Moreover, the government is also using a 'carrot and stick' approach by introducing penalties in the case of noncompliance, and rewards in the case of the presence of strong internal regulatory mechanisms. In addition, it is now focusing on cultural interventions trying to orient the culture in a way that would require less external regulation and would incorporate a values-based approach that is self-regulatory when it comes to pollution management and control. Such an approach focuses on yielding long-term benefits. The GGGI case study[4] provides a number of examples as to how China is trying to hasten its transition towards sustainable practices by carrying out reforms over SEZs. Several initiatives include:

- The Eco-Industrial Park (EIP) demonstration programme and The Circular Economy Demonstration Industrial Parks (CEDIP) were launched in 2003 and 2005 respectively, with the aim of transforming conventional industrial zones into resource-efficient ones, and promoting the 3Rs (Reduce, Reuse and Recycle) principles. These efforts have usually been also accompanied by policies such as preferential credit systems.
- The Chinese government also launched the Low-Carbon Industrial Park (LCIP) demonstration programme in 2013 with a view to achieve China's aim of becoming an 'ecological civilization'. Carbon controls, the adoption of technologies such as "CCUS" (carbon control, use and storage), developing carbon friendly infrastructure in the SEZs etc. were incorporated as part of this programme. It mainly focuses on minimizing greenhouse gas (GHG) emissions by employing rigorous GHG accounting and reporting procedures.

Furthermore, along with the direct benefits of such programmes, they had the added benefit that greater competition due to larger number of SEZs forced the industries housed there to adopt more stringent measures to control pollution as they had to differentiate themselves given the homogeneity that was occurring with the green practices soon spilling over to all SEZs.

3. CPEC and Special Economic Zones (SEZs)

The China-Pakistan Economic Corridor (CPEC) is the flagship project of China's 'Belt and Road Initiative' (BRI), designed to geographically link and connect 152 countries majorly relying on the Chinese investment to develop infrastructure in these countries. It will link Pakistan and China from Kashgar to Gwadar, consisting of a combination of investment in energy and infrastructure projects including 9 Special Economic Zones[5] (SEZs)

Currently, SEZs have special attention from the government of Pakistan and the private investors. Some of the benefits of SEZs include increased foreign direct investment (FDI), higher employment opportunities, greater access and competitive edge in the global market, improving the skills of the local workforce and helping diversify exports etc. SEZs also include free-trade areas, export-processing zones, industrial parks etc. that incentivize innovation over a multitude of industries.

SEZs under CPEC include: (i) Karachi Export Processing Zone (ii) Risalpur Export Processing Zone (iii) Sialkot Export Processing Zone (iv) Gujranwala Export Processing Zone(v) Khairpur Special Economic Zone (vi) Rashakai Economic Zone (vii) Gadoon Economic Zone and (viii) Hathar Economic Zone (Mahmood, 2018). Further details about the 9 proposed SEZs[6] under CPEC are given in Table 1.

[4] Ibid

[5] SEZs can be explained as 'geographically delimited areas administered by a single body, offering certain incentives (generally duty-free importing and streamlined customs procedures) to businesses which physically locate within the zone' (Zones SE 2018). These are located within the boundaries of a country but usually function without the constraints imposed by the laws and institutions of the country or the area in which they operate, giving them numerous direct and indirect advantages for growth and development as compared to other areas.

Table 1: Special Economic Zones under CPEC (Source: CPEC official)

SEZs	Location/Area	Status	Focused Sectors
1) Rashakai Economic Zone, M-1, Nowshera:	Located on 1000 acres of land, of which 702 acres are to be used for industrial development, at the junction of Karakoram Corridor and ML-1 development corridor, about an hour drive from either Islamabad or Peshawar.	Feasibility studies of SEZs is shared with Chinese side. The MoU and Engagement Agreement for the RSEZ project was signed in January 2018. Presently, the two parties are in end stages of finalizing and signing the Concession Agreement, following which the Ground Breaking of the project will take place.	Garments and textiles manufacturing, electronic appliances manufacturing etc.
2) China Special Economic Zone Dhabeji	Located in Dhabeji in Sindh province at a distance of around 55 km from Karachi covering 1000 acres of land.	Sindh Board of Investment and National Logistics Cell have signed a memorandum of understanding to set up a Logistics Park within the SEZ (source: https://www.dawn.com/news/1407981)	Ideal for providing a link with Karachi's airport and sea port etc. to increase local connectivity.
3) Bostan Industrial Zone	Located in Bostan, Balochistan Province on 1000 acres of land.	Feasibility studies of SEZs is shared with Chinese side.	Fruit processing, agricultural manufacturing, pharmaceutical
4) Allama Iqbal Industrial City (M3), Faisalabad	Covers 3000 acres of land in Faisalabad Punjab.	Feasibility studies of SEZs is shared with Chinese side.	Textiles, pharmaceuticals, steel and chemicals industries etc.
5) ICT Model Industrial Zone, Islamabad	Covering approximately 200-500 acres of land.	Feasibility studies of SEZs is shared with Chinese side.	Steel, food processing and textiles industries.
6) Development of Industrial Park	Situated at Port Qasim (Karachi) on 1500 acres of land.	Feasibility studies of SEZs is shared with Chinese side.	Steel, garments and automobile manufacturing industries.
7) Special Economic Zone at Mirpur, AJK	Covering 1078 acres of land connectivity with Sialkot being approximately 140 km from Sialkot and Jhelum.	Feasibility studies of SEZs is shared with Chinese side.	Will feature mixed industries.
8) Mohmand Marble City	It is situated in Federally Administered Tribal Areas (FATA). Land is yet to be allocated.	Feasibility studies of SEZs is shared with Chinese side.	The type of industries it will feature have yet to be decided.
9) Maqpoondas SEZ Gilgit-Baltistan	Covers 250 acres of land and will link Gilgit with Skardu.	Feasibility studies of SEZs is shared with Chinese side.	It will house marble/granite, leather, and iron ore industries.

3.1. Challenges in the way of developing SEZs

Historically, SEZs have been one of the main priorities of the government to kick-start Pakistan's economy on to the path of sustainable growth and development. One option for the Pakistan government is to replicate the Chinese model of development. However, China faced many challenges while developing its SEZs, and Pakistan might face the same. Some of the challenges might hinder the smooth functioning of SEZs establishment.

- Previously, poor governance and weak institutions are major factors that have undermined the industrial base in Pakistan (Khan & Anwar 2017).
- The incentives offered by the government include five-year tax exemptions for zone developers, a one-time exemption from customs duty on all capital goods entering the SEZs, land leases at cheap rates for 30 years, and repatriation of profits inter alia to attract FDI. The government has also proposed additional incentives for industrial zones, such as a one-window operation by Special Economic Zone Authority (SEZA), purchases of basic utilities in bulk etc. (ibid). However, many incentives such as tax exemptions might just lead to a loss of revenue for the government, as foreigners are liable to pay income taxes in their own countries. (ibid). In addition, bureaucratic inefficiency might undermine the one-window operation by the SEZA. Replication of incentives and policies in other countries may not be appropriate for Pakistan given the different situations and factors at play. Thus, policies should be tailor made for Pakistan considering its unique factors.
- There has been a recent trend towards private zonal development (ibid). Without involving the private sector in the development of SEZs, the government will not be able to meet the higher costs, as well as entice investors who do not trust the government. On paper, the government seems to be following this template with i) SEZ being developed through the public sector, ii) being developed through the private sector, and iii) being developed via public-private partnerships. However, the government needs to demonstrate tangible commitment and build trust with the private sector. Private developers have to gain approval not from one but multiple government bodies despite the one-window operation by SEZAs. Such bureaucratic measures stifle initiative and need to be curtailed to encourage investment, and to allow the private sector to actively participate in developing the SEZs. 'Pakistan's economy ranked 136 out of 190 economies in 2018 in terms of the ease of doing business ranking prepared by the World Bank'. Moreover, confusion related to Pakistan's SEZs also seems to stem from overlapping roles between the federal and provincial governments, and lack of clarity on responsibilities is causing unnecessary delays (Kiani 2019).

Although locations of the SEZs have already been selected; still, there is a room to learn from other countries especially China so as to ensure that Pakistan adopts all the best practices. China's development of SEZs highlights the significance of generating new ideas to invigorate investment, building trust with foreign investors, maintaining stable political and economic environmental safeguards, and ensuring continuity of policies (monetary, tax, labour etc.) so as to attract and retain investors.

3.2. Conclusion and Recommendations:

In the past, Pakistan tried to establish SEZs but did not succeed. However, this time under the ambit of CPEC (Phase II), Pakistan has renewed commitment and learnt lessons from Chinese experience. SEZs in China proved to be a controlled social experiment to test the success of market-oriented economic reforms. There is a non-exhaustive list of opportunities and challenges that Pakistan needs to deal with actively before CPEC transforms into the game changer. For the success of the SEZs, it is imperative to combine political, social, business elements to follow a sustainable growth. Top decision-makers need to exhibit

strong commitment to reforms both at the institutional and policy level. There is a need for stable and conducive business environment.

3.2.1. Revised labour policy

Policies and practices on labour in connection with SEZs vary widely across countries. For example, Egypt has a clear policy to employ one foreign labour for every nine Egyptian. Similarly, Nigeria maintained a one to four ratio of Chinese to Nigerian labour. Given the high unemployment rate and a growing working population, Pakistan needs a clear-cut policy allowing Chinese companies to use a mix of local and Chinese labour.

In the context of employment and proper skill amelioration of the labour force, there is a need to absorb skills and technology from countries like China. In order to make it sustainable, a gradual shift is needed. Thus, in order to build capacity, policymakers need to introduce a network of technical training institutions to create skilled labour force domestically.

3.2.2. Incentive Schemes

After the passage of SEZs Act (Amendment) 2016, they are entitled to enjoy a 10-year exemption from customs duties and taxes for all capital goods imported into Pakistan. Similarly, all income from the development and operations in SEZs is exempted from taxes.

A clear incentive framework under CPEC should tie incentives directly to continued efficiency. The tax exemptions and subsidies design should not hurt the existing tax base and not encourage local existing businesses to move to economic zones for a short while only to avail these benefits.

Efficient public-private partnerships are necessary to develop large investments that require both the government backing but also the business acumen to avoid red-tape and corruption such as port services.

Improved commercial participation in SEZs can foster trust in both local and foreign investors. Research institutions and civil society organizations must also be involved in continuous monitoring, innovation and benchmarking. Research will improve data availability, analysis and dissemination of best practices and opportunities that support policymaking.

3.2.3. Institutional reforms and Coordination

An efficient regulatory and administrative system at local level needs to be backed by a sound infrastructure of communication and basic amenities. A working coordination between federal and provincial policymakers has an important role to play. Top leadership must demonstrate strong commitment to develop institutional autonomy and flexibility to support businesses in SEZs. The decisions should be taken considering all stakeholders and more autonomy should be provided to the administration of SEZs regardless of the provincial regulations.

3.2.4. Regional Connectivity

To fully exploit benefits from export opportunities through the SEZs, Pakistan needs to have workable relationships with the neighbouring countries, especially in Central Asia. This will allow for greater market access and open up new vistas for Pakistani products. The success of economic zones also depends on the security and socio-economic situation of the region; thus, it is essential to maintain peaceful relationship with the immediate neighbours, including India, Afghanistan, and Iran. In Pakistan’s case, Mohmand Marble City and Bostan Industrial Zone have great potential to build on this model. Moreover, the accumulation of capital, technology and skilled labour from developed and neighbouring countries tend to have spillover effect that helps build local industry that might not necessarily be a part of SEZ.

3.2.5. Green policies/eco-polices in planning and development of SEZs

Just as SEZs have effectively driven industrial development and growth in China, the development of green SEZs could serve as a guidepost for the realization of a green development strategy in Pakistan. The basic strategies can be:

a. Climate change mitigation priorities: The economic activities in the SEZ need to be low carbon, committing to mitigate the emissions of greenhouse gases with concrete plans for mitigation in industrial sectors. This may include shift to low carbon and renewable energy mix, as well as energy audits, GHG accountings to measure the potential of emissions and its impact in each sector.
b. Sustainable and resilient infrastructure: Efficient use of resources in the planning and constructing the infrastructure of SEZs include resource saving technologies such as recycling system, water reuse, as well as green buildings and energy efficient systems.
c. Climate-friendly investments and low-carbon policy incentives: The climate friendly investments may include technological tools and innovations to generate green materials and elements using green incentives, intellectual property protection, climate friendly products, laws and standards generation. Few best practices may include introducing a feed-in tariff system, Renewable Portfolio Standards (RPS) and energy-efficiency standards, tax reduction for green high-technology investment, and R&D support.
d. Carbon Finance: A green financing system has a potential to provide new channels to transit to low carbon and green SEZs, such as Clean Development Mechanisms (CDMs), which can provide new source of funding to develop these SEZs.
e. Capacity building for awareness raising: The realization to prioritize the economic development would require awareness raising workshops and dialogues through public-private partnerships to create consensus on trying to reduce the ecological consequences in SEZs in Pakistan. The arguments can be complemented using the examples of nations like China who have faced disastrous effects and became the largest hostage to pollution. The citizens need to have green consciousness to understand the significance of shifting to low carbon development for better health and wellbeing.
f. Challenges at political and institutional level: The challenges at political and institutional level can be addressed by using dialogues and discussions among the stakeholders and decision-makers, promoting the culture of green practices and green economy using cost-benefit analysis.
g. Steps to promote low-carbon production: The provincial governments can establish operational requirements and goals, tasks and measures to promote low-carbon production and consumption patterns. The need for an effective guidance from the development authority and economic incentive policies, to closely follow the latest advances in low-carbon technologies, and actively promote the introduction, absorption, and re-innovation of technologies or conduct joint research and development on new technologies with overseas companies.