<u>China Pakistan Economic Corridor (CPEC) - - A Case Study</u> (Daud Ahmad)

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Introduction: This is a desk study of the current status of China Pakistan Economic Corridor (CPEC) based on information available from web sites of agencies in Pakistan, China and various other professional organizations. CPEC is part of China's major global initiative, known as the Belt Road Initiative (BRI), which is the subject matter of this book. BRI, first announced in 2013, reflects China's grand vision of connectivity extending from China to the Middle East, Africa, Southeast Asia and the Baltics in Europe. Under BRI, China is planning to invest US \$1-3 trillion, over the next 30 years or so, in nearly 60 countries all over the world to establish possibly six different economic corridors. CPEC is a key component of this grand scheme, labelled as the "flag ship" or the "front runner" by the Chinese. In Pakistan, it was often called a "game changer". Pakistan and China first announced the plan 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. This amount has since been varying and enlarging, currently as much as \$80 billion with addition of new projects under consideration. To date, nearly \$24 billion is already committed under 35 completed and on-going projects.

The CPEC was initially intended to promote connectivity across Pakistan with a network of highways, railways and to enhance power production to address critical energy shortages affecting Pakistan's economic growth. Eventually, CPEC would also facilitate trade along an overland route that connects China to the Indian Ocean, linking the ancient Chinese city of Kashgar in Xinjiang province to the new Pakistani port of Gwadar in Baluchistan province. 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.

<u>CPEC Objectives</u>: On November 21, 2017, Pakistan and China signed the basic CPEC framework document: Long Term Plan (LTP) for China-Pakistan Economic Corridor (2017-2030)¹. This plan outlined the vision, goals and guideline for cooperation in selected areas. It proposed to match relevant plans of China and Pakistan's Vision 2025². The CPEC program was planned to be implemented in three phases: the short-term projects by 2020; medium-term projects by 2025; and the long-term projects by 2030. The rather ambitious goals of CPEC as articulated in the LTP are:

- By 2020, it would strive to take the initial shape. Major bottlenecks to Pakistan's economic and social development shall be basically addressed, and CPEC shall start to boost the economic growth.
- By 2025, the CPEC construction works to be basically done, the industrial system approximately complete, major economic functions brought into play in a holistic way, the people's livelihood along the CPEC significantly improved, regional economic development more balanced, and all the goals of Vision 2025 achieved.
- By 2030, the CPEC building strive to be entirely accomplished, the endogenous mechanism for sustainable economic growth in place, the CPEC's role in stimulating economic growth in Central

¹ Long Term Plan (LTP) China Pakistan Economic Corridor (CPEC 2017-2030), MoPDR and NDRC, PRC.

² Pakistan Vision2025, Planning Commission, Government of Pakistan, <u>www.pc.gov.pk</u>

Asia and South Asia brought into holistic play, and South Asia shall grow into an international economic zone with global influence.

The Chinese vision of CPEC was to further advance its strategy of developing western provinces, promote economic and social development in Western China, accelerate the Belt and Road construction, give play to China's advantages in capital, technology, production capacity and engineering operation, and promote the formation of a new open economic system.

The Long-Term Plan defined seven major areas of cooperation between China and Pakistan:

- Connectivity: through a safe and efficient transit corridor between Kashgar and Gwadar as part of an integrated transport system; development of Gwadar as a deep-sea port and industrial hub;
- Energy: fast track construction of power generation projects to address the prevailing critical power shortages;
- Trade and Industrial development through establishment of 9 Special Economic Zones (SEZs).
- Tourism;
- People's livelihood and
- Financial cooperation in financial markets/institutions.

Evolution of CPEC: The CPEC program started in 2014 with a big bang under the PMLN³ Government (2013-18). Nearly \$ 24 b for 20 "early harvest projects" projects was committed. The initial focus of the program was primarily on critical needs of energy and infrastructure. Over emphasis on energy and lack of progress on industry, agriculture and export-oriented projects are now cited as the main weaknesses of this initial program. The subsequent PTI⁴ Government (2018-2022) pronounced to shift the focus of CPEC from energy/ infrastructure to industry, socio economics, agriculture and Gwadar Port development. PTI Government also gave priority to hydropower plants to improve the country's energy mix. As such, progress on new CPEC projects slowed down in the initial years of the PTI government. It did pick up somewhat in 2020 with signing of agreements for two hydro power plants worth \$ 3.9 b. The current "coalition government" has made pronouncement to speed up CPEC, but the prevailing political and financial uncertainties would hinder this. Pakistan is also trying to renegotiate the financing terms of power plants to reduce its bulging debt burden. At the moment implementation of ongoing projects is taking place, but future scope/composition of CPEC program is uncertain.

<u>Main Components of CPEC</u>: As expected, the composition of CPEC projects was an evolving process. The Government of Pakistan web site: <u>www.cpec.gov</u> is the main source of information on projects currently included in the CPEC program. Other sources like Wikipedia and Chinese Embassy links also provide listing of CPEC projects and their implementation status.⁵ However, only basic information regarding scope and cost is available on these sources. For projects under consideration, the available information is scanty; in some cases, only the name of the project is listed. The Map1 below provides an overview of the CPEC program, showing location of major power plants and three transit routes.

Map 1: Overview of CPEC Program

³ Pakistan Muslim League Nawaz (PMLN)

⁴ Pakistan Tahreek Insaf (PTI

⁵ https://en.wikipedia.org/wiki



Source: Obortunity.com

The Table1 below provides a breakdown by sectors and provinces of the CPEC program during Phase 1. It should be noted that this breakdown is rough in the sense that cost information on a number of projects is not available and some projects are multi-province, with no inter-provincial allocation stated.

Province/	Total			Energy Projects		Infrastructure Projects		Gwadar	Port	Industr	y/ SEZs
Region								Projects			
-	No.	\$ m.	%\$	No.	\$ m.	No.	\$ m.	No.	\$ m.	No.	\$ m.
КРК	7	6,127	14.4	1	1,956	5	4,171	-	-	1	n.a
Punjab	8	13,452	35.4	4	4,872	26	8,580	-	-	2	n.a
Baluchistan	15	3,023	7.1	1	1,912	4	319	9	792	1	n.a
Sindh	16	14,304	33.6	12	12,132	2	2,172	-	-	2	n.a
AJK/ GB	7	4,053	9.5	4	4,053	-	-	-	-	3	n.a
Total	55	40,459		24	29,925	13	15,242	9	792	9	
% of Total					60.9		37.2		1.9		

Following points need to be highlighted relation to the projects listing above:

⁶Includes \$ 1.6 billion for Lahore Metro, Orange Line. CPEC picked up this project to finance funding gap after suspension of construction for few years.

Energy Projects: The original CPEC program, conceived in a hurry, addressed the key economic constraint of energy and transport links, facing the country. The new power generation projects were implemented by the private sector, as commercial undertakings, with easy financing access from the Chinese sources. The private sector quickly availed this opportunity by perusing nearly 20 potential projects costing about \$ 30 billion. The thrust of these investments was on installation of thermal power plants using imported coal; essential complementary investments in transmission and distribution lagged. This resulted in installation of substantial, but expensive, new power generation capacity. Currently investments in energy account for over 60% of the total CPEC portfolio, completed and on-going projects. CEPEC could well be called: "China Pakistan Energy Corridor".

Infrastructure Projects: The infrastructure projects composing selected highways sections and the Gwadar Port development are being financed with concessional loans/ grants from the Chinese Government. Work started on three priority highway segments – one each in the northern, eastern and western parts of the corridor. The ongoing Lahore Orange Metro line project (Chinese funded) was later added to the CPEC program. Other 9 or so infrastructure projects are all mostly at feasibility/ preparation stage. Currently infrastructure investment count for about 35% of the total portfolio. This includes a big-ticket item (\$ 8b+) up-grade of Peshawar- Karachi railway line (ML1), which is controversial in many respects. It's financial viability/affordability and debt burden are the main concerns. The project, now split in phases, has been agreed for inclusion in CPEC. Technical and financial details are being worked out.

At the start of CPEC planning, designation of a CPEC "transit route" become a big challenge. There were three possible existing land routes, all part of the national road network, developed to different standards. Each one of those required new construction and upgrading to serve CPEC needs. The northern portion (Karakoram Highway: Kashgar – Burhan, near Islamabad, 850 km) is common to all three routes. It was developed in the 1960's, with Chinese help, over a rugged and crumbling mountain terrain. From Islamabad onwards to Gwadar, the three possible routes as shown in the map above are: Western alignment (2,520 km, Kashgar – Gwadar, via Quetta); Central alignment (2,190 km, via DIG Khan) and Eastern alignment (3,050 km, mostly existing motorways via Lahore, Multan to Karachi). Given the strong political and provincial interests, designation of one route as "CPEC Corridor" became a difficult decision for the then PMLN Government. Instead the Government, in consultation with the Chinese officials, decided to declare that all three routes will be developed over time. The longest Eastern alignment, however, got priority in the first phase in order to complete the weak links of the major national highway, which were facing funding shortages.

<u>Gwadar Port:</u> Gwadar Port is a critical element of the CPEC program comprising development of the deep-sea port facilities, and Gwadar city area as a commercial hub. The proposed projects included: dredging of the approach channel, an expressway linking Gwadar to Makran Coastal Highway, a new international airport and a desalination plant. These are to be supplemented with major investments, in the next phase, in container berths, number of specialized terminals, a 2300-acre Special Economic Zone (SEZ) and a 360 MW coal fired power plant. Most of these projects are at planning or early implementation stages. Scarcity of water and electricity in the area is a key challenge facing Gwadar development.

Special Economic Zones (SEZs): The CPEC program includes development of nine SEZs scattered over the country. Joint Pakistani/ Chinese teams have been working since 2016 to formulate this part of CPEC program. The purpose of a SEZ is to establish a specific area of land to promote industrial growth by providing special concessions in tax and economic policies. The success of SEZs relies on many factors, mainly a combination of tax and tariff incentives, fast and hassle-free custom procedures, links with local suppliers, growers and the global market and most importantly good infrastructure links. Current SEZ laws in Pakistan, with impediments to expedited approvals, are not conducive to fast-track investments. A fair amount of strategic planning will be required for successful development of this component. Three SEZs

(Rashakai, Dhabeji and Faisalabad) have since been designated as high priority. Land development for couple of these has partially been completed and selection of the entrepreneurs is underway. Substantial planning and analysis would be required for these investments to be viable.

Implementing Arrangements: The Long-Term Plan document lists an ambitious program to evaluate the implementation of major projects, yearly assessment of the progress of the plan in every aspect, establishment of a database mechanism to assess achievements of the goals. To the contrary, current information available for CPEC implementation arrangements is still 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' were established for: Planning, Transport Infrastructure, Energy, Gwadar Port and Industrial Parks/ Economic Zones. Agriculture is missing in this list. 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, no doubt, have a key role as they will provide land for development projects and provision of allied facilities. Pakistan army undertook the responsibility for project security. The scale and scope of CPEC program warranted a transparent and robust implementation framework involving all stakeholders. particularly provincial governments. This seems to have not happened. Strong commercial interests on the power side and availability of highway segments for construction/ upgrade drove the formulation of the initial CPEC program. The sector wide implementation arrangements are summarized below.

The *Energy Projects*, which compose the bulk of CPEC investments, were executed under the Independent Power Project (IPP) mode. The *Developer* (usually a partnership between a local and Chinese investors) was responsible for planning, design, financing, construction and implementation of the project. They sought commercial financing from Chinese banking sources. On the GOP side, the Private Power and Infrastructure Board was responsible for approval of the project schemes, the National Electric Power Regulatory Authority sets the tariff rates and concerned National Transmission Distribution Company signs the power purchase agreement.

The *infrastructure projects* were managed as "government projects" by the concerned ministries. Line agencies like National Highway Authority and the Gwadar Port Authority are responsible for construction of their respective projects. Ministry of Railways is the executing agency for the large railway components of CPEC.

The *proposed SEZs* will be developed in private / public partnership mode, in which the Government, the Zone Developer and the Zone Investors will participate. The Government Agencies will be responsible for: selling/ leasing of land to the Zone Developers, providing incentives to the developers (10-year tax holiday and one time import tax exemption on capital goods; providing necessary off-site infrastructure to the site, review and approval of the Zone Master Plan and a one-window investment facility through the Board of Investment. The Zone Developer (private or private/ public partnership) will be responsible for: preparation of the zone Master Plan; development of the site as per approved plans, and allocation of plots to investors. The Zone Investors will have to start construction within 6 months, complete construction within 24 months of plot allocation. The land title for the plot will be issued to the Zone Investors 6 months after start of production.

Financing Arrangements: CPEC financing falls under the umbrella of BRI, supported by the huge (\$ 3 trillion +) foreign exchange reserves of China. Bulk of the investments are through commercial contracts between corporate entities on both sides with commercial loans from Chinese sources. China has set up a framework for BRI financing consisting of three financial institutions for this purpose: Silk Road Fund (SRF); Asian Infrastructure Investment Bank (AIIB), and the New Development Bank (NDB).

CPEC projects are 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 for a fee of ~ 7%, and the security of the loans is guaranteed by the state. The details of the individual project financing are not readily available. The bulk of CPEC financing is for energy projects, which is executed in the IPP mode. Under this, foreign investors are guaranteed a minimum 17% rate of return in dollars on their equity investments. The loans are 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 being financed through government-government loans on concessionary terms, reportedly 2%; debt servicing responsibility would be on Government of Pakistan. The financing arrangements will, no doubt, have a major impact on success of the program. The current CPEC funding portfolio can roughly be summarized as:

- Total funding provided: \$ 20 billion.
- Funding for Infrastructure: \$ 6 billion at 2% interest with repayments starting in 2021.
- Funding for Gwadar Port: \$145 m concessionary loan at 2%; \$ 30m grant funding.
- Commercial financing for energy projects: \$ 14 billion.

According to an initial Government estimates, repayments on CPEC portfolio loans would start in 2021 with about \$300-400 million annually and gradually peak to about \$3.5 billion by fiscal year 2024-25 before tapering off with total repayments to be completed in 25 years.

The impact of CPEC investments on Pakistan's fiscal and debt burden is a hot topic; there are different numbers being reported all around. Pakistan's energy sector has been facing perennial dual problems of 'circular debt'⁷ and government subsides. These continue to deteriorate even with large CPEC energy sector interventions. How much of this deterioration is caused by the CPEC program itself is difficult to answer. According to a recent report⁸by the new Federal Energy Minister, the circular debt has more than doubled during the past four years and has now reached PRs 2.46 trillion (~\$ 11.7 b), which is about 25% of total FY 2023 budget or 0.74 % of GDP. The energy sector is the dominant recipient of Government subsidies. The proposed FY22-23 national budget (RPs 9.5 trillion) has allocated PRs 700b for targeted subsidies to various sectors of which bout 90 % goes to power and petroleum sectors. This is an optimistic estimate, given that in the previous 2021-22 year, the allocation for total subsidies was PRs 682 b, but the actual amount swelled to PRs 1,515 b, primarily caused by the power sector's poor performance. The propose FY 2023 power sector subsidies amount to about 6.7% of the total budget and 0.2% of GDP.

The Government CPEC web site does not provide any data on debt obligations and servicing schedules. CPEC is often referred to as a "debt trap", which is denied by the Chinese side. According to a Chinese Embassy statement⁹, only \$ 5.9 b of the total \$ 18.9 b Chinese investments is in the form of loans for infrastructure project (2%), which is roughly 6 % of Pakistan's total debt obligations (\$99b). The remaining investments in the power sector are labeled as Chinese companies' investments payable by the Pakistani counterparts. Part of the current power shortages in Pakistan are attributed to the inability of local companies to meet their obligations. The Chinese companies reportedly have threatened to shut down these power plants. The previous PTI Government tried to reschedule the terms of these investment, without any conclusion. If one includes the power sector investments (mostly commercial loans from

⁷ <u>*Circular Debt*</u> can be defined as the amount of cash shortfall within the government-owned Central Power Purchase Agency, which it cannot pay to the power supply companies. This shortfall is due to: i) difference between the actual cost of providing electricity and the revenues from sale to the customers, plus subsidies; and ii) insufficient payments by Distribution Companies to the Purchasing Agency out of the revenues realized

⁸ Published in Dawn Daily, May 10, 2022

⁹ Chines embassy , Islamabad circular dated 4/26/2020.

designated Chinese Banks and agencies) Pakistan's debt to China would stand around \$14.5 b. The fiscal and debt burden imposed by the power sector is not sustainable by any means, but it goes on year by year. It is estimated that the poorly performing power sector is reducing national GDP by 2%.

Implementation Status: An overview of the implementation status of CPEC projects, as reported in the Government website, is summarized in Table 2 below. All sort of progress update with different cost numbers are floating around in the media and academia; it would be impossible to reconcile those. In summary, 18 projects costing \$ 14 b are reported as completed, mostly in energy (69.4%) and transport (30.5%) sectors. Energy sector dominate the ongoing project portfolio also as it accounts for nearly 90% investments. Among the projects under consideration, the infrastructure investments are skewed by the mega rail line ML1 (\$ 8b+).

The construction of Phase I projects has generally proceeded on schedule. Lately, implementation is being hampered by security issues and delays in finalization of financial/ administrative matters relating to ongoing projects. A terrorist attack in a Karachi University this April, killing 3 Chinese staff, reportedly affected implementation of ongoing projects. Slowly things are getting back to normal.

		No. of	Estimated	Compl	eted	Ongoing Projects		Under		
	Sector	Projects	Total	Projects				Consideration		
			coast	No.	Cost	No.	Cost	No.	Cost	
			m^{10}		\$ m		\$ m		\$ m	
1.	Energy	28	26,255	10	9,753	7	9,602	11	6,900	
2.	Infrastructure	17	14,070	5	4,29511	2	275	10	9,50012	
3.	Gwadar Port	6	754	2	4	2	600	2	150	
4.	Industry/SEZs	11	128	0	-	4	$(128)^{13}$	7	n.a	
5.	Agriculture	No plans/ information available								
6.	Other Sectors	7	2	1	(2)	2	n.a	4	n.a	
	Total	69	41,209	18	14,054	17	10, 605	34	16,550	

Table 2. Overview of CPEC Projects Implementation Status

Rough estimate, based on data available in Government of Pakistan website.

Following observations about the CPEC program needs to be made.

• Dominating Energy Sector investments mainly included new power generation based on imported fuels; with inherently expensive unit production cost. While a significant power generation capacity was added to the national grid, the high production costs and weaknesses in the transmission and

¹⁰ Only for those projects for which estimated costs are listed; cost information for a number of a number of projects is not available.

¹¹ Includes \$ 1.62 b allocated to Lahore Metro Orange line, now completed.

¹² Includes ML!

¹³ Only for Rashakai zone.

distribution system are hampering utilization of this capacity. Already, the imported-coal power plants are facing serious financial difficulties.

- The infrastructure investments mainly supported the eastern route of the corridor. The two highway segments, under implementation, and the proposed large ML1 rail upgrade implies that nearly 95% of the proposed transport investments would support the eastern route. The shorter western route is mainly being developed through Government development funds.
- Development of the Gwadar Port area is a priority, but its implementation was slow in Phase I of the program. Only a short highway segment and initial phase of the Free zone Development have been implemented. PTI Government did accord high priority to development of the Gwadar area. Lack of available water and power are being cited as development constraints.
- Little planning and preparation have been done for other key sectors with potential for employment generation and exports, like agriculture and industry. Full potential of CPEC cannot be availed without developments in these sectors. This will require strategic planning and a better understanding of the developments and needs of the bordering Chinese provinces.
- The CPEC implementation arrangements to date have been ad hoc. Overall program responsibility rested with the Ministry of Planning and Development, which is not a line ministry per se. Due role of provinces and other stake holders was reported as weak. Proper due diligence in planning and implementation was compromised. The PTI Government established a CPEC Authority to coordinate the overall program. The Authority is still in the process of maturing. The current Government has made pronouncements to disband the CPEC Authority and return its functions back to the Ministry of Planning. The fluid implementation arrangements of CPEC has been a major factor in its optimal planning and implementation.
- The available CPEC projects information is incomplete. The project costs listed in the government data seems to be notional. For example, the listed cost of all 2x660 MW coal fired projects is \$ 1,192 m, irrespective their location and implementation status. This is an unlikely coincidence. A number of ongoing projects, e.g. Lahore Orange Line, Multan-Sukhar Highway, were included in CPEC to meet funding shortfalls. It is not clear if the listed cost is the incremental portion picked up by CPEC or the total project cost. A proper analysis of the CPEC program outcomes would warrant reliable cost and output data.
- While financing framework for the energy projects is clear, the actual financing agreements are not available. This is a critical missing information required for proper evaluation of the projects.
- Most of the Project Owners/ Executing Agencies seem to be new companies set up for respective projects. This raises concerns with respect to their implementation capacity and financial obligations.

Key Challenges Facing CPEC: The current challenges facing CPEC implementation are listed below.

Reset CPEC Focus: The CPEC Phase 1 composition was heavily skewed in favor of energy and transport projects. The need for a reset of the program focus was acknowledged. The second BRI Forum in Beijing in April 2019 also pronounced new guidelines for the broader program. This included much more attention to debt sustainability of counties; economic and financial viability of projects as well as environmental sustainability. China also announced withdrawal from coal-based power projects under BRI. Phase I CPEC program would have benefited immensely from these delayed recommendations.

Since mid-2018, the CPEC program is in a new phase of evolution. The PTI government pronounced to give priority to hydro power projects, as well as to projects that produce employment generation and value -added exports. These objectives were part of the original CPEC agenda. For Pakistan, complete withdrawal from coal fired power plants is going to be difficult. CEPEC has invested heavily in development of large coal mines in the Thar (Sindh Province) area. A number of mine-mouth coal projects are under planning

and implementation stages. An imported coal power project in Gwadar area is also under construction. The new start up does include two hydro power projects, but not much for wind or solar projects.

Establishment of SEZs and a broader agriculture development program in the corridor area were to be the modalities for income generation and export enhancement. The progress to date on these fronts has been slow. These are inherently difficult investment to design and implement. It is so much easier to undertake a \$ 2 billion power or infrastructure project than a \$ 200 m socio-economic program. The risks associated with the latter are substantial. The original program of 9 SEZs was slow to materialize; was later revised to 3 SEZs in the first phase, which are at different stages of implementation. Land development for three such zones is partially completed and allocation of pots to potential entrepreneurs is underway. An investments program for export-oriented agriculture has yet to emerged. This requires immediate government attention.

Sustain Gwadar Port Development: A fully functional Gwadar Port hub in a timely manner is essential to success of CPEC. Progress on this front was slow in Phase 1, but is picking up pace now. The ongoing works include: port facilities, international airport, thermal power plant, operationalization of the industrial, completion of road links etc. The security risk continues to hamper the program,

Decision on ML1: Upgrading of the ML1 railway line from Peshawar to Karachi is a much talked about project. The Ministry of Railway is keen about this mega \$ 8 billion plus project and pushing hard for this. Its technical and financial details are being finalized. The project, agreed in principal for inclusion in CPEC, is now proposed to be implemented in phases. The project is generating fair amount of controversy. It would put strain on availability of funding for other development projects and result in substantial debt servicing requirements. It will be a tough call for the government to make.

CPEC Management Modalities: The CPEC management and oversight arrangements have been not been clear or steady. As mentioned above the responsibilities have rotated between MoPDR and newly created CPEC Authority. These fluctuating arrangements have hampered optimal design and implementation of the program. The scale and scope of CPEC 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 CPEC Authority could be beneficial, if set up with a clear mandate, adequate professional resources and protection from political interventions. It should be charged to manage the internal challenges of planning, financing and coordinating between institutions, provinces and agencies to build momentum on speedy outcomes. Transparency in selection of projects and award of contracts will need to be established. A properly designed "enabling environment" framework consisting of laws, incentive and supporting facilities will be critical for the socio-economic projects.

Outcomes/ Impact of CPEC:

The 15 years CPEC program was launched in 2015. Roughly half of that time has now elapsed; now is a good juncture to assess progress and outcome of CPEC. In terms of developments on the ground, CPEC has:

Contributed to installation of 10 power plants with 6,620 MW (roughly 25% of the current peak demand) at a cost of \$ 9,750 m. Another 7 plants with capacity of 5,130 MW and estimated cost of \$ 9,600 million are under construction. The energy projects were given special preference as "early harvest "projects to alleviate prevailing serious power shortages. This has not happened for reasons mentioned earlier, i.e. high production costs, lagging supporting investments, serious sector-wide circular debt and unaffordable government subsidies. There is no available data to ascertain actual performance of CPEC power projects. In the broader picture, Pakistan's power availability

situation, post CPEC, is no better. The financial difficulties of the energy sector are clearly worse. The anticipated benefits of the CPREC energy projects are not visible.

- CPEC has definitely contributed to improvements in Pakistan's highway network, particularly the northern segment linking Islamabad to the Chinese border towards Kashgar and the Lahore to Karachi motorway. Substantial improvements of the western corridor are underway, mostly financed by government's own sources. The anticipated economic benefits of these investment are yet to be realized for slow progress in development of agriculture and industrial projects for employment generation and export-oriented production. Unless the transit corridor helps create a functional value supply chain, the economic benefits of CPEC are not realized.
- CPEC has clearly put Gwadar Port on the world map. This project has been Pakistan's dream since 1950. For political and financial reasons, Gwadar port development was very slow. A first phase of 4 berths was completed in 2007 with Chinese assistance. Gwadar Port being the critical hub of CPEC, became a significant part of the program consisting of construction of: a deep seaport, supplemented by ancillary facilitates (power plant, access links, water and sewage facilities etc.); development of Gwadar City, including new airport, hospitals and a large industrial zone. Progress on the Gwadar component was slow in the first phase due to technical and security related issues. Under the PTI government, Gwadar development was expedited. While only 2 small projects are completed so far, a large portfolio in under construction. Again, Gwadar's real success will be judged by the transit trade volume both ways and increasing value added from the domestic market.
- CPEC was supposed to be a "gamer changer" for Pakistan. Has it happened? The answer at the moment has to be: not yet. From the Chinese perspective, it was supposed to be a "front runner" or "flag ship" under BRI. {BRI report analysis can answer this.}. The broader goals of CPEC with respect to project completion targets and socio-economic benefits, as articulated in the Long-term Plan, are also yet to be achieved.

Way Forward

The CPEC program could have and would benefit from some basic suggestions:

- Pakistan should clearly spell out its national objectives for CPEC program. Commercial investments should support these.
- Make the program composition process transparent. Depoliticize and professionalize the process. The basic project due diligence should not be compromised.
- Well established oversight and implantation arrangements, commensurate with the size/ scope of this program, should be put in place.
- All relevant information of the program project details, financing arrangements etc. should be made available in public domain. Transparency here would greatly help improve the program design and outcomes.