

Introduction

The sea and land based economic corridor is aimed to secure and reduce the passage for China's energy imports. China-Pakistan Economic Corridor (CPEC) is a 3000 km Chinese infrastructure networks project undertaken in Pakistan. Developing a deep water port at Gwadar in Arabian Sea and building road and rail from this port to Xinjiang province in western China would be shortcut for boosting the trade between Europe and China and overcome an electricity shortfall, infrastructure and modernize transportation network in Pakistan. Hence, CPEC is seen as the main plank of China's Belt and Road Initiative.

Announcement and Subsequent development of CPEC

Chinese President Xi Jinping claimed the friendship between China and Pakistan as "higher than oceans and sweeter than honey". In 2015, Pakistan and China signed an agreement to commence work on \$46 billion agreement on which vast network of highways and railways are to be built. Later, they also signed 20 more agreements worth \$1.6 billion that focuses

on energy generation capacity. In 2016, cargo arrived in Gwadar formalizing operation of CPEC, further China announced an additional billion of investment following 2017 and 2018.

Projects in Gwadar Port and City

Expanded Gwadar port was handed to the China Overseas Port holding company in 2015. The site will include manufacturing zones, logistic hubs, warehouses and display centres. As of 2017, in total there are 9 projects funded by China in and around Gwadar which includes Gwadar International Airport, Gwadar East Bay Expressway, Makran Coastal Highway, and Pak-China Technical and Vocational Institute at Gwadar. Further, in 2020, Government release 230 million for seawater desalination plant at Gwadar.

Roadway Projects Under CPEC

The CPEC projects envisages major upgrades and rebuildings to Pakistan's transportation infrastructure. Under the CPEC project China has announced financing

of \$10.63 billion worth with 1.6 percent interest rate.

China

Indian Occupied Kashmir

Pakistan

Highway Network of CPEC

After Energy sector, largest investment of CPEC is in transportation. The are

three major parts in which CPEC is financing. The first is Motorways and Highways that include southern part of corridor - Gawadar to Basima, Northern part of corridor - Khujhabto Burehan, and Eastern part of corridor - Burehan, Faisalabad to Rehmanio Gawadar. The second is Main line one (ML1) that include Karachi, Lahore, Peshawar and Islamabad and will be operational in 2024. The third is Gawadar Seaport, a 3km track ahead into sea. Hence, CPEC roadway projects align Pakistan eastward and westward.

Railway Projects Under CPEC

CPEC projects emphasizes major upgrades in railway system. which includes rebuilding of ML1 railway between Karachi and Peshawar by 2022. In addition to this railways upgrades and expansions are slated for ML2 and ML3 railways. The CPEC plan also calls for expansion and completion of a rail link over Khujhab Pass - provides direct access to Chinese and East Asian goods to Pakistan. and Lahore Metro which construction of the line has already begun. Hence, CPEC projects upgrading the country's railway sector beneficially.

Energy Sector Projects Under CPEC

Energy sector is CPEC biggest focus. Approximately \$33 billion expected to be invested in this sector. There are two major projects under CPEC; The Mafkari-Lahore transmission lines that is completed and operation has a worth of \$2.1bn and second is North south corridor that is operational and has need of completion. The implication of the projects resulted into the end of loadshedding in Pakistan. In 2018, 8000 MW electricity was produced mostly from coal and civil nuclear projects.

Another benefit is that as Pakistan is producing most expensive electricity in Asia, the projects under CPEC resulted cheaper electricity generation through coal projects, civil, hydro, wind, and solar projects.

Another primary focus of BRI is clean energy projects; wind, solar, tidal projects. Although smog is now another problem due to climate change. Pakistan yet continue to pursue it but if Pakistan could ever generate 150 MW per day it will be greater than combine resources of Saudi-Iran.

Agriculture Cooperation Under CPEC

CPEC includes provisions for cooperation in management of water resources, livestock and other field of agriculture. The Framework includes cooperation in Remote sensing and Geographical Information system usage which will make the agriculture modernize.

Science and Technology

As part of CPEC, two countries signed the Economic and Technical cooperation Agreement that will help Pakistan to develop technologically. The projects that are signed under CPEC are Digital Terrestrial Multimedia Broadcast, Pakistan-China Fiber Optic projects and China Pakistan Joint Marine Research centre.

Concessional loans and Interest free loans

Approximately \$11 billion worth of infrastructure projects being developed by the Pakistani government will be financed at an interest rate of 1.6%. Similarly, the government of China in August 2015 announced that concessional loans for several projects in Gwadar totaling \$757 million would be converted to interest free loans.

Impact of CPEC

The Pakistan media and government have called CPEC investments a "game and gate changer". The shifting from coal based to renewable based investment promotes a greener image of CPEC. A 2017 report by consortium of Pakistan broker houses said that transparency related to CPEC would grow Pakistani exports by 4.5% a year. Further, Strait of Malacca provides a shortest path for China but due to tension in that region CPEC will be performed as a alternative to China. Further, CPEC provide route to Afghanistan and Central Asia that promotes the trade in the region. Hence, CPEC significantly important for Pakistan, region and for China itself.

Challenges regarding CPEC

Political regime in Pakistan is not stable and the civil governments have often seen military interference. Such scenarios jeopardizing the agreements signed by the leaders and increasing the uncertainty in implementation of projects which are under CPEC. Further, the worst economic crisis in Pakistan's

history since 2022 calls into question whether CPEC can achieve its development goals. Hence, current situation of Pakistan is a challenge to CPEC project's implementation.

Criticism on CPEC

The then BS deputy of state under administration of Trump said about CPEC, "Majority of CPEC project are loan based. In Pakistan with highest interest. The economy of Pakistan is already in under tremendous crisis and has burden of loans. CPEC will prove death trap project. They further said "Projects like Gwadar would be another Humbatara". There are numerous project completed by China in number of countries like Sudan and Sri Lanka. But these countries could not repay the loan and faced loss. Furthermore, CPEC based project are being flooded by Chinese labor and Chinese machineries leaving behind minimum space for Pakistan workers. In addition, there are security threat internally from separatist organization and externally from ISCP and ITP and maritime. Security in Arabian Sea also threatening security

of CPEC projects.

CPEC will be a game changer



It is obvious that economy of Pakistan under tremendous crisis, burden of loan but as per CPEC projects are concerns all are not loan based. A series of project are rental not loan based almost rest are BOT model based and Railways and highways are loan based and BOT model. Further,

Industrial and public private partnership based not loan based. If some project are loan based there terms and conditions are easier. Furthermore, there are 37 major projects completed by China and it faced problem in only 3 projects and are in working. Project like Humbatola was political project and loan based and with the concern with Gwadar is BOT model and present on most ideal location in Asia Pacific and Gwadar is largest and deepest seaport 120 barrels and the largest dependency will be of China itself so definitely it will maintain it and make transit corridor to Pakistan. In addition, clearcut agreement between China and Pakistan about labor working majority. labor will be belong to Pakistan labor. but this will be a challenge to Pakistan company to produce skilled labor. Further, deployment of military division also done by both countries in order to protect Gwadar.

Conclusion

CPEC will make more than double industries than Pakistan today have. China policy to relocate industry to neighborhood because production cost increased in china. so it started from Pakistan. China repeatedly used "iron brothers" for describing its relation with Pakistan. But Managing project like CPEC requires not only a well coordinated, mature and strategic approach but also administrative and policy continuity and political stability. ~~etc.~~