Citrus, Banana, Guava, Dates, Water Melon, Musk Melon, Onion, Tomatoes, Lady fingers, Tinda, Radish, Spinach, Turnip, Cabbage, Carrot, Bitter Gourd, Bottle gourd, Pumpkin, Cauliflower, Peas, Brinjal, Lufa, Cucumber, Chilies, Garlic, Coriander, Moong, Mash, O.K Pulse, Mutter Pulse, Sunflower, Kharif and Rabi Fodders
Crops with Growth Potential	Vegetables

Source: http://balochistan.gov.pk/index.php?option=com_docman&task=cat_view&gid=1274&Itemid=677

Vegetables have registered a consistent potential for growth since last few years as is amply evident from the Figure 8.5-A. Among these, tomato, lady finger and gourds are in particular noteworthy is evident from Figure 8.5-B.

FIGURE 8.5-A

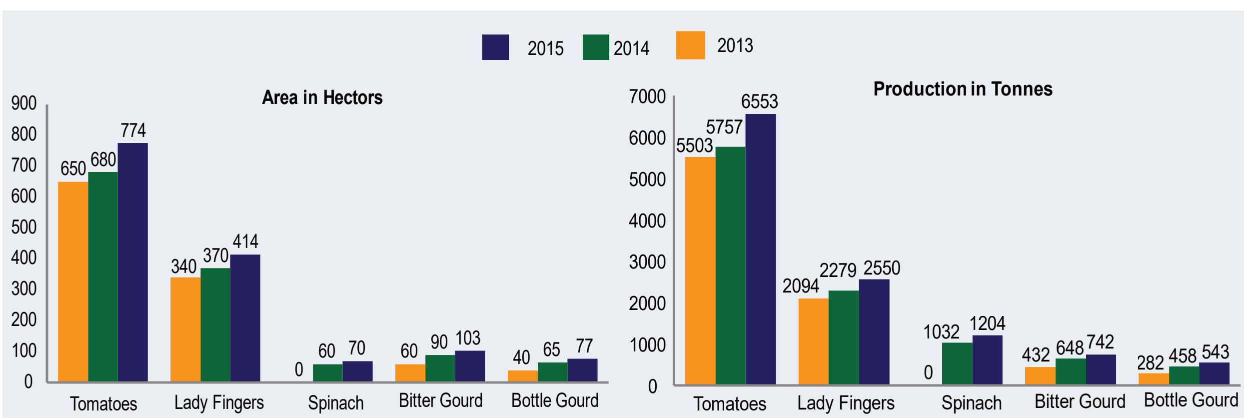
Production and Area Growth of Major Crops in Khuzdar



Source: http://balochistan.gov.pk/index.php?option=com_docman&task=cat_view&gid=1274&Itemid=677

FIGURE 8.5-B

Population and Area of Major Crops in Khuzdar



Source: http://balochistan.gov.pk/index.php?option=com_docman&task=cat_view&gid=1274&Itemid=677

Kharan

Kharan is situated in the sub-tropical continental plateau of the desert agro-ecological zone of Balu-chistan with an area of 48051 sq km. The annual average rainfall is around 90-104 mm and temperature ranges between 2° C in winters to 45° C in summers. The soil type is clayey, loamy and silty.

A large number of crops are cultivated in the area as shown in Table 8.3.

TABLE 8.3

Major Crops of Kharan

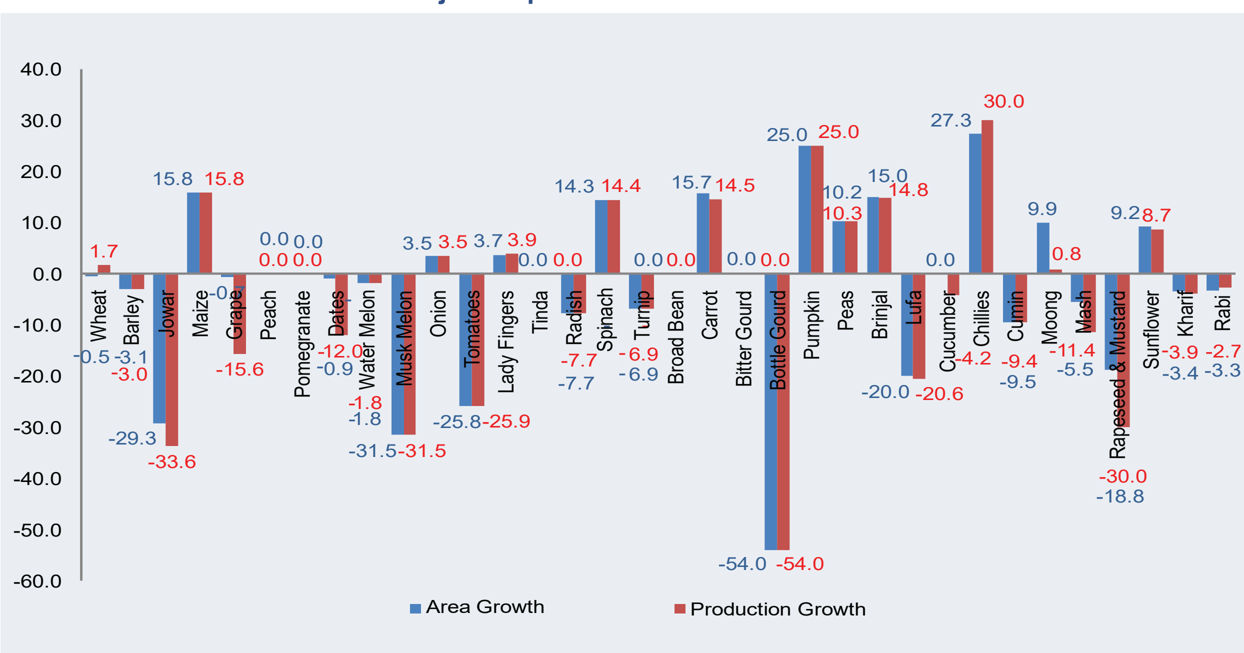
District	Kharan
Population[7]	156,152
Production System	Wheat, Barley, Jowar, Maize, Grape, Peach, Pomegranate, Dates, Water Melon, Musk Melon, Onion, Tomatoes, Lady Fingers, Tinda, Radish, Spinach, Turnip, Broad Bean, Carrot, Bitter Gourd, Bottle Gourd, Pumpkin, Peas, Brinjal, Lufa, Cu-cumber, Chillies, Cumin, Moong, Mash, Rapeseed and Mustard, Sunflower, Kharif, Rabi
Comparative Advantage	Wheat

Source: http://balochistan.gov.pk/index.php?option=com_docman&task=cat_view&gid=1274&Itemid=677

Vegetables have shown a consistent pattern of growth as is evident from Figure 8.6-A

FIGURE 8.6-A

Production and Area Growth of Major Crops in Kharan

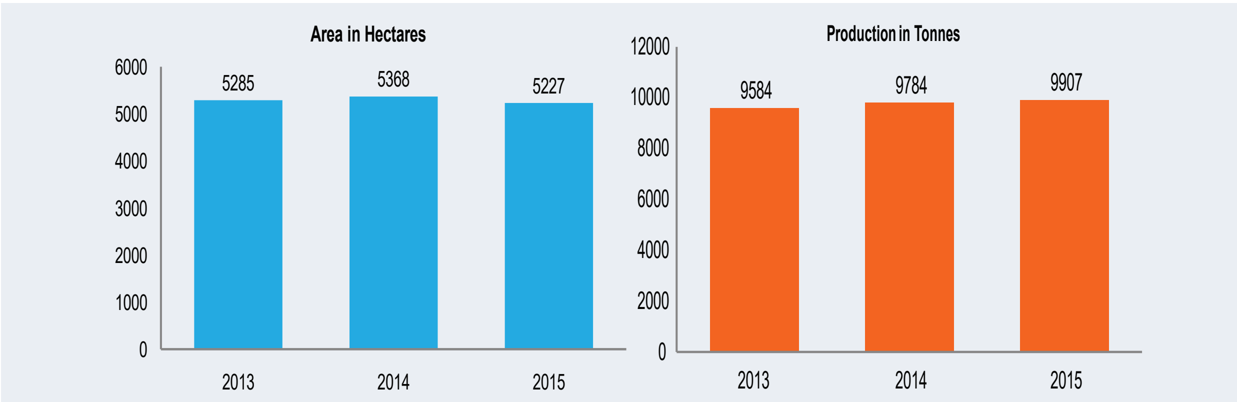


Source: http://balochistan.gov.pk/index.php?option=com_docman&task=cat_view&gid=1274&Itemid=677

However, wheat seems to have maximum potential for growth as despite the reduction in the area, the production has reached 9900 tons.

FIGURE 8.6-B

Production and Area of Wheat in Kharan



Source: http://balochistan.gov.pk/index.php?option=com_docman&task=cat_view&gid=1274&Itemid=677

Panjgur

It is also situated in the upland ecological zone of Baluchistan with an area of 16,891 sq km. The average annual temperature ranges between 28 to 32^{0}c and rainfall between 100-115 mm. The soil structure is silty, loamy and clayey. The major crops grown in the area are shown in Table 8.4.

Many of these crops including wheat and vegetables have exhibited positive growth rate over the years as is evident from Figure 8.7-A .

TABLE 8.4

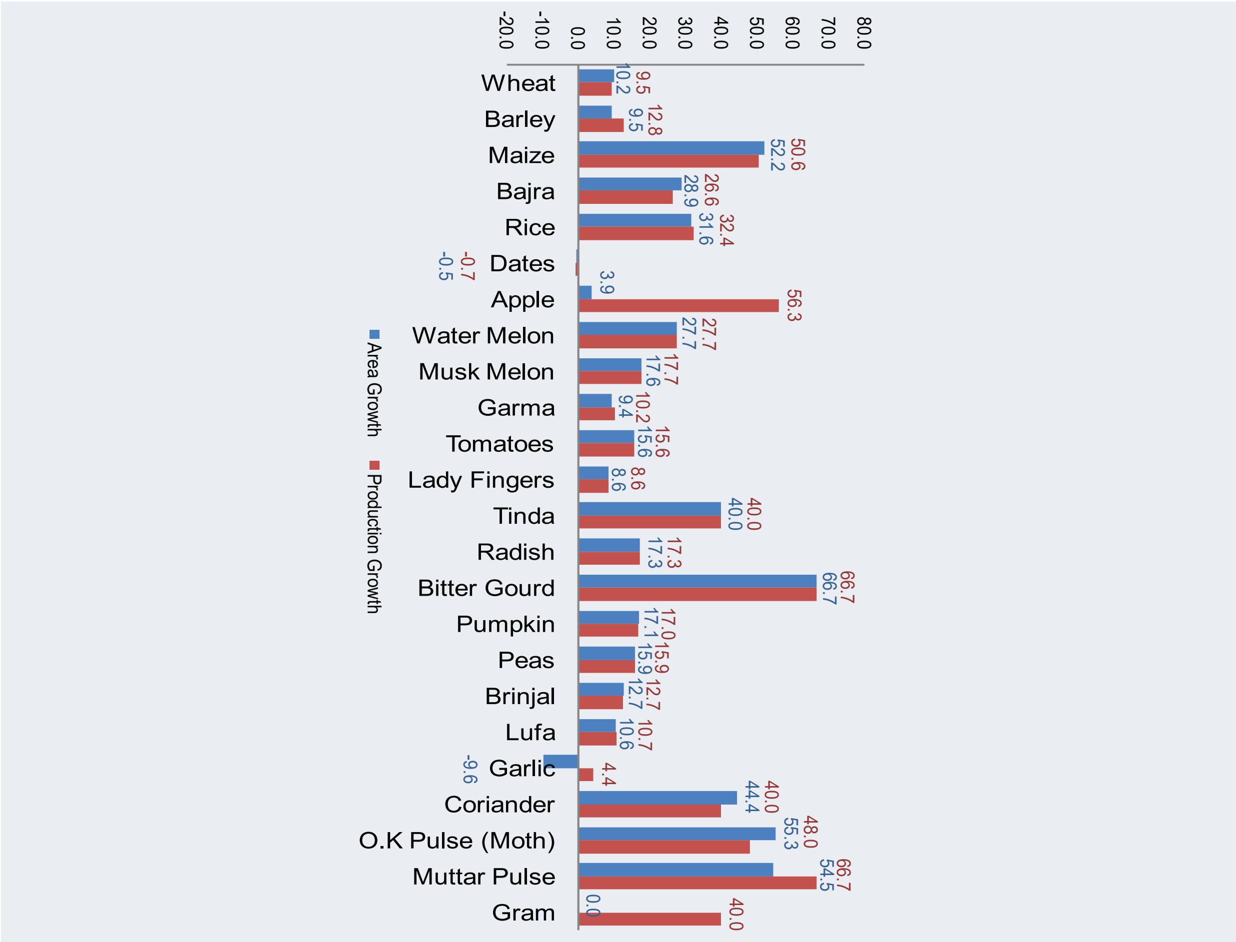
Major Crops of Panjgur

District	Panjgur
Population[7]	316,385
Major Crops	Wheat, Barley, Jowar, Maize, Bajra, Rice, Apple, Grape, Pomegranate, Dates, Water Melon, Musk Melon, Garma, Onion, tomatoes, Lady Fingers, Tinda, Radish, Spinach, Turnip, Broad Bean, Carrot, Bitter Gourd, Bottle Gourd, Pumpkin, Peas, Brinjal, Lufa, Cucumber, Chilies, Cumin, Garlic, Coriander, Moong, Mash, O.K Pulse, Masoor, Muttar Pulse, Gram, Kharif and Rabi Fodders
Crops with Growth Potential	wheat, apple, date, vegetables

Source: http://balochistan.gov.pk/index.php?option=com_docman&task=cat_view&gid=1274&Itemid=677

FIGURE 8.7-A

Production and Area Growth in Major Crops in Panjgur

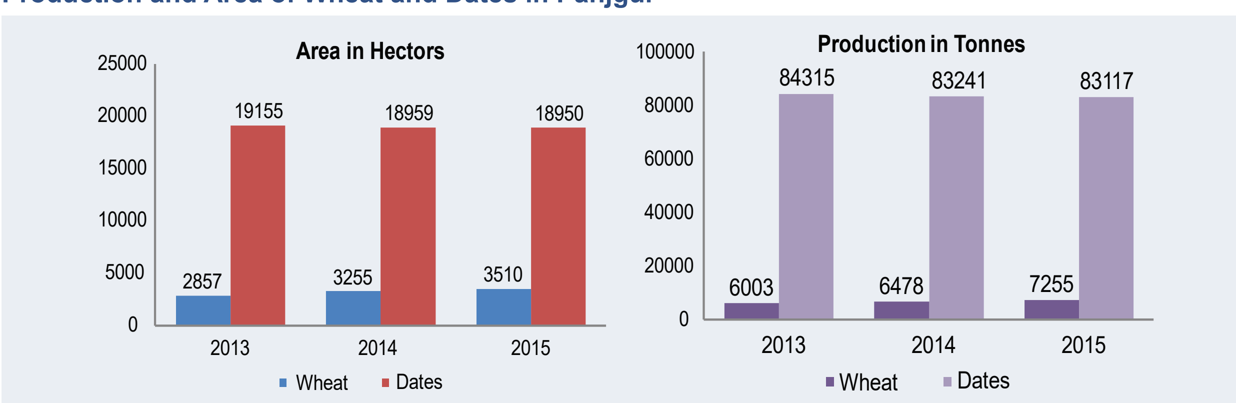


Source: http://balochistan.gov.pk/index.php?option=com_docman&task=cat_view&gid=1274&Itemid=677

However, wheat and dates demonstrate high growth potential as evidenced by Figure 8.7-B.

FIGURE 8.7-B

Production and Area of Wheat and Dates in Panjgur



Source: http://balochistan.gov.pk/index.php?option=com_docman&task=cat_view&gid=1274&Itemid=677

Kohistan

It is located in the eastern wet mountainous agro-ecological zone of KPK with humid climate. The rainfall ranges between 700-1000 + mm/y and the temperature from 16 °C to 30 °C. The soil type is loamy and shallow. The cultivated area is 245000 ha of which 26% is irrigated.

The major cropping systems include maize, rice, wheat, vegetables and fruits (Table 8.5).

TABLE 8.5

Major Crops of Kohistan

District	Kohistan
Population[7]	784,711
Major Crops	wheat, maize, rice, Barley, Rabi Vegetables, Kharif Vegetables, Kharif Fruits
Crops with Growth Potential	Wheat, Maize

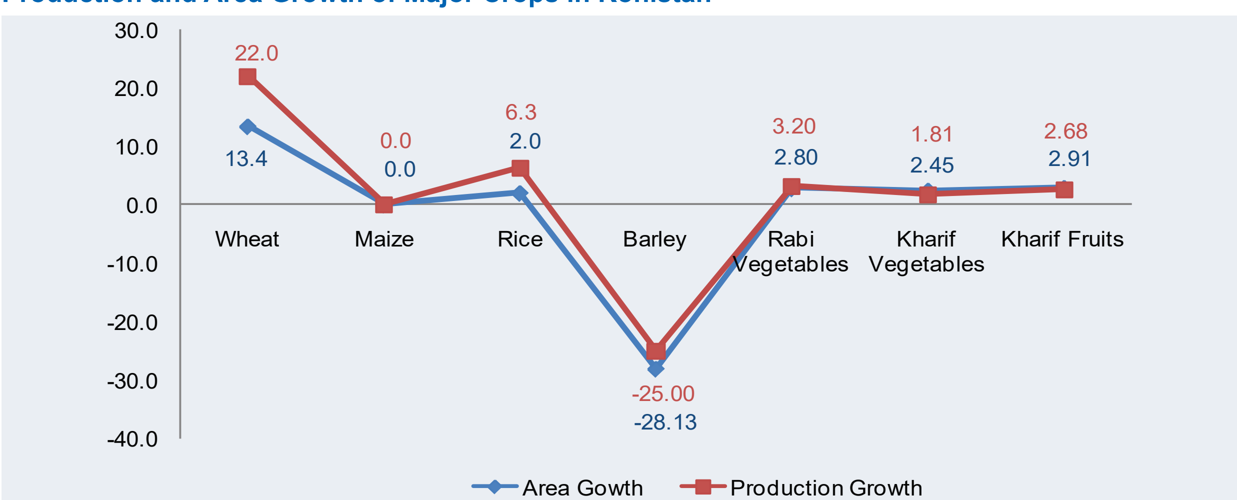
Source: Development Statistics of Khyber Pakhtunkhwa 2017

Many of the crops have either stagnated or shown a downward trend both in area under cultivation and overall production, except wheat and rice as is evident from Figure 8.8-A.

However, wheat and maize continue to be the preferred crops of farmers as exhibited by the growth rate in Figure 8.8-B.

FIGURE 8.8-A

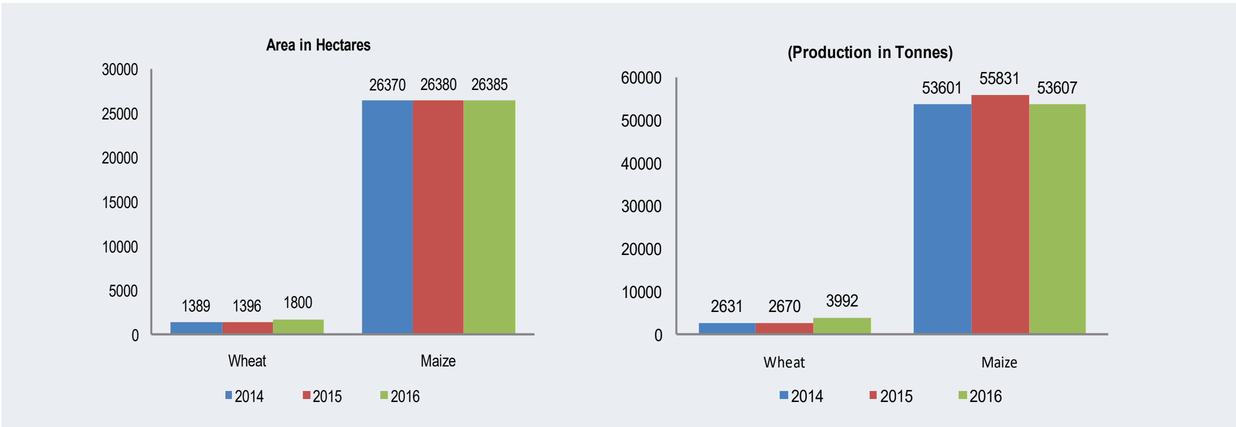
Production and Area Growth of Major Crops in Kohistan



Source: Development Statistics of Khyber Pakhtunkhwa 2017

FIGURE 8.8-B

Production and Area of Wheat and Maze in Kohistan



Source: Development Statistics of Khyber Pakhtunkhwa 2017

Lakki Marwat

It is located in the Southern Piedmont Plains of KPK with hot climate. The average rain fall is between 300 – 600 mm/y and temperature between 10-12 °C (winter) and 30 + °C (summer). The soil type is loamy. Table 8.6 shows the major crops cultivated in the area.

TABLE 8.6

Major Crops of Lakki Marwat

District	Kohistan
Population[7]	876,182
Major Crops	Wheat, Maize, Rice, Gram, Jowar, Bajra, Barley, Sugarcane, Rapeseed and Mustard, Rabi Vegetables, Rabi Fruits, Kharif Vegetables, Kharif Fruits
Crops with Growth Potential	Wheat, Barley

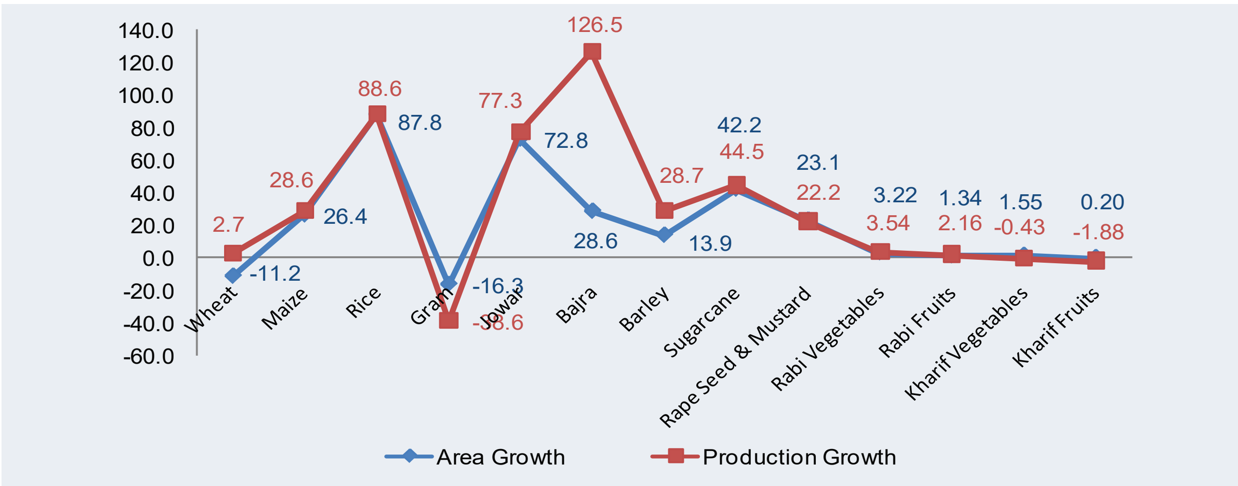
Source: Development Statistics of Khyber Pakhtunkhwa 2017

The Figure 8.9-A shows the growth in the area and production of major crops in the district Lakki Murwat

However, wheat crop seems to be the preferred crop as its overall production has shown a significant resuscitation in 2016 (Figures 8.9-B).

FIGURE 8.9-A

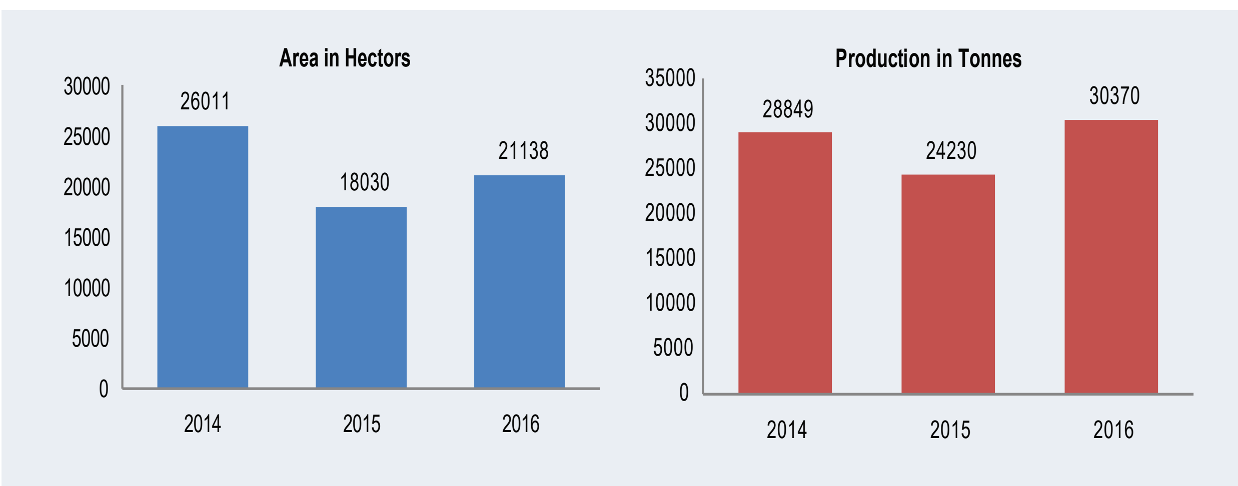
Production and Area Growth of Major Crops in Lakki Marwat



Source: Development Statistics of Khyber Pakhtunkhwa 2017

FIGURE 8.9-B

Production and Area of Wheat in Lakki Marwat



Source: Development Statistics of Khyber Pakhtunkhwa 2017

Federally Administered Tribal Areas (FATA)

The population of FATA[8] is estimated at 5.1 million. It is stretched over an area of 27,220 km. A large number of its residents had to face forced displacement and abandon their livelihood assets due to terrorist activities in the last two decades which has inflicted a major damage on the agriculture, horticulture, forestry and livestock sectors of the region.

While a credible quantitative field assessment of the total damage to the production system has not been done as yet, a time series data analysis (last 14-year period) was conducted by Dr. Mahmood Ahmad[9] and his colleagues in 2016 on the crops production trends. It revealed extensive damage to agro-pastoral sector. However, apple, pine nuts and livestock showed high resilience and exhibited huge potential for growth.

With the construction of CPEC Western Route and eventual merger of FATA in KPK, the connectivity and direct access to both domestic and external market will engender the accelerated commercialization of the economic activity, possible elimination of exploitative role of the market intermediaries and savings in transportation costs. This will enhance income and ensure better share of crop profit to the farmers.

Part 4
The Comparative and Competitive Advantages of Agriculture Sector and the proposed development model along the Western Route

The above Tables and Figures show that some specific crops in each of these least developed districts have yielded considerable increase in production as follows:

- Killa Saifullah: Apple
- Khuzdar: Tomato, Lady Finger, Gourd
- Panjgur: Wheat, Dates
- Kohistan: Wheat, Maize
- Kharan: Wheat
- Lakki Marwat: Wheat
- FATA: Apple, Pine nuts, Livestock

These crops (livestock in FATA), prima facie, indicate farmers' preferred choice for cultivation and rearing. The fundamental issue, however, is to sufficiently determine their degree of comparative advantage for the farmer. Non-availability of reliable relevant data including data on crop budgets and market dynamics defy this exercise. A comprehensive empirical study is warranted to address this deficit.

In the absence of such data and analysis, an effort has been made to indicatively identify crops in the selected districts which seem to have potential for further growth in the immediate horizon. These crops have been identified using the following criteria:

- The assumption that farmers make a rational choice in selecting crops for cultivation
- This choice is driven by market and profitability based on resource endowment
- Time series analysis of area under cultivation and total production of the crops during last three years presents a fair indication of the resilience of the crops and their comparative advantage.

The major challenge, however, is to transform the comparative advantage into competitive advantage to make agricultural profitable.[10]

CPEC as a Vehicle for Poverty Alleviation

There are four important factors enshrined in the CPEC framework to provide impetus to competitive agriculture: firstly, the focus on agricultural development and poverty alleviation; secondly, provision of special economic zones and food-agriculture processing and agro-industry therein; thirdly, the network of feeder and connecting roads and fourthly, access to domestic and international markets to support international trade flows and induce a considerable shift in the intra-country trade.

The Special Economic Zones (SEZ) and hubs along the three routes are particularly intended to galvanize the economic activities in the adjoining regions all along. The following section briefly describes the locations of these zones and hubs on the Western Route:

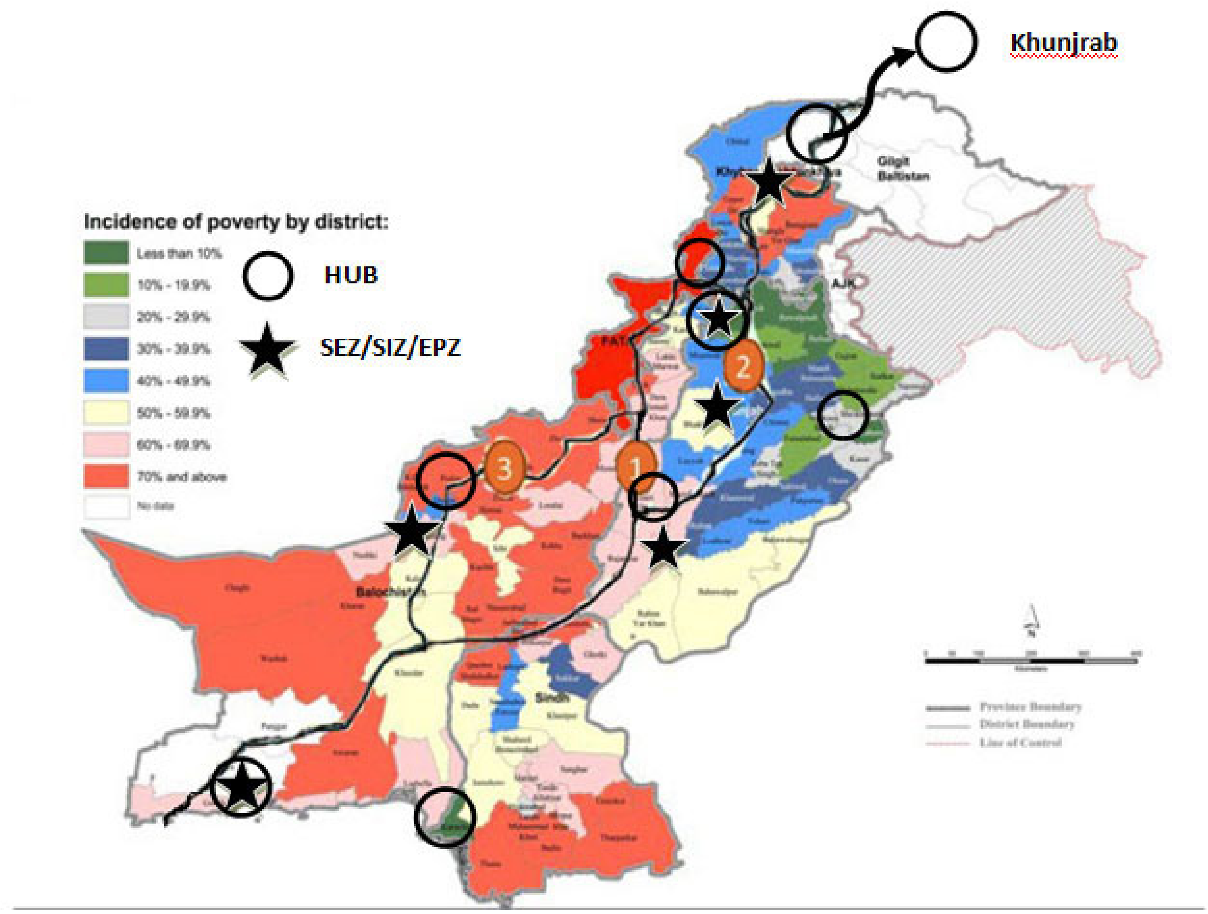
Economic Zones

Three major Special Economic Zones (SEZs) are planned along CPEC's Western Route while one in FATA in its close proximity:[11]

1. Bostan Industrial Zone in Baluchistan covers an area of 1000 acres with close access to the airport (23 km) and dry port (32 km) of Quetta. This SEZ caters for industries and commercial ventures pertaining to food and fruit processing, agriculture machinery, pharmaceuticals, electric appliances etc.
2. Rashakai Economic Zone (1000 acres) in KP-Kon M-1, Nowshera connected to the dry port (65 km) and airport 50 km for food and fruit processing units, textile, packaging industries etc.
3. Moqpondass SEZ in Gilgit Baltistan region covering an area of 250 acres with close proximity to the airport (35 km) and only 4 km

FIGURE 8.10

Location of Economic Zones



Source: Multidimensional Poverty in Pakistan; UNDP Report 2016 from CPEC route. This SEZ includes marble and leather industries and food, fruit, mineral processing units.

4. Mohmand Marble City in Mohmand Agency.[12]

There are additional two hubs planned on the Western Route in Gilgit Baltistan and Pishin respectively. Figure 8.10 shows their location on the poverty map of Pakistan.

While these SEZs and hubs do cater for the least developed regions, they do not seem to (a) address the needs of relatively low- population-density-most-deprived districts with a very high MPI and (b) fully avail the potential benefits likely to accrue from the Western Route to alleviate poverty for another five to six million people of these districts.

The Proposed Development Model for Poverty Alleviation

The development model comprises three salient components: (a) a staged development approach (b) four pronged interventions and (c) additional sub zones or clusters in the selected six districts and FATA based on their endowment and agricultural production systems.

a) Staged Approach

Given the historical neglect and the primitive practices which characterize the productive activities in these regions, the cultural and local specificities should be given high value in designing development interventions. This will entail the following stages:

- In the first instance, efforts should aim at improving the overall economic productivity based on the existing production system to make agriculture profitable
- The second stage should focus on diversification of the sector to promote high value crops, based on the potential comparative and competitive advantages
- Third stage, benefiting from the experience of the first two, should aim at increasing the overall factor productivity to transform the sub-sectors/commodities/agriculture into fully competitive, commercial and agro-industrial ventures with robust forward linkages to domestic and international markets.

b) A Four Pronged Intervention

A composite set of four pronged interventions is proposed to fully realize potential benefits from the agro-commercial activities:

Software — Policy Recommendations

The policy choice should not necessarily be to maximize the production but to create necessary and sufficient conditions for the farmers to become more competitive for profitable agriculture. The production structure as well as the agro processing industry and input delivery system should be incentivized to respond effectively to the changes in domestic and external markets and technologies. In order to achieve faster agricultural growth and commercialization, the policy must, inter alia, provide for: (i) enabling environment for farmers to facilitate their responsiveness to the market demands (ii) incentive structure to make farm sector profitable and competitive (iii) enhancement and strengthening of commodity chain through product transformation and value-creation, product enhancement (cleaning, grading, packaging), cost effective and time saving transportation and logistics support (quality control, cold chain procedures etc) (iv) integration climate change and sustainability (v) facilitation of flexible rural factor markets (labor, land, water, and finance) and (vii) promotion of the role of private sector, service centers, NGOs and farmer associations.

Hardware — Physical Infrastructure

Apart from the network of feeder roads and highways already in place, the agricultural infrastructure including input based infrastructure (seed, fertilizer, pesticides, farm equipment and machinery etc.), resource based infrastructure (water/irrigation, farm power, energy) and physical infrastructure (transport, storage, processing etc.) need to be developed. These projects, however, involve massive initial capital costs, considerably long gestation periods and relatively low rate of returns on investments. Nevertheless, they provide the farmers with access to institutional finance and markets; stimulate spread of proven yield enhancing technologies; lower input costs; promote agricultural growth; and thus concretize modern, commercial and flexible farming systems.

Orgware — Institutional Strengthening and Capacity Building

The institutional infrastructure (agricultural research, extension, advisory services, financial and credit institutions etc.) is sine qua non to transforming traditional agriculture to commercial and profitable activity. The institutional presence needs to be repositioned to cater for the areas around the Western Route. Capacity development of the farmers and agricultural institutions must be geared to technology generation and transfer, farmer training, technical advice, adoption of modern service delivery methods including dissemination of international best practices. Provision of easy credit facilities is essential for farmers' investment in production. More importantly, the work of NGOs and development agencies including the donors need to be synergized for benefitting from the local successful models in water, crop, livestock management etc.

Technoware

The pre-production through to post production cycles add value to the product and significantly augment the profitability and competitiveness of agriculture. The information and intelligence on input and output markets, price fluctuation, weather and demand and supply structure can be accessed through integrated ICT solutions to help small farmers make right production and procurement choices. These solutions could be deployed on the smart phones, internet and other digital tools which are already being pervasively used even in the remote rural areas.

c) The New Economic Sub-Zones and Clusters

The staged approach and four pronged interventions, as described above, are integral to establishing and bringing the additional new economic sub-zones and cluster to full fruition. These sub-zones/clusters should be modeled around the specific crops, already identified in the preceding Part 3, which over the years have registered increase in yield and production and seem to have sustained the natural comparative advantage.

Accordingly, the following additional small economic sub-zones and clusters (up to 30 acres) may be established to stimulate the economies of the selected districts. Initially, economy of scales may impede the development of commodity clusters and specific agro-industry type, but with right kind of incentivized policy and institutional framework and advisory and support services, these will mature into self-sustaining functional zones complementary to the CPEC major zones and hubs.

Killa Saifullah Sub-Economic Hub and Cluster

Area: 30 Acres	
Type of Industry - Agro Processing Industry - Apple processing and packaging - Cold storage	**Software:** Agri-business policy with specific incentives, SME policy, feasibility and investment studies **Orgware:** Functional and efficient SMEDA advisory services, access to financial services and credit, extension services with focus on farmers' training for apple cultivation **Hardware:** Model apple orchards, training facility,market connectivity (Kalat, Quetta, Zhob, DI Khan and Islamabad)
Model Orchard Farm Clustering of producers, processors, traders and support services for training and marketing	**Technoware:** Efficient crop management practices,improved input technology for apple cultivation, IPM, ICT for Market Intelligence and Information System (MIIS)
Connectivity	- Right on Western Route - Zohb Airport (147 km) - Quetta Dry and Airports (185 km)

Khuzdar (Baluchistan) Sub-Economic Zone and Cluster

Area: 30 Acres	
Type of Industry Agro Processing Industry: Tomato Paste Processing Unit Vegetables Packaging	**Software:** Agri-business policy with specific incentives; SME policy; feasibility and investment studies **Orgware:** Functional and efficient SMEDA advisory services; access to financial services and credit; extension services with focus on farmers' training for vegetable cultivation especially tomato, lady finger, bitter gourd
Cold Storage	**Hardware:** Market connectivity (Surab, Kalat, Quetta, Sukkar and eventually with long term CPEC route)
Clustering of producers, processors, traders and support services for training and marketing	**Technoware:** Efficient crop management practices; Improved input technology for vegetables cultivation especially tomato, lady finger, bitter gourd; IPM; ICT MIIS
	- National Highway N-25 - Motorway M-7 - Khuzdar Airport, Quetta Air-Dry ports (307 km)

Kharan (Baluchistan) Sub-Economic Zone and Cluster

Area: 25 Acres	
Type of Industry Agro Processing Industry - Wheat threshing, Flour Mills - Vegetables Packaging	**Software:** Agri-business policy with specific incentives, SME policy, feasibility and investment studies **Orgware:** Functional and efficient SMEDA advisory services, access to financial services and credit,extension services with focus on farmers' training for wheat and vegetables cultivation Hardware and Infrastructure: Model wheat farm,
Clustering of producers, processors, traders and support services for training and marketing	training facility, market connectivity (Besima, Panjgu, Surab and Kalat and Quetta) **Technoware:** Efficient crop management practices improved input technology for wheat, IPM, ICT for MIIS
Connectivity	- National Highway N-85 (160 km) - Panjgur Airport (338 km)

Kohistan (KPK) Sub-Economic Zone and Cluster (KPK)

Area: 25 Acres	
Type of Industry Agro Processing Industry Food Processing and Packaging Clustering of producers, processors, traders and support services for training and marketing	**Software:** Agri-business policy with specific incentives, SME policy, feasibility and investment studies **Orgware:** Functional and efficient SMEDA advisory services; access to financial services and credit, extension services with focus on farmers' training for wheat and maize cultivation **Hardware:** Model farms, training facility Market connectivity (Swat, Buner, Shangla, Mardan) **Technoware:** Efficient crops management practices, improved input technology; IPM; ICT for MIIS
Connectivity	- Karakoram Highway N-35 (6 km) - Saidu Sharif Airport (177 km) - Peshawar Dry Port (350 km)

Panjgur (Baluchistan) Sub-Economic Zone and Cluster

Area: 30 Acres	
Type of Industry Agro Processing Industry Dates Processing and Packaging Clustering of producers, processors, traders and support services for training and marketing	**Software:** Agri-business policy with specific incentives, SME policy, feasibility and investment studies **Orgware:** Functional and efficient SMEDA advisory services, access to financial services and credit, extension services with focus on farmers' training for dates orchards cultivation **Hardware:** Model orchard farm, training facility, market connectivity (Gwadar for exports, Kalat, Quetta, DIK, Peshawar, Lahore) **Technoware:** Efficient orchard management practices,improved input technology (cultivars, harvesting etc.), IPM, ICT for MIIS
Connectivity	- Right on Western Route - National Highway N-85 - Panjgur Airport - Gwadar Port - Quetta Dry Port (560 km)

Lakki Marwat(KPK) Sub-economic Zone and Cluster

Area: 25 Acres	
Type of Industry Flour Mill Food Packaging Clustering of producers, processors, traders and support services for training and marketing	**Software:** Agri-business policy with specific incentives, SME policy, feasibility and investment studies **Orgware:** Functional and efficient SMEDA Advisory services, access to financial services and credit,extension services with focus on farmers' training for wheat cultivation **Hardware:** Model farms, training facility, market connectivity (Bannu, Peshawar) **Technoware:** Efficient crops management practices,improved input technology,IPM, ICT for MIIS
Connectivity	- CPEC Route 2 - National Highway N-55 (14 km) - Bannu Airport (67 km) - Peshawar Dry Port (201 km)

Wana South Waziristan (FATA) :Sub-Economic zone and Cluster

Cluster Type	Commodity	nterventions
Value Chain: Processing, Grading, Packaging, Cold Storage Clustering of producers, processors and support services	Apple: Share 73% of FATA and 14.6% of Pakistan production, already competitive in the domestic market	**Software:** Climate change sensitive policy for organic crop production, better regulatory frameworks for market operations minimizing government role **Orgware:** Research and extension service for generating and disseminating new or proven technology, certified nursery at farm level, model fruit orchards, farmer training and capacity building, access to value chain financial services and credit **Hardware:** Market connectivity (Tanks, DI Khan, Peshawar, Islamabad and Lahore) **Technoware:** Efficient pre- and post-harvest practices, improved technology of fruit cultivation, IPM, ICT for MII
Value Chain: Extraction, Processing, Roasting, Packaging and Storage Clustering of producers, processors, traders and support services for marketing especially exports to China	Pine Nuts: Unique FATA product; already competitive; 98% sold to local market agents; 70% processing, roasting (obsolete technology "Bhattis") and marketing at Lahore; demand (local and export) and price steeply rising	**Software:** incentivized policy and enabling environment for export sector; supportive of product transformation and value creation; better regulatory frameworks for markets **Orgware:** Research and Extension services for generating and disseminating new processing technology and harvesting tools; quality certified planting material; disease control; farmer training for harvesting and curtailing marketing wastage; access to financial services and credit **Hardware:** Market connectivity with Bannu and Lahore; Pilot project for roasting facility at FATA; **Technoware:** Efficient pre- and post-harvest practices, Improved technology for roasting; technology for removing the pine nut seedsfrom the shell; ICT for MIIS
Sub-economic zone: Fattening Farm and feed lot system, Feed mills; Slaughter House, Export processing facility Clustering of producers, processors, traders and support services for collective and export marketing	Livestock: 90% of FATA farmers rear livestock; no fattening facility; 98% slaughtered in private premises; 40-50% profit goes to market	**Software:** Incentivized policy and enabling environment for: livestock development; rangeland development; better regulatory frameworks for markets **Orgware:** Research, Extension and Veterinary services for efficient stock management; artificial insemination; disease control; training for breeding, better housing and sanitation practices; re-seeding of barren land; pasture-rangeland management; rotational grazing and plantation of fodder trees; access to financial services and credit **Hardware:** Markets and Mandis' development; connectivity with Peshawar market and exports to Iran; niche market for Eid and halal markets; **Technoware:** Genetic improvement including provision of high quality rams and bucks; drought resistant and palatable grasses; fodder chopping machines; urea molasses block production
Connectivity National Highway N-5 (Torkham) Parachinar Airport Torkham Border Terminal Dry Port		

Conclusion

CPEC is considered to be a game changer for embarking on accelerated and inclusive sustainable development in Pakistan. The major challenge, however, is to make full use of the connectivity it provides to the least developed regions especially along the Western Route and the associated road network. These could serve as agro-corridors to ensure improved physical access to the markets, provide impetus to their agro-pastoral economies, create employment and income generation opportunities and thus alleviate incidence and intensity of poverty in the deprived and backward regions. Agriculture and agri-business development is already one of CPEC's major components. What is required is a well thought out package of policy and programs implementation to achieve the objective of inclusive growth as enshrined in the proposed CPEC long term plan (LTP).

The production system based new sub-zones/clusters will have a transformative effect on making agriculture competitive and profitable and at the same time reaping the long term political and economic gains - by integrating the alienated and poverty stricken regions of KPK, FATA and GB into the mainstream national development effort.

Chapter

9 Land-Based Commerce and Pakistan’s Possible Economic Links with the Land-Locked Countries of Central Asia

Land-Based Commerce and Pakistan's Possible Economic Links with the Land-Locked Countries of Central Asia

Asad Ejaz Butt

Introduction

The China-Pak Economic Corridor (CPEC) has been the cornerstone of Pakistan's foreign and economic policies since its groundbreaking in 2015. Infact, given the enormity of the project and the acceptability and support that it currently enjoys within the country, it is no more contingent upon any policy framework, be it local or foreign, that the country adopts. To say the truth, CPEC itself has become Pakistan's meta-economic narrative that is expected to project it grandiosely onto the global landscape and possibly rank it amongst the largest 20 economies of the world by 2030.

As discussed by other chapters in this report, the project offers enormous potential for international trade and integration especially within key but vulnerable sectors like water and agriculture (as espoused by Shahid Najam and Mahmood Ahmad) and is considered to be a vital determinant of the future direction of Pakistan's economy. But underlying its enormous potential for economic growth are irritants and challenges that could not only sabotage its functioning and operability but also bring irreparable losses to China and Pakistan, both of whom have great stakes to protect in what has become a mega trade deal between the two countries. So, while the expected returns of the project are high, so are the multi-dimensional risks associated with it.

One risk mitigating mechanism could be to diversify the project from the perspective of expanding its outreach and ownership. This implies that more international players and strategic partners could be invited to become part of the corridor to not only expand and increase its outreach but to also determine its international appeal and viability and to channel in the investment and stakes from a number of countries in the region and outside.

This has two clear advantages: one, that countries that do not approve of Pakistan and China, like India,would either become partners in the project or would be effectively isolated through increasing ownership of the project by other countries and two, the desired diversification would also, among other things, come in the form of product diversity and also the diversity of people, cultures and investment that could then be shared by a larger pool of countries. Clearly, this requires both China and Pakistan to negotiate deals with neighboring countries especially in South and Central Asia aggressively but with care and due diligence so as not to allow their own stakes to be diluted and the project being taken over by other regional and international powers like Russia.

One possible extension of the project could be to involve regional players like Afghanistan and the Central Asian Republics (CARs) including Kazakhstan, Kyrgyz Republic, Turkmenistan, Tajikistan and Uzbekistan. The obvious reason to do so is that while the CARs provide increasing returns to investment because of their unexplored natural resources and low barriers to entry resulting from absence of local established institutions, they also offer the proximity and geo-strategic advantages to China and Pakistan in terms of providing a safe and secure passage to the Middle East and Europe.

This chapter proposes Pakistan's external commercial linkages with the Central Asian Republics (CARs) through the existing land routes and also through the ones that will be built and reconstructed under the China-Pak Economic Corridor. To that end, this chapter considers the current social, political and economic identity of the CAR region and its relations with Pakistan to establish that the region can be involved and integrated in the CPEC and also in the larger OBOR plans of China. Also, an imperative question is what the region can offer in terms of its energy and economic potential, and how that could or could not bring about an improvement in the level of Pakistan's current engagement, most particularly trade-related, with the region.

History of the Central Asian Region – Anthropological Perspectives

Central Asia has historically served as a bridge between Europe and Asia. Being home to a large number of ethnic groups and communities that have claims on both its history and culture, the ethnic and cultural diversity of the region cannot be disputed. However, despite the presence of a number of ethnic groups who have contested with each other out of their quest for more land and power, there has never been one dominant ethnic group. This could possibly be the case because the region has faced a large number of invasions,which altered the demographic mix of the society, and has also undergone various ethnic migrations. The insurgents that invaded Central Asia, assumed that this was a strategically useful region, rich in natural resources; therefore, local ethnic groups could not establish a local polity or institutions to safeguard their economic, social and political interests. If they ever came close to any concentration of power or wealth, they were often run over by insurgencies.

The region is geographically diverse and includes steppes, mountains and flat deserts, which comprise the physical terrain. It is hard to look at it without acknowledging the influence and the historic role that the Soviet Union has played. It was divided into republics and governed from the capital, Moscow. The five countries known as the "stans" consist of the Turkish speaking, Uzbekistan, Kazakhstan, Kyrgyzstan, Turkmenistan and the Persian speaking, Tajikistan. Political and infrastructure development in each country varies on the basis of geography. The national borders within the Central Asia of today do little justice to the historical significance of the overlapping nature of the ethnic and cultural affiliations of the Central Asian people.

Uzbekistan has a history of urban settlements unlike many other states with steppes. Tashkent, with a large population, served as a cultural capital for the Soviets. Large infrastructure development in Tajikistan and Uzbekistan took place due to the large scale cotton farming. In the Ferghana Valley, major border conflicts among Kyrgyzstan, Uzbekistan, and Tajikistan have taken place since independence from the Soviets. The Soviets strove to create borders that would contain ethnic consciousness within communities that were spread across borders. The impracticality of the borders is also evident in the large areas within these nations that consist of pockets of sub-ethnic diversities. For instance, many of Uzbekistan's urban population is primarily

Tajik speaking and Kazakhstan's northern region is primarily Russian.

Central Asia played a large role in the world history, yet the years following the Russian and Chinese conquests have been an era of isolation and inter-regional conflicts. Multiple waves of migrants — pre-twentieth century and post — resulted in a fluidity of its ethnic groups and cultural practices. An emphasis on the past and current migrations and trading networks of the area further reveals the complex lived experience of ethnic groups within Central Asia – contradicting the nation-state ethnic-territories.

The Identity of CARs – Are they Integratable?

There are certain characteristics that define the geography and economy of CARs. They are key elements of the CAR identity, most noteworthy of which include land lockedness and ex-soviet status. These characteristics not only construct the CAR identity as it has come to be understood by the peoples and policy-makers of other nations around the world but also operate to inhibit the region in terms of its ability to integrate with the outside world.

Land Lockedness

Several studies have documented the impact of land lockedness on economic development. Of special relevance and interest is the work done by Gael Raballand. He has analyzed the impact of land lockedness on trade estimated for a panel database using a gravity approach. He examines the Central Asian economies to find out that land lockedness implies a high transport cost burden. He also estimates the impact of land lockedness on trade using four measures of being landlocked: the first estimation obtained by introducing a dummy variable, the second estimate uses the shortest distance between a landlocked country and the nearest major port facility, the third measure represents the number of borders with coastal countries and the fourth is the number of national borders crossed. Raballand is a name concludes that being landlocked would reduce trade by more than 80%.

A UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS) study published in 2013 titled "the Development Economics of Land Lockedness" finds out through using an econometric approach that land lockedness can affect both economic and non-economic dimensions of development, and that these development effects can be transmitted through several channels that include international trade and quality of institutions. Other international development experts including Easterly and Sachs have also pointed to land lockedness as a primary contributor to underdevelopment.

The Central Asian region borders Russia, China, Afghanistan, Iran and the Caspian Sea. The region is completely landlocked from three sides while the fourth border is shared between the Caspian Sea and Russia. However, out of the five CARs analyzed in this chapter, only Kazakhstan and Turkmenistan border the Caspian Sea. Therefore, integration and sea-based commerce with Central Asia, especially through Pakistan is not directly possible. The only linkages that Pakistan can build with the region is through land, and that too is dependent on a number of trade deals and negotiations that both Pakistan and CARs will have to manage through political maneuvering in Afghanistan and Iran.

Ex-Soviet Status

The Central Asian Republics haven't really been able to integrate into the international political economy as they would have aspired to after the disintegration of the Soviet Union in 1991. Despite efforts to establish and maintain international relations especially for trade facilitation and promotion purposes, various governments in the CAR region haven't been able to pursue policies, especially those of an international nature, that are independent of their soviet past.

The centralized political organization within the Soviet Union did not allow constituent units of the Union to develop capacity and gain any semblance of autonomy over foreign policy and international relations. Thus, the Central Asian Republics, which were already comparatively more subdued politically and economically compared to other constituent units within the Union, have not been able to develop a distinct identity after independence. A good example to analyze in this context is that of Britain post-Brexit. Their economy has started to show signs of vulnerability, and the British government, despite its proactive foreign policy towards South Asia in particular, is finding it hard to pursue a foreign policy and international relations independent of the European Union.

Not only have the CARs not been able to alienate themselves from their soviet past, but their values, customs and traditions are also inspired by the Russian polity and culture. But this phenomenon is not uniformly true across all CARs. Anders Aslund's work on diversity between the CARs holds much importance in this context. He makes a comparison between the five Central Asian economies, elaborating on the political systems of all five countries post-communist transition. He talks about how five countries differ in structure, level of development and indebtedness. Politically, although all five countries are considered authoritarian, the differences in pluralism are great. Turkmenistan and Uzbekistan are full-fledged dictatorships, while Kazakhstan, Kyrgyzstan and Tajikistan can be described as mildly authoritarian. He also compares the amount of natural resources each country has and the domination of Kazakhstan over the other weaker countries.

In the context of foreign trade, Aslund believes that Central Asia is fully dependent on other Soviet Republics, especially Russia. Since independence, trade with the outside world has expanded particularly for Uzbekistan and Turkmenistan, yet the two countries lack coherent national and regional trade policies. Anders points out that the economic data collected in most Central Asian countries is extremely poor with Turkmenistan, Tajikistan and Uzbekistan having the poorest statistical systems, Kyrgyzstan having a decent statistical system, but measurement being difficult in an economy dominated by small enterprises and Kazakhstan probably having the best statistics, since it has a reasonable statistical system and an economy dominated by large raw material extraction companies.

Economic and Political Isolation

The works cited earlier on the impacts of land lockedness and ex-soviet status are particularly important in the context of Pak-CAR relationships and for the potential extension of the CPEC to Central Asia. Not only does land lockedness reflect poorly on economic development, but it disables countries from pursuing independent foreign or economic policies as in the CAR case where the pursuance of independent polices is constrained by the high presence of Russian influence in the region. In cases where smaller states bordered by a stronger states/s wish to formulate policies with freedom and independence, they are thrown into economic and political isolation. CARs have historically given in to external pressure from Russia whereas Pakistan in South Asia and Iran in the Middle East haven't forsaken their economic and political independence to maintain friendly and cordial relations with their stronger neighbors.

Russia is showing initial signs of interest in CPEC. With the establishment of peaceful and friendly relations among Russia, China and Pakistan, there's every likelihood that the Russian influence in the CAR region will not operate to keep CPEC away from the region. There could, however, be a case that CPEC would provide the CARs with economic and political independence that can somehow mitigate the Russian domination in the region, which is clearly a situation that Russia would not want to develop. Therefore, the probability of a Pak-CAR partnership through CPEC is also partially dependent on whether Russia is willing to see competitors in the CAR region.

The India Afghan Closeness

The Indian military assistance to Afghanistan has increased manifold in the last few years. Pakistan's ally in the war on terror, the US under Trump has turned its back on Pakistan and has not only scaled back its assistance but also warned the country of dire consequences if it does not allegedly stop exporting terror to neighboring India and Afghanistan. Both India and Afghanistan have signed various military and economic deals over the last decade starting with the US-India nuclear deal in 2008 to LEMOA in the recent past.

In the newly released South Asia Policy formulated by the Trump administration, one can find an expression of a complete distrust on Pakistan in terms of its ability to fight the menace of terrorism in the region. And as a result, the number of troops and US intervention in Afghanistan is expected to increase. Meanwhile, the American war funding to Pakistan for 2018 has been suspended and the chances of its revival in the future also look bleak.

This represents a major divorce from the American foreign policy of last decade that was committed to an American exit from the region and a non-interventionist policy in Afghanistan both of whom provided greater ownership to Pakistan in the region at large and in Afghanistan in particular. However, the Asia Pivot policy, which was first spoken of during the Obama rule, is heavily relied upon by the Trump administration that views the China-Pak nexus as a potential challenger to the US domination and sees India, with its vast human resource base and a fledgling technology sector, as a country with a suitable potential to curb the Chinese expansion in the region.

What is concerning though is that while Pakistan's estrangement with the US would only please China that has vested interests and unrelenting trust in Pakistan, especially in the recent times when the country has faced criticism from roughly all its neighbors for its alleged support of terror groups, the risks to the country vis-à-vis CPEC have become unnecessarily large. Two 'what-ifs' are particularly important in this case – what happens to the Pak-China relationship if the CPEC is not pulled off as meant to be, especially due to the increasing security concerns along its routes and two, what if the Pakistan economy doesn't show great signs of improvement even if CPEC plans are implemented and realized in their entirety – meaning what if the economy doesn't respond to the proposed CPEC interventions.

Another risk is the efforts that India and Afghanistan could make to sabotage the CPEC. This is particularly easy for India and Afghanistan to do given the 21st century non-traditional proxy warfare and the reliance of Pakistan on the Wakhan corridor (see Figure 9.1) to connect with CARs.

During the 7th Joint Coordination Committee (JCC) meeting on CPEC, the Chinese and Pakistani administrations made a smart move by officially inviting Afghanistan to join the CPEC. This would not only mitigate the Indian influence in Afghanistan but also allow Pakistan to use the Afghan soil, especially through the Wakhan corridor, to connect to the energy-rich Central Asia. However, with India reportedly increasing its influence in the Wakhan region through construction and deployments, the

FIGURE 5.1

Map of Wakhan Corridor

Source: http://www.gifex.com/detail-en/2009-11-18-11172/Central-Asia-Political-Map.html

likelihood of Pakistan getting connected to Central Asia through either CPEC or CAREC is low. Is there a case that the CPEC connectivity to Central Asia is not only dependent on Pakistan, China, Afghanistan and the CARs but also on whether India agrees to join CPEC? Given that it doesn't seem like a possibility considering the political differences of India with China and Pakistan, part of the CPEC plans should be to explore and identify alternative land-based trade routes that can connect the Western sphere of Pakistan to Central Asia.

The Economic Potential of CARs

According to the data produced by the Asian Development Bank, the economic outlook for the CAR region looks bright with 'stable oil prices, improving prospects for the Russian Federation, and rising remittances. Growth is projected at 3.9% in 2018, up from earlier forecasts of around 3.5%, with improved projections for Kazakhstan. Forecast inflation is raised to 7.8% in 2018, mostly from higher inflation in Azerbaijan and Uzbekistan. The current account deficit is expected at 2.0% in 2018, wider than earlier projected mostly because of deterioration in Azerbaijan and Kazakhstan'[1] Azerbaijan though hasn't been the focus of this chapter for its geographic disconnection with the Central Asia on the eastern side of the Caspian Sea; however, its economic outlook too looks as positive as does that of the CARs that this chapter seeks to focus upon.

Javaid and Rashid (2015) compare the energy-potential of the CARs with that of the Middle Eastern countries and deduce that only three CARs — Kazakhstan, Turkmenistan and Uzbekistan — have significant oil, gas and energy reserves and state that the region is rich in hydrocarbons and oil reserves but the potential is not truly realized for the economic development of the region possibly because Russia has a monopolistic control over the regions energy resources. The non-uniformity of the presence of energy resources in the region could be a concern. However, the case with the relatively energy-poor CARs is not that they are natural resource poor or that their energy potential is not high enough to make their utility as potential CPEC partners any better than their relatively energy richer neighbors. It could just be a case of their resources either being explored at a smaller scale or the potential of their other hidden natural resources not been exploited in their entirety.

The economic potential of CARs justifies their proposed inclusion in the CPEC plans. Firstly, the extension of CPEC to Central Asia would not only incentivize Afghanistan to become part of the CPEC but also provide a greater platform to Pakistan and Russia to come together for mutual economic interests. Secondly, it shall also serve to contain the Indian which is likely to bring the Central Asia into its midst through Afghanistan. So, it is in the best political interest of Pakistan to use CPEC and economic transactions with Afghanistan, Russia and the CARs to have a greater access and control over productive resources of the larger South and Central Asian region. CPEC is definitely the bait that can make this possible, and with the generous Chinese monetary and technical support expected to flow in till 2030, Pakistan's worries in realizing these objectives can only be political in nature.

Pakistan's Relations with CARs

It is interesting to note that while some individual states within the region could be located in a geostrategically advantageous position and some might not, the region as a whole is quite well placed to become a bridge between Asia and Europe also facilitating connectivity of the South Asian states with Eastern Europe and the Caucasus.

The Government of Pakistan realizes the geostrategic importance of the CAR region apart from recognizing it as a region with immense economic potential. As a number of studies document, Pakistan has maintained cordial relations with the CARs not only because of the region's economic or geostrategic importance, as it provides a gateway into Europe and the Middle East, but also because of the socio-cultural and religious similarities.

One manifestation of Pakistan's inclination towards Central Asia, viewed from an economic lens, is the Strategic Trade Policy Framework, released by the Ministry of Commerce in 2014. It focuses on building long-term and profitable trade relations with the energy-rich Central Asia by 2018.

Strategic Trade Policy Framework 2014-18

There is a common misconception that there exists either a lack of policy-making in Pakistan, or the policies that have been formulated have found little or no expression in the decision-making and have not been supported by effective implementation frameworks. In my opinion, neither is there a dearth of policies, plans and strategies, nor are implementation frameworks completely missing. There is only a case of incoherence between the many policies that departments make without recognizing their complementarity and inter dependence. Departments work independently of each other without any integration or connectivity, reflects poorly on the successes they can achieve.

A stock take of the government policies reveals that the federal government has formulated a vision 2025. Punjab has also formulated a Growth Strategy that matures in 2018 which is expected to be replaced by the Sustainable Growth Strategy which attempts to imbibe the Sustainable Development Goals agenda more than its predecessor did. The federal government, is trying to actualize the Vision 2025 simultaneously with the localization of the Sustainable Development Goals (SDGs). Each line department and ministry of the government is embarking on creating its own set of polices including those for population, climate change and IT, to name a few, and coherence within these policies remains the least priority. One manifestation of the principle I put forth here is the Strategic Trade Policy Framework (STPF), which apparently takes a different route to trade and economic development than do other strategies of the government.

The STPF recognizes the role that CARs can play in the trade promotion and economic prosperity of Pakistan while other plans and policies of the government including vision 2025, hardly put any emphasis on land-based commerce as a means to foster greater connectivity and trade. The STPF states that the regions of South and Central Asia are amongst the least integrated regions of the world with intra-regional trade less than 5%, primarily caused by high costs due to infrastructure, missing links and lack of transit agreements. Opportunities are, therefore, immense for greater regional connectivity and enhanced cooperation through transit trade agreements. It also states that the Ministry of Commerce is working on achieving shared prosperity through better connectivity and transit trade by pursuing the following initiatives:

a. Resolution of outstanding issues in Afghanistan Pakistan Transit Trade Agreement (APTTA)
b. Negotiation and early conclusion of Afghanistan, Pakistan and Tajikistan Transit Trade Agreement (APTTTA)
c. Effective implementation of Transports Internationaux Routiers (TIR) Convention
d. Reactivation of Quadrilateral Transit Trade Agreement (QTTA) among Pakistan, China, Kyrgyz Republic and Kazakhstan
e. Taking institutional lead on formulation of a Pakistan-Afghanistan Central Asia regional economic integration framework through a Regional Trade Office, established at the Ministry of Commerce.

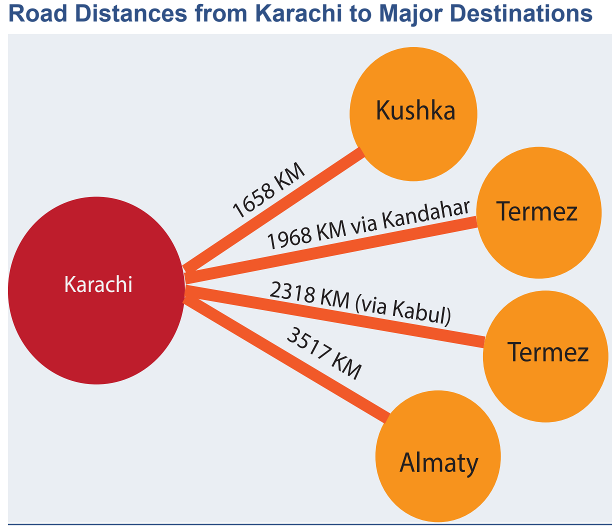
Pakistan's Land-Based Connectivity with Central Asia

One valid concern regarding Central Asia Regional Economic Corridor (CAREC) is that it hasn't been able to connect Central Asia with other regions especially those that are reasonably proximal like South Asia. Has CAREC then predominantly worked to build infrastructure that connects the Central Asian countries with each other and not the outside world is a question that needs to be explored in detail. In that vein, it is to be recognized that Pakistan's connectivity with Central Asia is poor.

Figure 9.2 presents the estimated distance of selected cities in Central Asia from Karachi. The data on the expected time, however, that will take exports to reach Central Asia depends on several factors including the relative road densities, quality of roads, for instance whether paved or non-paved and the expected time to fulfill immigration formalities at various border crossings. Assuming the non-exis-

FIGURE 9.2

Road Distances from Karachi to Major Destinations



tence of all political barriers, the CPEC roads could ensure shorter distance and time required to reach Central Asia.

Pak-CAR Trade Statistics

Table 9.1 presents statistics on Pakistan's current trade with the CARs. The table provides data for 2016 on export and import share of each Central Asian Republic in the total exports of Pakistan and also the volume in US$ of both exports and imports of Pakistan to each Central Asian Republic. Kazakhstan is by far the largest trading partner of Pakistan with a total trade volume in excess of $27 million with Pakistan experiencing a trade surplus of around $21.8 million. Interestingly, Pakistan's exports compare favorably to its imports from all other Central Asian Republics.

Even though the export-import balance of Pakistan vis-à-vis the CARs looks satisfactory, the overall trade volume is relatively too low to really impact anything within Pakistan. Even Kazakhstan, which is Pakistan's largest trading partner, only has a share of 0.13% in Pakistan's total trade of which 0.12% is Kazakhstan's total share in Pakistan's exports and 0.01% in imports. The total share of Central Asia in Pakistan's total exports is less than 0.2% with Kazakhstan alone accounting for more than 60%. The region's import share is a little over 0.1%. In absolute terms, Pakistan's total exports to the five selected Central Asian Republics are around $38 million while the total imports stand at $50 million in 2016.

This is both an opportunity and a challenge. The opportunity is that the CAR market is a nascent, developing and unexploited market that can offer increasing returns to investment and trade. And Pakistan under the CPEC will have both local and borrowed capacity to make use of this opportunity. However, a challenge will be to overcome various barriers to entry that have long kept the Central Asian economies away. Some of those factors like land lockedness and ex-soviet status, which have inhibited the integration of CARs with the outside world, have already been discussed in the early parts of this chapter. The great challenge for Pakistan, therefore, is to factor in some of those concerns while it contemplates extending the CPEC to Central Asia.

The data in Table 9.2 bears testimony to the fact that Pakistan's trade with the CARs is extremely low especially in context of the economic potential of the region that Pakistan can take due advantage of by creating long-term and sustainable partnerships. Despite many social, political and religious barriers that inhibit Pakistan's trade with India, the country's share in Pakistan's total trade volume outstrips that of all CARs by a fair margin. Pakistan exports 1.7% of all its exported goods to India while the share of all CARs in Pakistan's total exports is 0.19%. Same is the case with Iran, which despite having serious political differences with Pakistan and being the subject of Pakistan's commitment to international sanctions against it, is the destination of 0.17% of Pakistan's total exports which is the same size as Pakistan's exports to all CARs.

Regionalism

Annette Bohr (2004) discusses the collapse of the USSR, the rhetoric of regional cooperation, and how the Central Asian states have been embroiled in conflicts among themselves, including trade wars, border disputes and disagreements over the management and use of water and energy resources. She then discusses the new regional order in Central Asia, the events of 9/11 and the subsequent basing of US troops in the region that served to entrench pre-existing patterns of regional cooperation, while highlighting the obstacles that have beset the regionalization process since the mid-1990s.

She observes that while all five Central Asian states have been attempting to use the renewed rivalry between Russia and the United States, it is being played out in the Central Asian region to

TABLE 9.1

Pakistan's Trading Partner Countries — Central Asian Republics

Country	Year	Total Export (US$ million)	Percentage Share of Total Exports	Total Imports (US$ million)	Percentage Share of Total Imports
Kazakhstan	2016	24.5	0.12	2.7	0.01
Kyrgyz Republic	2016	1.2	0.01	0.1	0.00
Tajikistan	2016	4.4	0.02	19.0	0.04
Turkmenistan	2016	4.0	0.02	25.0	0.05
Uzbekistan	2016	3.4	0.02	3.2	0.01
Total		37.5	0.19	50.0	0.11

Source: UN Comtrade | International Trade Statistics Database

TABLE 9.2

Pakistan's Trading Partner Countries – Neighboring Countries

Country	Year	Total Export (US$ million)	Percentage Share of Total Exports	Total Imports (US$ million)	Percentage Share of Total Imports
Afghanistan	2016	1369.8	6.67	369.9	0.79
China	2016	1590.9	7.75	13680.2	29.11
India	2016	348.1	1.70	1644.4	3.50
Iran	2016	35.6	0.17	323.1	0.69
Total		3344.4	16.29	16017.6	34.09

Source: UN Comtrade | International Trade Statistics Database

maximize their strategic and economic benefits. The regional dynamic has resulted in the steady gravitation of the centre of regionalism in Central Asia to the north from a nominal Tashkent–Astana axis to a more stable Astana–Moscow one, with possible repercussions for the poorer states of Tajikistan and Kyrgyzstan. Her article examines the major constraints on regionalism in Central Asia, considering in particular the ways in which the non-democratic regimes of Central Asia have obstructed state–centric 'top–down' regionalism as well as informal regionalist processes 'from below'.

Martin Spechler (2000) has also discussed how free-trade within the Central Asian economies and that with the outside world will increase competition, product diversification and catalyze the stagnating Central Asian economies, majority of whom except Uzbekistan had not achieved the level of GDP by year 2000 that they had in 1989. Spechler proposes supranational regional institutions and trade openness as key factors to forge Central Asia's integration into the international economy thereby adding to the region's economic growth.

He also believes that "a free trade area in Central Asia would constitute a much larger market than any of the isolated countries. An economic union allowing free movement of factors of production as well as goods would be even better. Foreign investors would be attracted by the prospect of operating in this larger market."

The non-existence or ineffectiveness of institutions that can facilitate the integration of CARs into the international economy, something that Spechler refers to as supranational institutions, is a valid concern. However, the problem with regionalism is not whether the CARs have the potential to go regional or international but whether going regional through increased cooperation will intensify the economic and political predicaments that the region faces. Competitiveness and product diversification are key prerequisites for a successful venture into international trade, but the region, even more advanced economies like Kazakhstan, has obvious failures in ensuring them. With its great energy potential, it can certainly become a much demanded sub-region within the larger Eurasian and South Asian regions; however, one problem that individual countries within the region have faced is their failure to establish their distinct identities free of the Central Asian or Russian label.

Going regional would intensify this concern since they would switch from a smaller allegiance to a larger one but without being empowered to formulate and articulate their foreign and internal policies with independence. In fact within a larger group of countries, there's more likelihood of their individual presence and identity being either masked or dominated by larger and more powerful states like Russia and China, especially within the Shanghai Cooperation Organization which is, as of now, the greatest platform available to the CARs to go regional. Pakistan also being part of it can reflect on the chances of a Pak-CAR cooperation especially through land-based commerce and projects like the CPEC.

Shanghai Cooperation Organization

Pakistan's recent admission to the eight-member Shanghai Cooperation Organization (SCO) alongside India is a key development in the region especially from the perspective of integrating and including the CARs into the CPEC network and enhancing trade and cooperation between the regions of central and South Asia. With China and Russia already members of the organization, the stage is set for SCO to become a CPEC facilitator. However, if Pakistan's ties with Russian and India can also improve through SCO is yet to be seen and also to be seen is whether the SCO can go beyond operating as a talk shop like other regional organizations including SAARC.

Khan (2013) has analyzed the impact of Pakistan's inclusion in SCO which in 2013 was only a possibility by preempting how Pakistan's relations with a number of countries like India, Russia, China and the four SCO-member Central Asian states will be impacted as Pakistan is finally accepted as an SCO member. His deductions are similar to opinions of other political scientists and foreign policy experts who believe that Pakistan's ties with regional states, most importantly Russia and India, could see improvements through the SCO platform which does have the potential to become a counterpart of NATO in this region.

The SCO charter also needs to be analyzed in detail to determine if it allows for the organization to formally adopt bilateral or multi-lateral agreements reached individually between member countries. To launch CPEC through the SCO platform a greater ownership from the regional states apart for China and Pakistan needs to be explored. The only exception to this would be a naysaying India that has consistently rejected Chinese offers to join the CPEC and as per the Pakistani narrative, has quadrupled its efforts to team up with the Americans to sabotage the project.

Central Asia Regional Economic Cooperation (CAREC)

Activating CAREC as an alternate land-based commerce facilitator alongside the CPEC can also be instrumental in ensuring enhanced cooperation and partnership between Pakistan and the CARs. This shouldn't mean that CAREC is currently inactive; however, analyzing the current scale and growth levels at which the Central Asian economies are operating, one can deduce that the impacts of CAREC have been lower than expected.

The CAREC website[2] lays down the introduction and objectives of the corridor and also explains the long-term vision. More specifically, the corridor aims to foster greater integration in the region through a partnership of eleven countries and six multilateral development partners working to promote development through cooperation, leading to accelerated economic growth and poverty reduction. The priority areas under which the corridor plans to commission projects are transport, trade facilitation, trade policy, and energy. CAREC helps Central Asian and neighboring countries realize their potential in an increasingly integrated Eurasia. Since 2001, the program has mobilized almost $29.4 billion in transport, trade, and energy infrastructure investments.

CAREC is similar to CPEC in many ways but different in many others. It is aimed at the economic revival of economically stifled countries. However, it does not have the political undertones that have come to be associated with the CPEC and therefore, while that could be deemed as a strength, it could as well become a great disadvantage. The amount of international interest that CPEC has received for its political implications is not paralleled by any other program including CAREC. That could become a reason for it to be sabotaged; however, if China and Pakistan are able to deflect external pressures emanating from the West and from countries like India and Afghanistan, and are also able to tackle internal problems like security hazards along the western route, the CPEC will easily outpace any of its counterparts including CAREC.

Conclusion

The China-Pak Economic Corridor is a multi-faceted and multi-sector project with interventions aimed at the reform and reconstruction of many sectors of the economy through targeted Chinese investment expected to channel into Pakistan in various installments till 2030. This chapter determined the effectiveness, appeal and readiness of the CARs - by analyzing their geographic, anthropological and economic potential – to become partners in the CPEC. In doing so, the following key findings and conclusion were drawn:

- Converting the multi-sector, multi-faceted agenda into a multi-actor one by facilitating a buy-in from a larger pool of countries.
- Diversity in terms of adding more regional partners will be the key to ensure CPEC success not only for the fact that it will eliminate political risks but also to ensure added competition and product diversification.
- Central Asia has certain identity that is characterized by land lockedness and its status as an ex-soviet. That reflects in the economic and political isolation of the region.
- The abundance of energy resources in Central Asia and the lack of infrastructure and institution means that institutional barriers to entry are low in the region and natural resources are predominantly unexploited.
- Pakistan has maintained cordial relations with CARs. That alongside the socio-religious similarities between Pakistan and CARs implies that Pakistan already fulfills the prerequisites for a CPEC launch in Central Asia; it is only a matter of how this potential is harnessed.
- The road routes from Pakistan to Central Asia show that a road network that connects Pakistan with Central Asia exists; however, it has to be seen how effective the new road and rail network will be to in centivize Afghanistan and Central Asia to become partners.

- Pakistan's trade with CARs except Kazakhstan is low which carries an immense potential for expansion and improvement and with the energy infrastructure expected to be built under the CPEC, energy imports from the smaller Central Asian states could see the trade volumes increase.
- A commodity analysis involving Pakistan's comparative advantage vis-à-vis the CARs needs to be determined to identify potential exportable commodities to CARs if they are successfully on-boarded to the CPEC.
- A stock take of the Government of Pakistan's strategies, plans and policies like the Vision 2025, Strategic Trade Policy Framework, etc. needs to be undertaken to ensure their assimilation with and into the newly released CPEC long-term plan to ensure policy coherence and uniformity of the agenda at the highest levels.

Trade deals and negotiations that chalk out a long-term trade plan, which is mutually enabling, beneficial and agreeable for both Pakistan and CARs need to be carried out with a view to hardwire CARs into CPEC. This will ensure its sustainability and success in the middle of many political, administrative and economic challenges, some of which are delineated in detail in the other chapters of this report.

Chapter

10 Summary and Recommendations

Summary and Recommendations

Key Findings	Recommendations
1. Pakistan's economy, after several decades of good performance, is slipping due to a number of factors. A key factor among them is the absence of strategic thinking about the direction that the country should take to revive growth on a sustainable basis. Growing imbalances in fiscal and external accounts are other factors. Fiscal deficit is now 5.8% of GDP and current account deficit is 4% of GDP. Pakistan's economy is now performing poorly in comparison to India and other South Asian countries.	CPEC offers a unique opportunity to place this initiative in the context of long term strategic plan. To turn things around, policy makers need to take cognizance of this fact and take measures such as improve revenue performance at national and provincial levels, reduce public sector enterprises losses (3.8% of GDP), enhance trade competitiveness etc.
2. The proposed CPEC investments of $55-60 billion, roughly $4-5 b /year, by 2030 will significantly impact the economy. Increased foreign investments would stimulate domestic investment. The ratio of gross fixed investments would increase from current 15% to possibly 20%. This could result in a 1.5% increase in the annual rate of GDP growth. Over a longer period, the debt obligation would increase, as well. By 2025, the increased debt liabilities from CPEC are estimated to be around $ 3.3-4.5 billion per year.	Prudence in planning and implementation would be key to effective use of available funds and ensuring that these investments result in real benefits to cope with future liabilities. For example, if investments in power sector result in elimination of load shedding, the productivity gains could be substantial, and so will be savings from more efficient energy mix. This would, a priori, require major policy reforms in the energy sector and requisite investments in transmission and distribution. Reforms should include rationalization of electricity tariffs.

3.	China's interest in developing land based commerce is part of its new development paradigm which offers Pakistan a unique opportunity to boost its economy and security. To cope with its internal and external challenges, China is launching a massive global program of investments, called Belt Road Initiative (BRI). CPEC is an important component, often referred to as the "front runner" of BRI. It could be a real game changer for Pakistan's economy. Pakistan just cannot afford to miss this opportunity.	Pakistan's policy makers need to recognize China's strategic objectives and ensure that those are being achieved, particularly establishment of a safe and effective transit corridor. Given that the longest Eastern Route, via Karachi, is the first priority, there is a potential danger that Kashgar-Karachi may become the primary corridor and Gwader may end up with enhanced competition from two ports on each side: Karachi and Chabahar. Pakistan also needs to articulate its own agenda to maximize national interests from this global initiative and work towards achieving those.
4.	The BRI is at the early stages of formulation. Number of critical details on scope and implementation of selected investments are not available.	China needs to put in place transparent institutional arrangements, particularly with regard to prospective investments,to coordinate on a continuing basis with partner countries of BRI and other related institutions.
5.	The CPEC program faces some political and security challenges.	Best way to mitigate these risks is to make the process transparent and inclusive and to make sustained implementation progress. It is also recommended that an independent monitoring setup be put in place to serve as an independent and neutral "information warehouse" for CPEC.
6.	For Pakistan to benefit fully from CPEC, it needs to make sure that all CPEC projects are subjected to a proper "due diligence" process of identification, appraisal and design.	It is proposed that the MoPDR set up a task group of professionals/specialists to review and vet selection and design of all projects based on a uniform-criteria.
7.	Timely and effective implementation of CPEC would require national level implementation arrangements, compatible with its size and scope. Pakistan, through strong commitment, did demonstrate this capacity in the implementation of the Indus Basin Program.	For CPEC implementation, the respective roles of: central government, provincial governments and beneficiary entities would need to be clearly delineated. It is recommended that the Government of Pakistan should consider establishing a specific CPEC Unit within the framework of "Council of Common Interests" to manage CPEC with transparency and efficiency.

8. Presently, CPEC is largely conceived as transport and energy projects and less as possible engine of growth with better regional connectivity. CPEC can provide a major growth opportunity for Pakistan by improving physical connectivity and functioning of the markets, while generating economies of scale in agriculture and industry.	In the next stages of CPEC planning, greater attention should be paid to explore the trade and agriculture potential of CPEC interventions. For trade, Pakistan should aggressively strive to become part of China's global value chain. The planning of the four proposed 'Functional Zones' should focus on harnessing the comparative and competitive advantage of each zone based on agro-pastoral and other local endowments value chains.
9. The two weak links in the CPEC corridor are at its two ends – the rugged mountainous northern section of the road with constrained transit border facilities and the Gwadar port, yet to be fully developed. Gwadar port is projected to reach its peak cargo handling capacity by 2045.	Timely development of Gwadar Port is critical for CPEC success. The Eastern route is getting first priority, which will increase reliance on the Karachi port, which in turn could undermine the importance of Gwadar. Improving trade transit facilities at the China-Pakistan border — physical as well logistic is essential.
10. An important anticipated outcome of CPEC is economic uplift of the least developed and poverty stricken areas of Pakistan, particularly the north of the Indus River.	While the master plan proposes to develop the western and central corridor, the initial focus seems to be on the eastern corridor. Special efforts should be made to accelerate the construction of the western route and implement the accompanying investments needed for the economic uplift of backward area, keeping in view local comparative and competitive advantages.
11. At the moment, the focus of CPEC is development along the east –west axis, improving transit between Kashghar and Gwadar and related activities. It is mostly internal improvements, not much external linkages with neighboring countries, especially Afghanistan. In a recent trilateral meeting held in Beijing involving China, Afghanistan and Pakistan, it has already been decided to extend CPEC to Afghanistan.	Bringing Afghanistan into the CPEC umbrella will greatly enhance the potential benefits of the scheme and help reduce regional conflicts.
12. As already indicated, CPEC is a part of a much larger program, the BRI.	Pakistan should develop the capacity, possibly in the private sector, to keep a watch on the development of the BRI

Statistical Appendix
Key Indicators

Statistical Appendix
Key Indicators

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

	GDP Growth Rate (%)	Incremental Capital Output Ratio	Volatility of Growth[a] (%)	Extent of Balanced Growth[b]	Growth Rate of Labor 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	4.0	3.8	0.5	4.7	0.9
2015/16	4.7	3.3	0.7	7.13	1.0
2016/17	5.3	3.1	1.2	5.7	1.1
Average	**4.4**	**4.2**	**0.1**	**6.6**	**0.9**

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.

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 Invest ment	Private Invest mentas % of Total Fixed Investment	Share of Private Investment in Labor Intensive Sectors (%)
1999/2000	17.4	91	65	51.6
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	15.6	91.7	72.9	41.8
2016/17	15.8	82.9	69.7	43.5
Average	**16.7**	**90.2**	**73.0**	**43.5**

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[a]	Change in Ratio of Output Prices to Fertilizer Prices (%)	Change in Agriculture Terms of Trade with Manufacturing (%)
1999/2000	n.a	n.a	1.1	6.6	n.a
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	0.3	n.c	-2.3	6.9	6.6
2016/17	3.5	32.6	1.3	29.5	2.5
Average	**2.5**	**n.c**	**0.03**	**-0.92**	**1.1**

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

Source: Pakistan Economic Survey (various issues)

[a]The difference in the growth rate of agriculture during a year minus the trend growth rate (as approximated by the average growth rateduring the previous five years)

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

	Growth Rate (%)	Growth Rate of Export Oriented In dustries (%)	Growth Rate of Import Substituting Industries (%)	Share of Growth in Large Scale Manufacturing (%)	Growth Rate of Manufacturing Exports (%)
1999/2000	1.5				
2000/01	9.3	27.6	4.6	76.3	6.2
2001/02	4.5	9.7	3.1	52	1.5
2002/03	6.9	4.3	7.6	68.2	22.2
2003/04	14	8	15.5	84.6	11.6
2004/05	15.5	26.5	12.7	87	15.6
2005/06	8.7	5.9	11.1	75.2	14.4
2006/07	9	9.9	7.5	74.3	3.4
2007/08	6.1	12.8	2.3	58.9	12.2
2008/09	-4.2	4.3	-2.4	n.c.	3.3
2009/10	1.4	6.5	14.8	24.9	0.4
2010/11	2.5	4.7	3.8	54.8	20.3
2011/12	2.1	0.5	4.5	44.5	1.2
2012/13	4.9	1.9	6.3	74.9	0.6
2013/14	5.7	n.a	n.a	78.3	-3.9
2014/15	3.9	n.a	n.a	68.2	-1.6
2015/16	3.7	n.a	n.a	64.7	-13.8
2016/17	5.3	n.a	n.a	74.7	n.a
Average	**5.8**	**9.4**	**7**	**77.1**	**5.85**

n.c. = not computed
Source: Pakistan Economic Survey (various issues)
SBP, Annual Report (various issues)

Table A-5
Growth in Employment by Sector

	Employment (000)					2001/02 to 2014-15		
	2001/02	**2007/08**	**2009/10**	**2013/14**	**2014-15**	**Employment Growth Rate (%)**	**Value Add Growth Rate (%)**	**Employment Elasticity (%)**
Agriculture	20474	21894	23945	24586	25820	1.8	3	0.59
Manufacturing and Mining	4982	6382	7024	8026	9339	5	6.9	0.71
Electricity and Gas*	299	n.a	n.a	n.a	n.a	-0.3	3.9	-0.07
Construction	2757	3093	3565	4126	4456	3.8	4.2	0.91
Wholesale and Retail Trade	5090	7167	8673	8252	8912	4.4	4.2	1.06
Transport and Communication	2216	2700	2820	3109	3296	3.1	5.2	0.6
Finance and Insurancea	247	n.a	n.a	n.a	n.a	18.7	17.9	1.05
Public Admin-istration and Community Services	7151	6725	5920	7404	8057	0.9	8.4	0.11
Total	**43286**	**49090**	**53210**	**56520**	**61040**	**2.7**	**5.4**	**0.5**

n.a = not available

Source: Labour Force Survey, PBS (various issues) Pakistan Economic Survey (various issues)

[a] Period of estimation for these two sectors is 2001-02 to 2005-06, mainly because LFS has stopped giving numbers for them

Table A-6
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 Ex Pansion Less GDP Growth (%)
1999/2000	3.6	-	n.a	16.0	5.5
2000/01	4.4	3.6	n.a	15.2	7.0
2001/02	3.5	2.5	n.a	0.0	12.3
2002/03	3.1	2.8	n.a	3.7	13.3
2003/04	4.6	6.0	3.9	14.8	12.1
2004/05	9.3	12.5	8.8	10.4	10.3
2005/06	7.9	6.9	7.0	17.3	9.4
2006/07	7.8	10.3	6.9	7.6	13.8
2007/08	12.0	17.6	10.2	27.7	10.3
2008/09	17.0	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	11.0	11.0	10.6	21.8	9.8
2012/13	7.4	7.1	9.6	7.8	12.3
2013/14	8.6	9.0	8.3	4.3	8.5
2014/15	4.5	3.5	6.5	1.3	9.0
2015/16	2.9	2.1	4.2	-7.5	9.0
2016/17	4.1	3.9	5.2	-0.2	8.4
Average	**7.5**	**9.0**	**7.8**	**10.7**	**10.1**

n.a = not available

Source: Pakistan Economic Survey (various issues)
SBP, Annual Report (various issues)
IMF

Table A-7
Fiscal Policy
(Percentage of GDP)

	Revenues[a]	Expenditure[b]	Non-Interest Current Expenditure[c]	Budget Balance[d]	Revenue Deficit/ Surplus[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	12.6	-4.0	-0.5
2006/07	14.9	18.1	14.9	-4.1	-0.8
2007/08	14.1	21.4	17.4	-7.3	-3.3
2008/09	14.0	19.2	15.5	-5.2	-1.4
2009/10	14.0	20.2	16.0	-5.2	-2.1
2010/11	12.3	18.9	15.9	-6.5	-3.5
2011/12	12.8	21.6	17.3	-8.8	-4.5
2012/13	13.3	21.6	16.4	-8.2	-3.0
2013/14	14.5	20	15.9	-5.5	-1.5
2014/15	14.3	19.6	16.1	-5.3	-1.8
2015/16	15.3	19.9	16.1	-4.6	-0.8
2016/17	16.0	19.8	15.0	-3.8	0.9
Average	**14.1**	**19.15**	**14.1**	**-5.11**	**-1.58**

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- 8 Fiscal Policy (Base Year 2005/2006)				
	Primary Balance[a] (%of GDP)	Total Government Debt[b] (% of GDP)	Effective Interest Rateon Domestic Debt[c] %	% of Deficit Financed by Bank Borrowing %
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	-0.9	53.1	10.2	21.8
2006/07	-1.3	52.1	13.8	37.5
2007/08	-2.6	56.8	13.7	80.5
2008/09	-0.2	57.8	12.9	54.2
2009/10	-1.8	59.9	12.4	32.8
2010/11	-2.7	58.9	10.5	51.5
2011/12	-4.3	63.3	10.7	52.0
2012/13	-3.8	64.0	9.7	79.5
2013/14	-1.0	63.5	9.5	23.3
2014/15	-0.6	63.3	9.3	61.2
2015/16	-0.3	67.6	6.6	58.3
2016/17	0.3	65.5	8.2	55.7
Average	**-0.90**	**62.97**	**10.55**	**37.76**

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-9
Monetary Policy

	Net Foreign Assets[a] (% Change of broad money)	Net Domestic Assets[a] (% Change of broad money)	Private Credit Growth %	Interest Rate on Six Month Treasury Bill (%)	Broad Money Growth (%)	Interest Rate Spread[B]
1999/2000	2.0	7.4	1.4	8.8	9.4	8.0
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	-1.0	11.1	5.9	13.8	5.7
2016/17	-47.4	4.0	16.8	6.0	13.7	5.0
Average	2.4	6.4	11.8	8.6	14.5	7.8

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] Difference between the interest rate on advances and deposits

Table A-10
Effective Tax Rates
(Tax Revenues as percentage of Tax Base[a])

	Income Tax (%)	Customs Duty (%)	Excise Duty (%)	Sales Tax (%)	Total FBR Taxes (%)
1999/2000	4.3	19.1	6.4	11.6	9.1
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
Average	**4.56**	**9.82**	**4.22**	**11.99**	**9.74**

Source: 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-11
Level and Pattern of Trade

	Merchan dise Export Growth (%)	Extent of Product Diversifi cation of Exports[a]	Extent of Market Di versification of Exports[a]	Merchan dise Import Growth (%)	Change in Terms of Trade %	Share of Essential Imports[a] %
1999/2000	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	24.45
Average	**6.5**	**0.8**	**0.2**	**11.4**	**-3.7**	**35.7**

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

Table A-12
Balance of Payments

	Current Account Balance (% of GDP)	External Debt as a % of Exports of Goods and Services	Net Reserves (US $ Million)	Gross Re serves (In months of next year's imports of goods and services)	Change in Value of Pakistani Rupee per US $ (%)	Change in Real Effective Exchange Rate (%)
1999/2000	-1.6	322.1	908	0.9	3.0	-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	-4.0	284.6	16242	4.4	0.4	3.5
Average	**-1.7**	**223.2**	**10010**	**3.7**	**4.4**	**1.5**

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

Table A-13
Trade in Income in Equality
Growth in Real Household Income by Quintile
(Annual Growth Rate, %)

	Total	1st	2nd	3rd	4th	5th
	Growth Rates between 2001-02 to 2007-08					
Pakistan	4.7	2.5	3.6	3.4	4.2	5.9
Pakistan Urban	2.8	2.2	2.2	1.5	1.7	3.1
Pakistan Rural	5.3	2.6	3.9	4.1	5.4	8.9
	Growth Rates between 2005-06 to 2007-08					
Pakistan	-1.3	-1.8	-1	-2.7	-2.3	-0.8
Pakistan Urban	-0.2	5.7	3.3	-1.3	1.1	-0.5
Pakistan Rural	-2.1	-3.2	-2.4	-3.3	-4.1	-0.9
	Growth Rates between 2007-08 to 2015-16					
Pakistan	1.5	1.9	1.2	1.8	2.0	1.5
Pakistan Urban	1.9	0.8	0.5	1.4	2.3	1.9
Pakistan Rural	1.1	2.1	1.4	1.9	1.8	0.4
	Growth Rates between 2001-02 to 2015-16					
Pakistan	3.0	2.2	2.3	2.5	3.0	3.5
Pakistan Urban	2.3	1.4	1.3	1.4	2.0	2.4
Pakistan Rural	3.0	2.4	2.5	2.9	3.5	4.2

Source: Calculated using numbers from Household Integrated Economic Survey, Federal Bureau of Statistics.

TABLE A-14
TREND IN REGIONAL INEQUALITY
Growth in Real Household Income by Province
(Annual Growth Rate, %)

	2001-02 to 2007-08	2005-06 to 2007-08	2007-08 to 2015-16	2001-02 to 2015-16
Overall				
Pakistan	4.7	-1.3	1.5	3.0
Punjab	5.6	-0.8	1.6	3.5
Sindh	3	-2.8	0.5	1.6
KPK	5	-2.6	3.0	3.9
Balochistan	-0.6	3.3	2.5	1.1
Urban				
Pakistan	2.8	-0.2	1.9	2.3
Punjab	3.4	-1.2	2.9	3.1
Sindh	2	2.3	0.1	1.0
KPK	3.3	-7.2	3.3	3.3
Balochistan	0.5	8.2	1.6	1.1
Rural				
Pakistan	5.3	-2.1	1.1	3.0
Punjab	6.7	-0.5	0.7	3.4
Sindh	2.3	-9.5	0.5	1.3
KPK	5.3	-1.4	2.9	4.0
Balochistan	-2.5	-1.5	3.0	0.4

Source: Pakistan Integrated Household Survey, Various Issues
Pakistan Bureau of Statistics

Table A-15
Trend in Regional Inequality
Coverage of Education and Health Services

	1998/99	2001/02	2006/07	2007/08	2008/09	2010/11	2012/13	2013/14	2014/15
Gross Primary Enrolment Rate (Age 5-9)									
Punjab	75	76	100	97	97	98	98	100	97
Sindh	64	63	79	80	84	84	81	76	79
K-PK	70	77	82	83	87	89	91	89	90
Balochistan	64	62	72	75	75	74	73	67	71
Max/Min Ratio	1.172	1.242	1.389	1.293	1.293	1.324	1.342	1.492	1.366
Net Primary Enrolment Rate (Age 5-9)									
Punjab	44	45	62	61	62	61	62	64	61
Sindh	41	40	50	51	54	53	52	48	51
K-PK	39	41	49	49	52	51	54	54	56
Balochistan	36	32	41	41	44	47	45	39	46
Max/Min Ratio	1.222	1.406	1.512	1.488	1.409	1.298	1.378	1.641	1.326
Gross Middle Enrolment Rate (Age 10-12)									
Punjab	43	45	55	59	57	58	60	59	59
Sindh	38	34	43	46	49	48	48	46	46
K-PK	37	38	53	52	54	57	61	61	61
Balochistan	29	33	34	35	36	35	39	41	40
Max/Min Ratio	1.483	1.364	1.618	1.686	1.583	1.657	1.564	1.487	1.525
Net Middle Enrolment Rate (Age 10-12)									
Punjab	19	18	20	19	22	23	25	25	25
Sindh	17	14	17	18	18	19	19	17	18
K-PK	11	12	16	17	17	17	21	26	21
Balochistan	9	8	9	11	11	13	14	12	13
Max/Min Ratio	2.111	2.25	2.222	2	2	1.769	1.786	2.083	1.923
Gross Matric Enrolment Rate (Age 13-14)									
Punjab	37	44	51	54	57	61	62	65	63
Sindh	51	42	45	44	50	55	54	50	54
K-PK	36	41	45	48	51	54	58	56	60
Balochistan	41	29	33	34	34	38	37	33	40
Max/Min Ratio	1.244	1.517	1.545	1.588	1.676	1.605	1.676	1.969	1.575
Net Matric Enrolment Rate (Age 13-14)									
Punjab	12	12	11	13	13	14	15	17	16
Sindh	10	13	10	11	11	11	12	11	12
K-PK	6	10	6	6	8	7	10	9	10

Balochistan	3	6	5	5	5	6	6	5	7
Max/Min Ratio	4	2	2.2	2.6	2.6	2.333	2.5	3.4	2.285
Literacy Rate (10 +)									
Punjab	46	47	58	59	59	60	62	61	63
Sindh	51	46	55	56	59	59	60	56	60
K-PK	37	38	47	49	50	50	52	53	53
Balochistan	36	36	42	46	45	41	44	43	44
Max/Min Ratio	1.417	1.306	1.381	1.283	1.311	1.463	1.409	1.418	1.432
Full Immunisation									
Punjab	55	57	83	76	85	86	89	86	90
Sindh	38	45	65	67	69	75	74	61	73
K-PK	54	57	76	74	73	77	76	75	78
Balochistan	34	24	54	57	43	56	53	41	51
Max/Min Ratio	1.618	2.375	1.537	1.333	1.977	1.536	1.679	2.097	1.765

Source: Pakistan Social and Living Standard Measurement Survey, PBS (various issues)

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Chapter 2

1. The official fiscal year runs from July to June. Thus FY 17 refers to the period July 1, 2016 – June30, 2017

2. Business confidence may be turning around after a dip lasting more than a year. The most recent wave (November 2017) of the OICCI (Overseas Investors Chamber of Commerce and Industry) Business Confidence

3. During FY14-16, the fiscal deficit was constrained by targets set in consultation with the IMF under the terms of a financing program. During FY17 and beyond, deficit levels are to be guided by the Fiscal Responsibility and Debt Limitation Act (FRDA). As amended in 2016, this Act sets a deficit limit of 4 percent of GDP for the three-year period FY18-20 and 3.5 percent thereafter. The amended Act also constrains the maximum general government debt to be no more than 60 percent of GDP through FY18 and no more than 50 percent by FY33. Neither the fiscal deficit target nor the public debt target was met in FY17.The budget announced for FY18 contains a large increase in development spending that is to be offset by enhanced tax and nontax revenues. The projected deficit is 4.2 percent of GDP (IMF, 2017, Table 1, Page 28).

4. https://profit.pakistantoday.com.pk/2017/07/06/our-exchange-rate-policy/

5. Several emerging market economies have suffered export declines in recent years as

6. commodity prices have been low and as western economies and even China have experienced slow growth. In FY16, Turkey, Singapore, Malaysia, Indonesia, Taiwan, Korea, and India all experienced export declines. However, all these economies returned to positive export growth in FY17 but Pakistan did not.

7. Growing external imbalances have put pressure on the rupee. The State Bank has been managing this pressure for the most part by administrative measures rather than by allowing the value of the rupee to depreciate. Among such measures was the introduction in February 2017 of cash margin requirements on the import of nonessential consumer goods.

8. 8The evidence on this is mixed. The April 2017 OICCI survey noted that investors planned to decrease planned investments in the latter half of 2017. However, the latest OICCI survey (November 2017) reports improving business confidence and rising investment plans.

9. See newspaper report at https://propakistani.pk/2017/07/14/pakistan-needs-urgent-power-sector-reforms-imf/

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4. Fortune Magazine article, August 15, 2017.

5. 5China invested nearly $1.5 billion in a deep-sea port and international airport. A large (6000+ Ha0 economic zone was planned as well. A change of Government in Sri Lanka and violent protest against the terms of these investment delayed contract signing. The repayment obligations were deemed unaffordable. Deb conversion to equity is being perused. The Chinese will end up with large real estate. In Pakistan some of the recent Chinese

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6. These districts have been selected based on the criteria of degree of incidence and intensity of Poverty and their overall MPI ranking; proximity to and connectivity with the Western Route;

7. and potential for converting resource based comparative advantage to competitive advantage.

8. 2017 census provisional estimates

9. FATA consist of seven "agencies": Bajaur, Mohmand, Khyber, Orakzai, Kurram and North and South Waziristan

10. SABCON study 2016

11. The factors which influence agricultural competitiveness, inter alia, include: factor productivity (labor, land, water etc.) and non-price competitive advantages like infrastructure, technological innovation and transformation capacity, the level of industrialization, relevant support industries, the market demand structure, the government management and policy.Neng-li (2011): "Transformation from Comparative Advantage to Competitive Advantage- A way to improve Regional Agricultural Competitiveness". Asian Agricultural Research 3 (11):5-8

12. Planning Commission, Development and Reform, Govt of Pakistan http://cpec.gov.pk

13. No further data available on this SEZ

Chapter 9

1. Retrieved From: https://www.adb.org/data/central-asia-economy

2. 2http://www.carecprogram.org/index.php?page=carec-program

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