Assessment of Special Economic Zones in Pakistan: Suggesting Steps Towards Improved Performance

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Executive Summary

- 1. Industrial clustering and EPZs in Pakistan. Virtually all major district headquarters in the country have an industrial estate or an industrial area that receives infrastructure and special incentives. To facilitate the development of Pakistani industry, in 1952 the Government established the Pakistan Industrial Development Corporation, with the mandate to build up the country's industrial base, contributing to the emergence of a number of industrial clusters (e.g., Sialkot surgical goods cluster, Gujarat pottery cluster, Faisalabad garments cluster, Khyber Pakhtunkhwa marble cluster). The share of GDP of the large-scale and small-scale manufacturing sectors together increased from 7.8 percent in 1949-59 to more than 17 percent by 1980. Even with increased production, manufacturing output remained concentrated in a limited number of sectors. In 1980, to accelerate the pace of industrialization and export-led growth, the Government of Pakistan set up the Export Processing Zone (EPZ) framework. Eventually 10 EPZs were established, although only 5 remain operational in 2019. The EPZs' economic contribution is considered to be low, and data show they did little to enhance export performance.
- 2. SEZ Framework and CPEC. The Government of Pakistan enacted the SEZ Act 2012, establishing both federal and provincial SEZ authorities. At the federal level, the Act established the Board of Approvals (BOA) headed by the Prime Minister. At the provincial level, the SEZ Act established provincial SEZ Authorities (SEZAs), one in each province, headed by the Chief Minister of the province. The BOA holds the final power to accept or reject zone applications; however, the provincial SEZAs are first required to receive, review, and approve the applications before they are submitted to the BOA. The first two SEZs were established in Sindh province, developed by the National Parks Development & Management Company, a corporate body owned by the Government of Pakistan through the federal Ministry of Production. The third, also established in Sindh, was developed by the Sindh Special Economic Zone Management Company, a corporate body owned by the Sindh provincial government. In total, six SEZs have been notified under the SEZ Act 2012, and all have been developed and operated by provincial government-enacted corporate entities. In 2013, the Governments of Pakistan and China signed a memorandum of understanding to improve the lives of people in Pakistan and China by building an economic corridor – the China Pakistan Economic Corridor (CPEC) – promoting bilateral construction, development, and connectivity. One of the key tasks under CPEC is to establish Priority SEZs (PSEZs) along the economic corridor. The CPEC Working Group identified 46 potential sites for PSEZs, and the 6th Pak-China Joint Cooperation Committee meeting prioritized 9 of them: three in Sindh and one each in Khyber Pakhtunkhwa, Punjab, Islamabad, Balochistan, Azad Jammu Kashmir, and Gilgit-Baltistan.
- 3. Challenges with SEZs. Interviews with SEZ stakeholders in Pakistan (SEZAs, developers, domestic firms, Chinese firms) reveal several challenges facing Pakistan's SEZ program, namely: (1) The policy framework has not been socialized with a number of stakeholders: Pakistan's business community feels strongly about their lack of representation in locational, infrastructure, and regulatory decisions regarding SEZ planning and development. It is reported that authorities are not reaching out to domestic manufacturers, and there is a perception that Chinese investors will receive better treatment than domestic investors. (2) institutional fragmentation has led to delays in the provision of critical government services: Investors and developers report that the processes for dealing with critical government services are complex, time-consuming, and costly. It is reported that machinery and capital equipment of SEZ investors is being held up by Customs for up to 8 weeks because of administrative delays. (3) feasibility and other technical studies appear not to have been undertaken by existing SEZs and PSEZs: Interviews

with stakeholders revealed that so far no formal feasibility study has been undertaken at the federal or provincial level. No formal study has been undertaken to identify the skill sets needed by prospective Chinese investors. (4) infrastructure development is reported to be behind schedule, and critical facilities and services not yet provided. The existing parks that were given SEZ status have been unable to provide enterprises with on-site services such as a one-stop shop, customs office, and utilities, which are required SEZ facilities stated in the SEZ Act. It is reported that many of the existing SEZs still lack basic utility facilities such as sewerage systems and dedicated electricity, water, and gas connections.

- 4. Global experience with SEZs. SEZs are a popular policy option among governments seeking to attract new investment and create sustainable jobs. The world now counts more than 5,000 SEZs, and three out of every four countries have at least one. However, popular as they have been, SEZs are often failures. A 2017 study finds that approximately 40 percent of SEZs experienced negative growth from 2007 to 2012, and only 30 percent performed better than the host country average. Further, even the countries that were able to implement growth SEZs also implemented non-growth ones In a successful SEZ, the spatial concentration of people and economic activity creates benefits for firms in terms of forward and backward linkages, pooled labor markets, and knowledge spillovers. The co-location of firms and their suppliers reduces transport costs for raw materials and intermediate goods (backward linkages) and increases the productivity of suppliers through knowledge transfer (forward linkages). Labor pooling allows better matching between firms and workforce, increasing the likelihood for companies to find suitable employees and for workers to find sustainable jobs. Finally, the frequent interaction of firms, suppliers, and workers facilitated by their close proximity creates knowledge spillovers, promoting further innovation. These benefits encourage firms to locate where other companies are already present instead of spreading more evenly across space. When SEZs are implemented well, they are able to attract large numbers of multinational and domestic firms, generate large-scale employment of domestic labor, and facilitate the development of higher-value and more technology-intensive industries. Annexes I, II, and IV present case studies on successful SEZs and some of their benefits.
- 5. **Lessons from global experience.** Acknowledging the challenges identified in stakeholder interviews, the paper reviews global experiences in areas associated with these challenges: policy design, institutional set-up and delivery, site planning and location analysis, and infrastructure development.
 - Policy design. Fiscal incentives appear to be effective only under certain circumstances, and not always important to investors in SEZs. Investors are more likely to value specialized infrastructure services (water treatment, waste management), or the ability to lease pre-built facilities, minimizing start-up cost. Government subsidy towards land acquisition has been a successful strategy in several SEZs globally, namely in Vietnam and South Africa, where government subsidy allowed the developers to charge land rents 50% lower than in comparable industrial locations nearby. Successful SEZ policies have encouraged the development of specific sectors through targeted policy measures. Philippines, for example, has developed dedicated rules, regulations, and incentives for eight targeted sub-sectors. Annex I provides more detail on the policy design in Philippines SEZs.
 - Institutional set-up and delivery. Delivery of the policy regime requires coordination among
 all relevant ministries, departments, and agencies at various levels of government. Leaving land
 acquisition to the private sector can limit the efficiency of SEZ development, resulting in land
 speculation and low-impact SEZ development. Investors value having infrastructure and services
 available on-site at the SEZ location to reduce transaction costs and accelerate set-up time. Failure

to provide critical enabling services to the SEZ can undermine other advantages of the location, driving away investment that might otherwise have been attracted. The case study on Aqaba SEZ in Annex II highlights a successful example of institutional reform improving Aqaba's competitiveness. Successful investment promotion is typically best handled by dedicated, locally-based teams who court specific investors in targeted sectors. The case study on Malaysia in Annex IV highlights how successful investment promotion and aftercare activities were key success factors in the development of Penang SEZs.

- Site planning and location analysis. Recent interviews with SEZ firms highlight location advantages (proximity to port, airport, major city) as a key reason for their investment. Successful SEZs have been able to leverage their location advantages in developing an attractive value proposition for investment. For example, in low-income countries where low wages are an attractive value proposition, zones targeting low-cost manufacturing have generally been more successful than those aimed at high-tech sectors. Conducting proper site planning analysis is critical towards positioning the SEZ to leverage its location advantages. In repositioning Agaba port city for growth, the Government of Jordan commissioned a study to identify Agaba's competitive advantages as an investment destination; evaluate the infrastructure, services, administration, and layout of the port city; and make recommendations on future planning. The case study on Agaba SEZ in Annex II provides more detail on this process. Solid SEZ frameworks clearly lay out all of the different specifications of SEZ planning, and establish a sunset clause on the designation period. Typically, sites that may be designated as SEZ locations must meet specific criteria that are established in the governing rules in regulations. For example, the Philippines SEZ Act and Regulations explicitly require a series of documentation (proof of site suitability, Master Plan, ESIA, feasibility study, etc) as part of the application for SEZ site designation. Annex I provides more detail on this process.
- Infrastructure Development The ability to meet critical infrastructure standards and offer low-cost land to investor firms is linked to the ability to cost-effectively design and construct the SEZ. The design and construction of a SEZ typically requires large capital investments: land acquisition and resettlement costs, land clearance and earthworks, construction of roads and utility networks, construction of industrial plots or pre-built facilities, and so on. While most early SEZ programs followed a public-sector-led development model, over time the development and management of SEZs has been opened to the private sector. There appear to be several key assets that large, private developers offer: (a) a track record of developing SEZs in multiple countries, with the ability to navigate different legal and economic environments; (b) experience with the complexity and scale of a SEZ-type project, in terms of financing and infrastructure standards; (c) financing from international banks and institutions, often at favorable terms; and (d) a deep network of industry-specific contacts that can help promote investment in the SEZ after construction. Table X provides a comparison of different financing models for SEZ development, and the case study on Aqaba in Annex II also provides detail on specific PPP developments.
- 6. **Suggested Steps of Implementation Towards Improving Performance.** Reflecting on the global experiences presented in Chapter 2, the paper suggests steps to be taken towards strengthening the implementation of Pakistan's SEZ program. They are summarized briefly here.
 - Policy design. Conduct broad stakeholder consultations to socialize the different policy elements with all of the stakeholders (SEZAs, IPAs, Chinese investors, Pakistan business

community, existing SEZ developers), to collect feedback on the strengths and weaknesses of the existing policy regime; establish public-private dialogue mechanism that includes grievance reporting; conduct demand analysis through survey of Chinese investors, establishing a database of interested investors; consider harmonizing incentives between existing SEZs and PSEZs

- Institutional delivery of public goods and services. Establish a special delivery unit chaired by the BOA to supervise the coordination of all the relevant ministries and agencies, the SEZAs, and the SEZ developers; Establish special delivery units within each SEZA chaired by the Chief Minister of the province, to lead all technical work related to SEZ implementation including preparatory analysis, environmental and social compliance, marketing and promotion, PPP procurement launch and evaluation;
- Site planning and location analysis. Commission a study that evaluates Pakistan's attractiveness as an investment destination in priority sectors, including benchmarking of trade, transportation, labor assets against comparator countries; Establish and publish a set of requirements governing SEZ site selection; Require the submission of site assessment, environmental and social assessment, drainage study, transportation assessment, market analysis, demand forecast, master land utilization plan, cost estimate, financial analysis, and SPV structure, as part of the development agreement application to BOA
- Infrastructure development and vetting of SEZ developers. Establish coordination mechanism between the BOA, the SEZAs, and the Pakistan PPP Authority; build the technical capacity of the SEZAs to develop business case for PPPs, review feasibility studies, establish SPV structures, etc; Establish and publish technical and professional qualifications of SEZ developers, in terms of experience with previous SEZ or similar projects, performance of previous SEZ or similar projects, financial capacity and relationships with banks, projects in other countries or markets.

Chapter 1: Pakistan's Experience with Special Economic Zones (SEZs)

History of Industrial Clustering in Pakistan

- 1. The clustering of industrial production in Pakistan is not new. Virtually all major district headquarters in the country have an industrial estate or an industrial area that receives infrastructure and special incentives. To facilitate the development of Pakistani industry, in 1952 the Government established the Pakistan Industrial Development Corporation, with the mandate to build up the country's industrial base. Following the implementation of the 1970s nationalization policy which led to a decline in industrial growth, the Government launched an effort to support the development of industrial infrastructure throughout the country, contributing to the emergence of a number of industrial clusters (e.g., Sialkot surgical goods cluster, Gujarat pottery cluster, Faisalabad garments cluster, Khyber Pakhtunkhwa marble cluster). The share of GDP of the large-scale and small-scale manufacturing sectors together increased from 7.8 percent in 1949-59 to more than 17 percent by 1980.
- 2. Even with increased production, manufacturing output remained concentrated in a limited number of sectors. During the early stages of industrialization, import substitution played a major role in the growth of the manufacturing sector in Pakistan, and basic textiles and food products accounted for the bulk of manufacturing value addition. In the 1960s, as policymakers began to shift away from the import substitution model (lifting price controls, liberalizing the foreign exchange market, subsidizing exports, etc.), higher-value manufacturing sectors such as chemicals, basic metals, and machinery began to emerge, but their products were sold mainly to the domestic market. From 1960 to 1965, domestic demand accounted for 96 percent of the growth in manufacturing sectors, and export expansion for just 4 percent. During the 1970s, sharp declines in capital inflows, lack of domestic demand for manufacturing output, and inefficiencies in the manufacturing sector that kept it from competing in export markets slowed investment in the sector (Kemal 1998).

Pakistan's Experience with Export Processing Zones

- 3. **Government of Pakistan sets up the EPZ policy.** In 1980, to accelerate the pace of industrialization in the country and enhance the volume of exports by creating an enabling environment for investors to initiate export-oriented projects, the Government of Pakistan set up the Export Processing Zone (EPZ) framework, including establishing an Export Processing Zone Authority. Most other Asian countries had already established EPZs as part of an export-oriented strategy.¹
- 4. Pakistan established its first EPZ at Karachi in 1989, allocating US\$372 million from the Annual Development Fund of Pakistan. As of 2019, 31 local and 38 foreign firms were active in KEPZ, with a total investment of \$81 million. EPZs were also established at Risalpur, Sialkot, Tuwairqi, Saindak, Duddar, Gwadar, Reko Diq, Khalifa, and Gujranwala, although only five remain operational in 2019 (see Table 1). Pakistan's EPZ Authority reports that as of 2019, 134 investors are active across the five EPZs.

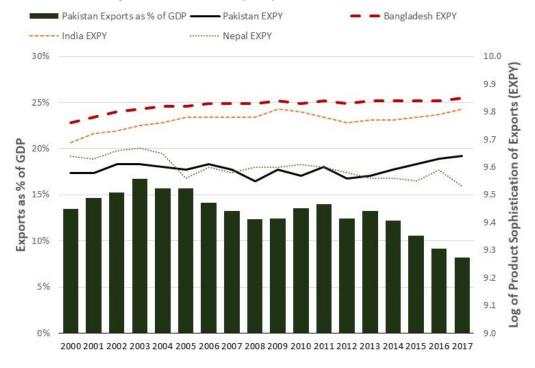
¹ India established the first Asian EPZ in 1965 in Khandla, and Taiwan and South Korea established EPZs in 1970 (Mukhtar et al., 2013).

Table 1. Pakistan's export processing zones

Name of EPZ	Year est	Operational?	Major products
Karachi EPZ	1989	Yes	Garments, electronics, chemicals
Risalpur EPZ	2002	Yes	Warehousing, furniture
Saindak EPZ	2003	Yes	Copper and gold
Duddar EPZ	2004	No	Lead and zinc
Gujranwala EPZ	2005	Yes	Electronics, home appliances, textiles
Sialkot EPZ	2005	Yes	Home appliances
Tuwairqui Steel EPZ	2005	No	Steel billets
Khalifa Coastal Oil EPZ	2006	No	Petroleum products
Gwadar EPZ	n/a	No	Fishery, oil
Reko Diq EPZ	n/a	No	Copper and gold

In Pakistan the economic contribution of EPZs has been less than in neighboring countries, and have done little to enhance export performance. During 2012-2013, Bangladesh's EPZs generated exports of US\$4856.07 million, investment of US\$328.53 million, and employment of approximately 33,987 (BEPZA year book 2013), whereas during 2011-2012, Pakistan's EPZs generated exports of US\$485.26 million, investment of US\$516 million, and employment of just 3,500 (Mukhtar et al., 2013). Exports as a share of GDP have actually declined, from 13.2 percent in 2007 to 9.6 percent in 2017 (see Figure 1). The State Bank of Pakistan attributes the decline in exports mainly to loss in market share in the US textiles market, a fall in international commodity prices that affected food sector exports, and a downward trend in cement exports due to lagging demand in Afghanistan and to South Africa's imposition of anti-dumping duties on Pakistani cement products. Figure 1 also shows that the sophistication of Pakistani exports has not changed much since 2001, and remains less than that of the exports of Bangladesh and India.

Figure 1. Pakistan's export performance, 2000-2017



Market and Coordination Failures in Pakistan Motivating SEZ-Type Intervention

- 6. **Low level and sophistication of exports.** Pakistan is a relatively light exporter, compared to other economies with similar access to trade markets and per capita GDP, and the Pakistani export basket is concentrated in relatively low-value sectors. Some of the underlying causes may be insufficient investment promotion, low frequency and reach of trade fairs, limited availability of information on trade opportunities, failure to meet international quality standards and labor requirements, and inability to leverage existing trade agreements (Karachi Chamber of Commerce).
- 7. **Lack of integration with global value chains.** Although Pakistan and China have a Preferential Trade Agreement, Pakistan's exports to China remain low, and the products it does export remain limited in terms of end markets and value addition. Some of the underlying causes may be shortages of electricity and gas, limited access to labor and industry-specific skill sets, law and order issues, high dependence on imports for raw materials, and a low level of technology and research and development (Karachi Chamber of Commerce).
- 8. Uncompetitive business environment and insufficient delivery of public services to investors. The Pakistani business environment—specifically, the instability of the security situation (i.e., terrorism) and the inconsistency of government policies—continues to be a point of concern for investors. A number of multinational corporations, for example BP, Chevron, Siemens, and several pharmaceutical companies, have disinvested from Pakistan in recent years. Underlying causes include tax complexities, ineffectiveness and inconsistency of export policies, and poor enforcement of quality standards (Karachi Chamber of Commerce)
- 9. **Uncompetitive industrial and trade infrastructure.** Compared to other investment locations, Pakistan's investment destinations remain uncompetitive in terms of access to government services and of infrastructure. Pakistan has a comparatively low density of paved roads, poor-quality railroads and airports, and only an acceptable level of seaports. In the power sector, institutional shortcomings prevent electricity generation from reaching its capacity, resulting in systemic power outages and load shedding (Loayza and Wada, 2012). The quality of infrastructure in Pakistan was rated low by 50 percent of firms, moderate by 40 percent, and high by only 10 percent (Akhtar, 2003).

Introduction of SEZ Framework and China-Pakistan Economic Corridor Agreement

10. The Government of Pakistan enacted the new SEZ policy in 2012, establishing both federal and provincial SEZ authorities. At the federal level, the Act established the Board of Approvals (BOA) headed by the Prime Minister and with membership from ministries, provincial governments, and representatives of the private sector. The BOA would be the highest decision-making body of the SEZ policy, with powers to, among other things, approve or reject zone applications, approve or reject development agreements, examine and decide upon policy issues, and cancel development agreements. The existing Board of Investment (BOI) would act as the Secretariat of BOA, coordinating the relevant stakeholders and preparing any documentation for consideration by the BOA. At the provincial level, the SEZ Act established provincial SEZ Authorities (SEZAs), one in each province, headed by the Chief Minister of the province and with membership from provincial cabinets and departments, as well as representation from the local chambers of commerce. The main function of the SEZAs is to supervise the SEZ activities and to assist zone developers in preparing applications and acquiring land.

- 11. The Act establishes that SEZs can be established anywhere in the country, developed by the public sector or private sector, or by public-private partnerships (PPPs). SEZs must have at least 50 acres of land, 30 percent of which is to be developed as non-processing areas (e.g., hospitals, residences, training facilities). The federal Government and provincial governments can establish SEZs by themselves or in collaboration with private parties under various PPP modes, and SEZs can also be developed by the private sector exclusively, irrespective of foreign or domestic ownership. There are no special requirements to become an SEZ developer; any entity that is incorporated under the laws of Pakistan is eligible. Finally, any existing zone or industrial estate may apply to the provincial SEZA to be designated as an SEZ.
- 12. The Act establishes a two-tier approval process for SEZ applications. The BOA holds the final power to accept or reject zone applications; however, the provincial SEZAs are first required to receive, review, and approve the applications before they are submitted to the BOA. If the BOA approves a zone application, the provincial SEZA is responsible for selecting a developer and negotiating a development agreement for the designated SEZ territory. The regulations expressly envision that such a development agreement would be notified for competitive bidding (by the SEZA), with the selected bid submitted to the BOA for final approval. The Act is permissive in allowing the SEZAs to submit a developer agreement at the same time as the zone application (i.e., without competitive bidding), as long as the developer in question either owns all the immovable property in the proposed SEZ, or holds leasehold rights.
- 13. **SEZs are approved/notified under the 2012 Act.** The first two SEZs were established in Sindh province, developed by the National Parks Development & Management Company, a corporate body owned by the Government of Pakistan through the federal Ministry of Production. The third, also established in Sindh, was developed by the Sindh Special Economic Zone Management Company, a corporate body owned by the Sindh provincial government. Three SEZs were established in Punjab province and one in Khyber Pakhtunkhwa, all developed and operated by provincial government-enacted corporate entities. For the most part, these SEZs are still in the development stage. Only Korangi Creek, Bin Qasim, M-3 Industrial City, and Hattar Economic Zone have investors that have started production. Table 2 lists the SEZs.²
- 14. Pakistan and China sign a cooperation agreement to jointly undertake major infrastructure projects. In 2013, the Governments of Pakistan and China signed a memorandum of understanding (MoU) to improve the lives of people in Pakistan and China by building an economic corridor the China Pakistan Economic Corridor (CPEC) promoting bilateral construction, development, and connectivity. Under CPEC, the Chairman of the BOI is the convener of the Joint Working Group on Industrial Cooperation, and one of the key tasks (under the industrial development Pillar in 2nd phase of CPEC) is to establish Priority SEZs (PSEZs) along the economic corridor. The Working Group identified 46 potential sites for PSEZs, and the 6th Pak-China Joint Cooperation Committee meeting prioritized 9 of them: three in Sindh and one each in Khyber Pakhtunkhwa, Punjab, Islamabad, Balochistan, Azad Jammu Kashmir, and Gilgit-Baltistan. According to the CPEC website, the only SEZ with an approved and signed development agreement is the Rashakai Economic Zone in KP. Table 2 also lists the CPEC SEZs.

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² Proposed PSEZ under CPEC http://cpec.gov.pk/special-economic-zones-projects

Table 2. SEZs in Pakistan that have received BOA approval

Name of SEZ	Host province	Approved developer	Size (acres)		
SEZs notified under SEZ Act, 2012					
Korangi Creek Industrial Park	Sindh	NIP (federal gov't)	250		
Bin Kasim Industrial Park	Sindh	NIP (federal gov't)	930		
Khairpur Special Economic Zone	Sindh	SEZMC (Sindh state gov't)	140		
M-3 Industrial City	Punjab	FIEDMC (Punjab state gov't)	4,356		
Hattar Economic Zone	Khyber Pakhtunkhwa	KPEZDMC (KP state gov't)	424		
Quaid-e-Asam Apparel Park	Punjab	PIEDMC (Punjab state gov't)	1,536		
	Priority SEZs identified under CPEC				
Rashakai Economic Zone	Khyber Pakhtunkhwa	KPEZDMC (KP state gov't)	1,000		
China SEZ Dhabeji	Sindh	TBD	1,000		
Bostan Industrial Zone	Balochistan	TBD	1,000		
Allama Iqbal Industrial City (M3)	Punjab	FIEDC	3,000		
ICT Model Industrial Zone	Islamabad	TBD	200		
Port Qasim Industrial Park	Sindh	NIP (federal gov't)	1,500		
Mirpur SEZ	Azad Jammu Kashmir	TBD	1,078		
Mohmand Marble City	Sindh	TBD	353		
Moqpondass SEZ	Gilgit-Baltistan	TBD	250		

- 15. Pakistan and China have agreed to cooperate in five sectors: iron and steel, mines and minerals, textiles, petrochemicals, and agriculture. The Rashakai Economic Zone, for example, is intended to host the following industrial clusters: garment and textiles, building materials, electronics and electrical appliances, and automobile and mechanical equipment. BOI officials have stated that preference is given to sectors that have low dependence on imports, utilize local raw materials and inputs, generate local employment, promote joint ventures for technology transfer, produce value addition of about 20 percent, and produce exports of about 80 percent of output. As part of CPEC agreement, PSEZs are intended to support Chinese industries relocating to Pakistan, especially those that would bring technology and upgrading to Pakistan's industrial setup.
- 16. Only new entrants and new industries are eligible for fiscal incentives. The 2012 SEZ Act states that only new entrants and new industries that are set up after SEZ designation may apply for SEZ enterprise status. In other words, if an existing industrial park is approved to be designated as an SEZ, only new investors in the industrial park are eligible for SEZ enterprise status, and not the industrial park's existing investors. Further, PSEZ investors that relocate from abroad receive an additional package of fiscal incentives, on top of those offered to general SEZ investors. Box 1 provides a comparison of the incentive package for general SEZ investors versus the package for PSEZ investors.

Box 1. Fiscal Incentives for SEZ investors/developers in Pakistan

SEZ investor already in domestic territory SEZ investor

For SEZ developers

- One-time exemption from all customs duties and taxes on plant and machinery imported into Pakistan (for SEZ development)
- Exemption from all taxes on income earned from SEZ operation for a period of five years, starting from the date of signing of the development agreement

For SEZ investors

- One-time exemption from all customs duties and taxes on plant and machinery imported into Pakistan (into the SEZ)
- Exemption from all taxes on income for a period of 10 years to units starting production by 30 June 2020, and 5 years to units starting after 30 June 2020

SEZ investor relocating from abroad

In addition to receiving the benefits offered to SEZ investors, PSEZ investors additionally receive:

- Provision of plots on instalments (50% down payment and remaining 50% in four biannual instalments)
- Mark-up support at 50% of the mark-up (to a maximum of 5%) to be provided by provincial governments on the loans taken in Pakistani currency for financing the project
- Freight subsidy at 50% on the inland transportation of plant and machinery for installation in/development of SEZs
- Developer can purchase utilities from utility providers in bulk, and sell them to the SEZ enterprises (at the same rate)
- Developer is allowed to rent out existing sheds for industrial use

Current Challenges

- 17. Only seven years after Pakistan's introduction of SEZs, it is too early to assess their performance/success. International experience suggests that the success of a given program can only be assessed after 10-15 years. Many of the early SEZs (notified under SEZ Act 2012) are still in the development phase, so their ability to attract investment cannot yet be evaluated. However, according to stakeholder interviews with relevant government agencies, the Pakistani business community, and SEZ developers and investors, there are several notable opportunities for improvement.
- 18. The policy framework for PSEZs which offers additional package of incentives threatens the competitiveness of those SEZs notified under SEZ Act 2012. BOI has approved additional incentives for PSEZ developers and investors, namely the provision of subsidies towards land rent, cost of financing, and cost of transporting plant and equipment. PSEZ developers will be able to develop SEZ infrastructure at a lower cost than existing SEZ developers, and PSEZ investors will achieve lower operating costs than investors in comparable SEZs, assuming other factors being equal. If not properly coordinated, the additional package of incentives for PSEZs has the potential to cannibalize the target markets of existing SEZs, with PSEZs developers winning market share over existing SEZ developers, given a more cost-competitive value proposition (namely, lower land rent).
- 19. It is reported that the Pakistani business community feels left out of SEZ policy design and planning. Pakistan's business community feels strongly about their lack of representation in locational, infrastructure, and regulatory decisions regarding SEZ planning and development. It is reported that authorities are not reaching out to domestic manufacturers, and there is a perception that Chinese investors will receive better treatment than domestic investors. Lack of consultation with appropriate stakeholders is considered a major reason why the original six designated SEZs in Pakistan are struggling to attract investment. A number of leading domestic investors that were considering investing in the SEZ at Karachi (Al-Futtain Renault, Hayat Kimya, Naveena Group, and International Steels) have decided not to invest there, although several (such as Renault, Hayat Kimya) have instead invested in M-3 IC SEZ,

Faisalabad, Punjab. Stakeholder consultation during policy design is important in determining the right mix of incentives, subsidies, and linkage with local actors.

- 20. **Existing SEZs appear not to have undertaken formal feasibility and demand studies.** Interviews with stakeholders revealed that so far no formal feasibility study has been undertaken at the federal or provincial level. It is reported that land for SEZs was selected through brainstorming during official meetings, rather than on the basis of professional site analysis and feasibility study, suggesting that existing SEZs are operating without consideration for their comparative advantages as an investment location. Further, while government officials have committed to targeting Chinese sectors that employ local, skilled and semiskilled labor, no formal study has been undertaken to identify the skill sets needed by prospective Chinese investors. Without this, PSEZs are at risk of becoming "enclaves", with low capacity to build on local strengths and integrate with local economies. Proper feasibility and demand studies are critical towards positioning an SEZ to leverage its comparative advantages.
- 21. The existing institutional set-up appears to lack the guidelines and capacity to handle important day-to-day management activities. Investors and developers report that the processes for dealing with critical government services are complex, time-consuming, and costly. It is reported that machinery and capital equipment of SEZ investors is being held up by Customs for up to 8 weeks because of administrative delays. At present there is a multilayered administrative process for dealing with SEZ applications, developer selection, and incentives administration. The SEZ Act requires provincial SEZAs to receive, review, and approve applications. However, it is reported these entities do not have dedicated staff, instead relying on civil servants within the ministries to review SEZ-related applications. The SEZ Act maintains that once the provincial SEZAs approve the applications, they submit them to the BOI for federal approval. The BOI, as custodian of the Act, is also reported to operate without dedicated technical staff to handle day-to-day affairs associated with SEZ administration. Finally, there is no focal point or delivery unit that can coordinate among federal agencies to work through administrative delays. As will be discussed in Chapter 2, streamlined government services is one of the main attractions to SEZ investors.
- 22. Infrastructure development is behind schedule, and critical infrastructure intended to be available at the SEZ according to the SEZ Act is reported to be missing. Although SEZ developers are required to develop 30 percent of the land into common facilities for training, residence, health, research, and so on, no developer has yet done so The existing parks that were given SEZ status have been unable to provide enterprises with on-site services such as a one-stop shop, customs office, and utilities, which are required SEZ facilities stated in the SEZ Act. It is reported that many of the existing SEZs still lack basic utility facilities such as sewerage systems and dedicated electricity, water, and gas connections. Although the SEZ Act envisioned a single-window operation at each zone to facilitate regulatory compliance (licenses, permits, etc.), none of the SEZs have yet developed this capability. Also discussed in Chapter 2, quality infrastructure is a key factor driving investment to SEZs.
- 23. There are no professional or technical qualifications required to become an SEZ developer, and SEZ Authorities are reported to lack experience or know-how with PPP implementation. The SEZ Act defines an SEZ developer as an enterprise which has entered into a development agreement with an SEZ Authority. However, it is permitted that any entity incorporated under the laws of Pakistan can enter into a development agreement with an SEZ Authority, and there are not specific professional or technical qualifications or achievements needed to become an SEZ developer. Although the SEZ Act states that SEZs can be developed as public-private partnerships (PPPs), the BOI as the national SEZ secretariat has no mechanism to track the fiscal impact of PPPs, and it is reported that provincial SEZAs lack the proper expertise and capacity to deal with matters related to land acquisition, PPP transactions, labor rights,

intellectual property rights, dispute resolution, and regulatory compliance. Successful SEZ programs globally are increasingly using PPP arrangements to develop SEZ infrastructure.

Chapter 2: Global Experience with SEZs

- 24. SEZs are a popular policy option among governments seeking to attract new investment and create sustainable jobs. The world now counts more than 5,000 SEZs, and three out of every four countries have at least one.³ However, popular as they have been, SEZs are often failures. A 2017 study finds that approximately 40 percent of SEZs experienced negative growth from 2007 to 2012, and only 30 percent performed better than the host country average. Further, even the countries that were able to implement growth SEZs also implemented non-growth ones.
- 25. Figure 2 illustrates the absolute growth from 2007 to 2012 in nighttime lights radiance in a sample of 97 zones across 13 countries. An SEZ's nighttime lights radiance has been shown to positively correlate with the number of operating firms in the SEZ (SEZ Study 2017), and has been used as a proxy measure for the "performance" of an SEZ, in terms of its ability to attract investment. The figure shows that there are performing and non-performing zones in each country, and most zones in most countries do not outperform the country average.

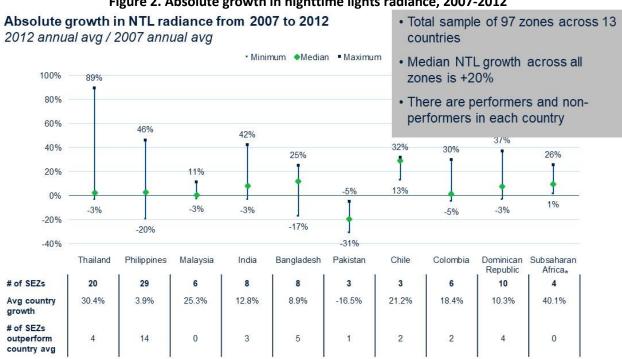


Figure 2. Absolute growth in nighttime lights radiance, 2007-2012

³ The first modern zone is said to have been established in the Navy Yard in Brooklyn, New York, in 1937, to provide a location where exports could be warehoused, produced, sold, or serviced; it was supported by legislation that included fiscal benefits for exporters. The first European Zone, the Shannon Free Zone in Ireland, was established in 1959 by the Irish Government to repurpose the Shannon International Airport, which was no longer in demand as a refuel hub after the advent of the jet airliner, which could travel longer distances. In Latin America, zone development began in the mid-1960s, first in Colombia, which established the Barranquilla Zone in 1964, and then in the Dominican Republic, which established the La Romana Zone in 1965. Zone development in Asia began shortly thereafter, starting with Kandla in India in 1965 and Kaohsiung in Taipei in 1965. These were soon followed by Masan, South Korea, 1970; Sungei Way, Malaysia, 1971; Bataan, Philippines, 1972; and Tanjun Priok, Indonesia, 1973.

Rationale for SEZs as a Policy Tool

- 26. In a successful SEZ, the spatial concentration of people and economic activity creates benefits for firms in terms of forward and backward linkages, pooled labor markets, and knowledge spillovers. The co-location of firms and their suppliers reduces transport costs for raw materials and intermediate goods (backward linkages) and increases the productivity of suppliers through knowledge transfer (forward linkages). Labor pooling allows better matching between firms and workforce, increasing the likelihood for companies to find suitable employees and for workers to find sustainable jobs. Finally, the frequent interaction of firms, suppliers, and workers facilitated by their close proximity creates knowledge spillovers, promoting further innovation. These benefits incentivize firms to locate where other companies are already present instead of spreading more evenly across space (SEZ Study 2017).
- 27. SEZs often seek to address some of the following market and coordination failures.
 - *Physical endowment shortages:* infrastructure gaps related to access to industrial land, trade and transport infrastructure, infrastructure services, and utilities (electricity, gas, water).
 - Poor institutional quality: lack of coordination between government agencies, inadequate regulatory framework, lack of coordination of public investment, and lack of understanding of investor choices by the public sector.
 - *Uncompetitive structural conditions:* lack of economic density, high transportation cost, outward migration of skilled labor.
 - Limited transformational capability: limited access to and absorption of innovation within sectors, low capacity to branch out to other productive and innovative sectors, and human capital deficiencies.
- 28. SEZs aim to resolve these market failures by establishing a physical territory where the conditions for doing business are more advantageous (i.e., "special") than those prevailing in the national territory. When compared to the domestic economic environment, SEZs can be considered "special" in several ways.
 - Extra-territoriality principle. The SEZ land is considered to be outside the domestic customs
 territory of the country, so that products in the SEZ do not receive the customs treatment of
 the national territory; however, products in the SEZ remain eligible for national certificates
 of origin and benefit from national trade agreements.
 - Fiscal exemptions. Firms that locate in the SEZ (and often SEZ developers) pay reduced taxes and duties (corporate income tax, payroll tax, accelerated depreciation allowance, investment tax credit, import duty, etc.).
 - Specialized infrastructure. The infrastructure of the SEZ is developed to include trade infrastructure (port, airport, rail), pre-built factory or warehouse units, and/or utility infrastructure with capacity for industrial production (electricity, gas, wastewater).
 - Specialized services. The SEZ management entity offers specialized services to investor firms
 (construction/engineering, skills trainings, recruitment and placement, etc.); one-stop shop
 is stationed on-site where investors can access all the different government services in a
 coordinated fashion (business registration, land permit, customs service, tax clearance,
 immigration, trade formalities, etc.)

29. In practice, SEZs have evolved into various forms and often are called by different names in different countries. They typically fall into seven categories (see Table 4).

Table 3. Comparison of major SEZ typologies and their characteristics

Name of SEZ type	Fiscal exemptions	Extra-territoriality	One-stop shop	Multiple operating firms	Trade focus	Pre-built factories	Domestic linkages (firms, labor)	Definition
Free Trade Zones	✓	✓		✓	√	~		FTZs (also known as commercial-free zones) are fenced-in, duty-free areas offering warehousing, storage, and distribution facilities for trade, transshipment, and re-export operations.
Export Processing Zones	✓	1	1	~		✓	~	EPZs are industrial estates aimed primarily at foreign markets. There are in general two types of EPZs: one is comprehensive, open to all industries; the other is specialized, open only to certain specialized sectors/products.
Comprehens ive SEZs	~	1	1	✓		1	*	Comprehensive SEZs ("multifunctional economic zones") are zones of a large size that have a mix of different industrial, service, and urban-amenity operations. In some cases these zones can encompass a whole city or jurisdiction.
Single- factory SEZs	✓							Single-factory SEZs provide incentives to individual enterprises regardless of location, providing flexibility while offering the fiscal and traderelated benefits of the SEZ regime.
Industrial Parks				✓			✓	Industrial parks ("industrial zones") are largely manufacturing-based sites. Some multifunctional ones are similar to "comprehensive special economic zones" (described above), but they usually operate at a smaller scale. They normally offer a broad set of incentives and benefits.
Bonded Area	√							Bonded areas ("bonded warehouses") are secured areas in which goods may be stored, manipulated, or manufactured without payment of duties, while remaining subject to customs laws and regulations (whereas an FTZ is exempt).
Specialized Zones	✓		~	✓		✓	✓	Specialized zones include science/technology parks, petrochemical zones, logistics parks, and airport-based zones.

Lessons from Global Experiences

30. As Chapter 1 illustrates, while CPEC represents a major opportunity for Pakistan to attract Chinese industries to relocate to PSEZs in Pakistan, the SEZ framework as it stands faces a number of challenges: (a) the policy regime does not publicly target specific industry sectors, leaving investors, developers, and local chambers of commerce without clarity on what types of firms the SEZs will attract; (b) institutional fragmentation has hampered the government's ability to efficiently deliver the public goods and services offered in the policy regime; (c) no country-wide formal feasibility studies have been undertaken to evaluate the suitability of various SEZ locations, making it difficult for SEZs to build on local strengths; and (d) SEZ infrastructure development is lagging behind schedule, deterring investors who might otherwise have come. Global experience with SEZs yields several important lessons that may be useful to Pakistan in terms of policy design, institutional delivery, site selection and master planning, and infrastructure development.

Policy Design

- 31. As currently constructed, Pakistan's SEZ policy differentiates between investment into existing SEZs and investment into PSEZs, granting more attractive fiscal benefits to the latter type of investment. Except for a few products that are banned, the current SEZ policy maintains that any investor is eligible to register an SEZ activity. All labor and employment laws of Pakistan are applicable to the SEZ in the same manner as in all territories in Pakistan. Coordinated government services (including customs) should be made available on-site at the SEZ through one-stop-shop and customs facilities. In terms of fiscal incentives, investors in existing SEZs receive one-time exemption from custom-duties and taxes on import of plant and machinery, and exemption from all taxes on income for the next ten years. Investors in PSEZs (who re-locate from abroad) receive the same exemptions as investors in existing SEZs, and additionally receive subsidies on land rent, cost of financing, and cost of transporting plant and machinery. Developers of PSEZs also receive greater level of fiscal benefits that developers of existing SEZs. Further, while BOI has indicated that PSEZs intend to target priority sectors (Food Processing, IT-ITES, Automotive, Textile, and Logistics), the policy measures intended to support this are reportedly not yet formalized, and it is unclear whether SEZ developers design and construct infrastructure corresponding to these priority sectors.
- 32. **Fiscal incentives, while they have been very popular in the history of SEZ policies, appear to be effective only under certain circumstances.** The impact of corporate tax holidays the backbone fiscal incentive offered by most SEZ policies on SEZ performance depends to a large extent on the level of development of the host economy: the impact is negative for poorer countries, but becomes positive as GDP per capita increases. This suggests that tax breaks may be an effective component of SEZ policies in high-income countries, but not in low-income ones. Recent interviews (2018) with investors in SEZs suggest that fiscal incentives in the form of tax holidays seem to be somewhat of a "hygiene factor": investors expect to get them, but they rarely sway decisions about investments in a particular country. Tax policy is best designed: (1) with simplicity, to reduce opportunities for tax evasion and aggressive tax avoidance; (2) to be efficient, limiting distortions on investor behavior such as domestic businesses relocating into the SEZ resulting in paying less tax while not creating any additional investment; and (3) easy to administer, minimizing the cost of tax payment and collection. Generally speaking, different income tax provisions for businesses inside and outside the zone increases the complexity of the system.

- 33. **Different investors will value different incentives.** For globally integrated investors with multinational supply chains, the ability to import raw materials and machinery duty free appears to be an important factor influencing the decision to invest in a SEZ location. Globally integrated investors also service a client base that demands sustainable production methods; thus specialized infrastructure services (water treatment, waste management, etc.) are very important to these investors in complying with global buyer requirements. Investors with significant time or investment constraints appear to put high value on the ability to lease a pre-built factory or warehouse facility. Without this ability, they say, investment costs to locate in the SEZ would be too high, and the time required to construct their own factory too lengthy. Logistics and service investors tend to value the provision of in-house customs services and other administrative facilitation services, likely because their business model relies on high-volume trade of goods across borders (Frick, Rodriguez-Pose).
- 34. **Subsidized land is major value driver for SEZ investors.** The cost of land lease or sale is one of the major cost components involved with making investment in an SEZ or similar location. Government subsidy has the ability to drive down the cost of land, and successful SEZs globally have benefited from government support in this regard. In both Vietnam and South Africa, for example, the cost of land rent in the SEZ is approximately 50% lower than in comparable industrial locations nearby, and investors reported this to be a major factor in the decision to invest at the SEZ.
- 35. Successful SEZ policies typically target the specific characteristics of the economic activities the country seeks to promote, and the specific needs of the investors it seeks to attract. Some countries maintain multiple, parallel SEZ frameworks to support the development of distinct economic activities. Vietnam, for example, operates four different types of SEZ frameworks, each with a distinct legal and institutional set-up and specific policy objectives: (a) Industrial Zones, focused on production of industrial goods and services for industrial production; (b) Export Zones, focused on production of export goods and services for export; (c) Economic Zones, open to all types of commercial and industrial activities; and (d) Hi-Tech Zones, focused on hi-tech manufacturing. Other countries operate a single SEZ framework, but offer differentiated incentives depending on the sector of the investor. Philippines, for example, offers different types of incentives to different types of investors through the Special Economic Zone Act of 1995. Table 5 illustrates the key features of SEZ policy design across a number of countries, including Pakistan.
- 36. The policy regime that works at the outset may not position SEZs for long-term growth and transformation. Zone growth is difficult to sustain over time. Generally zones are most economically dynamic in their early years, and over time their economic performance becomes similar to that of their surrounding areas. Even countries that implement solid laws and regulations typically refine and improve the policy framework through follow-on amendments. In the Dominican Republic, SEZ policy design did not focus on upgrading the skills of the workforce, and the SEZs were not able to transform when garment manufacturers exited the SEZs for lower-wage investment locations. Transformational initiatives that increase the positive spillovers of investments and improve the capacity of related market operators can generate new sources of economic dynamism within and surrounding the SEZs, as in Malaysia.

Table 4. Comparison of SEZ Policy Designs

Table 4. Comparison of SEZ Policy Designs				
SEZ program	Eligible activities	Investor requirements	Key incentives	
Korea Foreign Investment Zone	Advanced technology, manufacturing, logistics, or tourism activities	 Minimum \$10M investment for manufacturing or tourism; \$5M for logistics; no minimum for hightech Min. 30% foreign ownership, except for high-tech 	 No corporate income tax for 3 years (then 50% for 2 years) No import duty on capital equipment No local taxes (acquisition, registration, property) for up to 15 years Land rent reduction or exemption: 50%-100%, for up to 50 years Cash grants and financial support for approved uses Employment and training subsidies Differentiated labor regime 	
Philippines Special Economic Zone	Manufacturing, IT service, tourism, medical, agroindustrial, logistics and warehousing, real estate, utilities	Maximum 5% foreign employees Minimum 70% export for manufacturing	 No import duty on raw materials and capital equipment No corporate income tax for 4 years, with extensions granted based on investor performance^a Subsidized utilities No local taxes, no withholding tax 	
Vietnam Export Processing Zones	Production of export goods and provision of services for production of export goods and export activities	• 100% export	 No import duty on first-time import of machinery No corporate income tax for 4 years, then 50% for 9 years No physical checks for goods exported from EPZ; no customs procedures for building materials and foodstuffs imported from inland Vietnam Vocational trainings for workforce 	
Colombia Free Industrial Zones	Manufacturing, logistics, transportation, distribution, tourism, trade	 Minimum \$1.0- \$2.4M investment, depending on total assets of firm Minimum 20-50 direct employment, depending on total assets of firm 	 No import duty on raw materials and capital equipment 15% flat corporate income tax (33% is prevailing rate) Reduction in municipal taxes 	
Pakistan Special Economic Zones	Any activity is eligible	 Only new investors entering SEZ site after designation are eligible for SEZ status Investors that relocate from abroad into PSEZs receive more advantageous incentives 	 No import duty on first-time import of plant and machinery No corporate income tax for 10 years for units starting production by June 30, 2020; 5 years for units starting production thereafter 	

^a Income tax holiday extension (max of 8 years total) is available for companies for which (a) average net foreign exchange earnings for first 3 years of project is at least \$500,000; (b) capital equipment-to-labor ratio does not exceed \$10K to 1 for year immediately preceding extension consideration; (c) average cost of indigenous raw materials used is 50% of total cost of raw materials.

Institutional Delivery of Public Goods and Services

- 37. The SEZ Act 2012 established the Board of Approvals (BOA) at the federal level, as well as Investment Promotion Authorities and SEZ Authorities at the provincial level, to implement the SEZ policy. This has produced a multilayered administrative process for interfacing with investors. The SEZ Act requires provincial SEZAs to first receive, review, and approve all applications, before submitting to BOA for final approval. The BOA holds the final power to accept, reject, or cancel zone applications, as well as to approve implementing rules and regulations. Interviews with stakeholders in Pakistan suggest that this two-tiered administrative process is leading to significant delays on the ground. Provincial SEZAs are also responsible for selecting a developer (through competitive bidding) and negotiating a development agreement. However, it is reported that the provincial SEZAs lack the proper expertise and capacity to deal with matters related to land acquisition, PPP transactions, labor rights, intellectual property rights, dispute resolution, and regulatory compliance, which are all critical aspects of engaging an SEZ developer. Although the SEZ Act establishes the functions and responsibilities of Investment Promotion Authorities, it is reported that investment promotion activities for most SEZs are left to the developers.
- 38. Delivery of the policy regime requires coordination among all relevant ministries, departments, and agencies at various levels of government. The delivery of the policy regime refers to the provision of all the public goods and services promised by government to SEZ developers, investors, and service firms. At the planning and development stage, strong SEZ programs typically feature empowered government actors responsible for land acquisition and investment promotion, while the development of SEZ infrastructure is increasingly left to the private sector. At the operational stage, investors tend to be attracted to SEZ locations where public goods and services can be accessed more efficiently than in other investment locations, and strong SEZ programs do typically provide all the public goods and services offered by the policy package on-site at the zone, and in a streamlined fashion. Table 6 illustrates how public goods and services are delivered across five SEZs globally, including the Rashakai SEZ in Pakistan.
- 39. Leaving land acquisition to the private sector can limit the efficiency of SEZ development, resulting in land speculation and low-impact SEZ development. The SEZ Act India enacted in 2006 stipulated that land was to be acquired exclusively by private developers, either bought or leased for at least 20 years. Private developers faced a number of challenges in acquiring land, especially for large-scale projects: highly fragmented land ownership, unclear titles, strong incentives for farmers to hold out for higher prices, a low supply of land appropriate for industrial use, and a low demand from farmers to sell their land. Further, a widespread perception arose that private developers acquired and converted land using the SEZ act, and then held onto the land to take advantage of rising value. Six years after the SEZ Act was enacted, only 124 out of 580 approved SEZs were operational, nearly two-thirds of the operational SEZs were in the IT sector (average size of just 32 hectares), and one-third of all SEZ exports were generated by a single SEZ, a refinery that generated little employment.
- 40. Investors value having infrastructure and services available on-site at the SEZ location to reduce transaction costs and accelerate set-up time. Failure to provide critical enabling services to the SEZ can undermine other advantages of the location, driving away investment that might otherwise have been attracted. Institutional fragmentation when coordination among the relevant government bodies is not properly functioning is a common cause of this type of failure. In Jordan, the declining competitiveness of Aqaba as a port city in the 1990s was attributed in large part to institutional overlap and fragmentation, which raised the cost of port operation and made Aqaba uncompetitive compared with other ports in the region. In response, the King of Jordan sidestepping the Cabinet created a specially-appointed delivery unit consisting of young technocrats from the private sector and who would report directly to King. The

delivery unit designed an administrative and institutional system in Aqaba that would have exclusive jurisdiction over the provision of all types of public services, governed by a six member commission that would include the president and would be directly accountable to the King, and could be called for questioning by the Government and Parliament. The independence of Aqaba and its jurisdiction over Aqaba's assets has also helped in the success of the Aqaba Development Corporation, which owns the ports, airports, and strategic parcels of land in Aqaba, as well as the development and management rights for these strategic infrastructure assets and other key infrastructure and utility assets. Since the establishment of Aqaba SEZ (ASEZ) in 2001, investment attracted has reached about \$20 billion, and the population has more than tripled from 60,000 in the late 1990s to about 190,000 people today. More detail on the Aqaba experience is provided in Annex 3.

- 41. Successful investment promotion is typically best handled by dedicated, locally-based teams who court specific investors in targeted sectors. The Coega Development Corporation and the Kulim Hi-Tech Park Corporation (the developer/operators of the Coega SEZ in South Africa, and the Kulim HTP in Malaysia, respectively) each employ a team of professionals on-site, to undertake investment promotion activities focused in the sectors being targeted. Table 6 provides more detail on the investment promotion set-up of a number of zones. The efforts of these two developer/operators is also supported by their status as state-owned enterprises, with connection to state government authorities, as well as to the authorities that regulate the SEZs. The Penang Development Corporation (PDC) is a state-owned SEZ developer/operator in Penang State, Malaysia, and has been involved in SEZ development since the 1960s. PDC members involved in the establishment of Bayan Lepas SEZ highlighted that coordinated promotional activities (e.g. industry fairs, SME-MNE matchmaking programs, roadshows abroad, etc) were key to attracting investment to the zone. InvestPenang, a dedicated investment promotion agency in Penang, was eventually established in 2004, to act as the focal point between investors and the Federal Government, and to deliver investment aftercare services. PDC members have highlighted that investor aftercare was critically important in obtaining inputs for PDC's strategies and plans, and helped PDC to adapt to the evolving economic structure of Penang. More detail on the Malaysian experience is provided in Annex 4.
- 42. In many successful SEZ programs, the legal framework for the provision of public goods and services is achieved entirely by the SEZ policy framework, laws, and regulations. In the Philippines, the SEZ Act of 1995 outlines all of the key public services that would be provided to SEZ investors and establishes a single corporate body (Philippine Economic Zone Authority, or PEZA) to coordinate the delivery of these services to investors. Business registration, land titling, customs services, tax clearance, immigration services, foreign trade formalities, environmental and social services, industrial labor relations, dispute resolution mechanisms, provision of utilities, and one-stop shop services—all these government services to SEZ investors are explicitly governed by dedicated SEZ laws and regulations, and PEZA is the legally established institution responsible for coordinating their delivery. In other successful SEZ programs, most of the government services provided to SEZ investors are regulated in ordinary, discrete pieces of legislation, at both the federal and local levels. In Malaysia, all types of SEZs (hi-tech parks, free industrial zones, FTZs) fall under the jurisdiction of the Malaysia Investment Development Authority (MIDA) which is a subsidiary agency of the Ministry of International Trade and Industry. While some services are regulated through MIDA regulations and bylaws (e.g., land titling, tax clearance, foreign trade formalities), others are regulated by local government regulations (e.g., dispute resolution mechanisms, provision of utilities) or federal law (immigration services, environmental and social services).

Table 5. Delivery of public goods and services

Table 5. Delivery of public goods and services				
14 11	Land/infrastructure	Investment promotion	On-site services	
Kulim Hi- Tech Park (KHTP), Malaysia	 State gov't acquires land; Federal gov't designates as Hi-Tech Park; Kulim Hi-Tech Corporation (state-owned corp) develops land, basic infrastructure, and pre-built facilities 	Dedicated, on-site staff (KHTP) targeting water fabrication, semiconductor, advanced electronics, medical and scientific instruments, biotechnology, optoelectronics, advanced materials, aerospace, including investor aftercare services	 Dedicated KHTP staff provide investor aftercare services Dedicated KHTP teams provide security, infrastructure, and utility services Gov't administrative services delivered by Malaysia Investment Development Authority 	
Coega SEZ, South Africa	 State gov't acquires land; Department of Trade & Industry designates land as SEZ Coega Development Corporation (CDC) develops land and basic infrastructure SEZ investors develop factory/warehouse infrastructure 	Dedicated, on-site staff (CDC) targeting metallurgical, automotive, BPO, chemicals, agro- processing, logistics, trade solutions, energy, maritime, including investor aftercare services	 Customs area on-site administered by Customs Tax incentives administered by Revenue Service CDC provides all other onsite services, including security, infrastructure services Utilities provided by SEZ investors 	
Laguna Techno- Park, Philippines	 Philippines Economic Zone Authority (PEZA) issues SEZ license to private developer (Ayala Land and Mitsubishi Corp JV) Land acquisition and infrastructure development handled by private developer 	Private developer, supported by InvestPhilippines and PEZA, engages in investment promotion, mainly targeting investors in automotive and electronics (Honda, Panasonic, etc.)	 PEZA operates one-stop shop on-site, providing all gov't services Bureau of Customs operates customs office on-site Private developer provides security, infrastructure, and utility services 	
Eastern Seaboard Industrial Estate & Free Zone, Thailand	 Thai Customs issues free zone license to publicprivate joint venture (IEAT and Hemaraj Land Development Plc) Land acquisition and infrastructure development handled by licensed free zone developer 	 Industrial Estate Authority of Thailand (IEAT) is responsible for promoting investment into Thai industrial estates and free zones Private developer also engages in investment promotion: automotive, chemical, steel, building material, electronics 	 Customs area on-site administered by Customs IEAT maintains online Total Solutions Center for all gov't services Tax incentive administered through Board of Investment Private developer provides infrastructure and utility services 	
Rashakai SEZ, Pakistan	 Provincial SEZ authority submits SEZ application and Developer Agreement; BOI grants final approval SEZ developer (KPEZDMC) acquires land; SEZ co- developer (China Road & Bridge Corporation) develops infrastructure 	SEZ Developer responsible for investment promotion activities and investor aftercare;	 Gov't administrative services intended to be delivered by provincial SEZ authorities SEZ developer provides all other on-site services, including security, infrastructure services, etc Federal gov't responsible for gas and electricity connections; provincial gov't responsible for water connection 	

Site Planning Around Location-Specific Strengths

- 43. In Pakistan, the process of conducting a feasibility and other technical studies associated with SEZ development appears not to be institutionalized. Interviews with stakeholders revealed that so far no formal feasibility study has been undertaken at the federal or provincial level. It is reported that land for SEZs was selected through brainstorming during official meetings, rather than on the basis of professional site analysis and feasibility study. It was reported that no formal study has been undertaken to identify the skill sets needed by prospective Chinese investors. The need for proper feasibility and land utilization studies is demonstrated through the experience of existing industrial estates in Pakistan. Established in 1960, the Quaid-e-Azam Industrial Estate is one of Pakistan's oldest industrial estates, and located close-by to the provincial capital of Lahore, where property prices have become high. In 2017, a new industrial estate (Sundar) opened for business on the outskirts of Lahore, and it is reported that many manufacturing investors who initially set up at QIE have begun to relocate to Sundar to get larger plots at lower cost. The vacant plots at QIE are apparently now being leased or purchased by non-industrial enterprises such as TV stations and universities, who are attracted to QIE by the relatively lower rents (compared to downtown Lahore) and better infrastructure.
- 44. Recent interviews with SEZ firms highlight location advantages as a key reason for their investment. For most investors, a location advantages were related to the proximity to transport infrastructure, in particular ports and airports, or at least an easy highway connection to them. Proximity to large markets and to a main city or business was also highlighted as an advantage, as well as the ability to network with other firms and access government. Successful SEZs have been able to leverage their location advantages in developing an attractive value proposition for investment, suggesting that SEZ policies work best when targeting specific sectors that derive profits from the location-specific endowments of the SEZ location. For example, in low-income countries where low wages are an attractive value proposition, zones targeting low-cost manufacturing have generally been more successful than those aimed at high-tech sectors. Table 7 highlights the locational advantages of some successful SEZs, some of the policies/interventions utilized at these SEZs, and the resulting investor firms that located to them.
- 45. Conducting proper site planning analysis is critical towards positioning the SEZ to leverage its location advantages. In repositioning Aqaba port city for growth, the Government of Jordan commissioned a study to identify Aqaba's competitive advantages as an investment destination; evaluate the infrastructure, services, administration, and layout of the port city; and make recommendations on future planning. This report was instrumental in determining the types of investors that were likely to relocate to Aqaba, and optimizing land use planning and utilization. Country policymakers in Penang, Malaysia commissioned similar studies in the 1970s which identified the electronics sector as a good match for the country's location endowments, partly because of its labor-intensive nature, and partly because its limited environmental impact. Policymakers in Malaysia today continue to undertake studies periodically to examine how Penang could diversify into new production activities or new product areas, and also maintain a database of local suppliers used to identify matchmaking opportunities with new MNCs. Site planning analysis is also a critical component of determining the financial feasibility of the SEZ, and what types of government subsidies, if any, are required. More detail on the Aqaba experience is provided in Annex, and on the Malaysian experience in Annex.
- 46. When SEZ planning and implementation take place without legislative guidance, infrastructure may be built that is not needed and funds may be misused. The Russian SEZ law of 2005 lacks clear

guidelines on the operating rules and procedures of SEZ development, in terms of how the different government services will be coordinated, and what the technical specifications of infrastructure development are (master plan, environmental assessment, etc.). This has resulted in construction overruns and delays – only 526 out of 758 infrastructure facilities have actually been put into operation. An audit of SEZ developer/operators in Russia revealed that maintenance costs exceeded operating revenues, and because a proper demand assessment was not undertaken, infrastructure that was not needed was constructed. Further, the legislation also lacks clarity on the funding and fiscal relations of SEZ development, so that earmarked funds have been used for unintended purposes. For example, the audit revealed that SEZ management companies were using publicly allocated funds (earmarked for SEZ development) to create subsidiaries, buy bonds, and open commercial bank accounts.

47. Solid SEZ frameworks clearly lay out all of the different specifications of SEZ planning, and establish a sunset clause on the designation period. Typically, sites that may be designated as SEZ locations must meet specific criteria that are established in the governing rules in regulations. For example, in the Philippines, the SEZ act requires potential sites to (a) be already identified as a regional growth center in the Philippine Development Plan or by the Regional Growth Council; (b) possess existing infrastructure (roads, rail, etc.), and have capacity to absorb related infrastructure improvements; (c) have land adjacent to the zone available for the development of residential areas; (d) be able to show that the land area has significant incremental advantage over existing zones, and establish its profitability; and (e) be situated where controls can easily be established to curtail smuggling activities. As part of the application for SEZ site designation, developers are generally required to provide documentation as proof of site suitability. To prevent speculative land activities and to ensure proper development, SEZ frameworks typically establish a sunset clause on the designation and development period. In Indonesia, the SEZ law requires that the SEZ should be ready to operate within three years from its designation, and in Thailand, 25 percent of the land area of the SEZ must be developed with full public services and utilities within two years of its designation.

Table 6. Leveraging locational strengths

Table 6. Leveraging locational strengths			
	Location endowments	Key policies/interventions	Attracted investors
Eastern Seaboard Industrial Estate & Free Zone, Thailand	 Borders 4 of 10 ASEAN nations, receives privileges from agreement of ASEAN Free Trade Area Close proximity to deep sea port (30 km) and Bangkok airport (86 km) 	and export duties, and customs clearance on-siteSpecialized developer/operator offers	 Fifteen of the world's top 25 auto suppliers have production facilities Toyota Group has 25 parts and components suppliers Other investors include Mazda, BASF, GM, Ford, Chevrolet
Laguna Technopark SEZ, Philippines	 Growing domestic economy (6.2% GDP growth) Sizable and skilled labor force Close proximity to port (52 km) and Manila airport (50 km) 	 One-stop shop service on site, including customs clearance High quality infrastructure (with prebuilt factory units) developed in seven phases since 1995 Dedicated utility providers licensed under the SEZ regime Licensed SEZ developer (Mitsubishi Corp) is a major Japanese conglomerate 	 electronics, automotive, food processing, and pharmaceuticals Major investors include Honda, Panasonic, Stanley, Black & Decker, Universal Motors
Aqaba Special Economic Zone, Jordan	 Strategic access to Gulf states (Saudi Arabia, UAE, Oman, Kuwait) Proximity to deep- water seaport, modern highway system, and tourism assets 	 Special Task Force appointed by the King responsible for all aspects of location analysis and master planning Use of PPPs for infrastructure development Fully autonomous government authority responsible for all aspects of service provision Land use plan targeting 50% tourism, 30% logistics, and 20% industrial 	 Industrial investors include: Orbit Aluminum Industries, WioSun, Sydney Garments, Logistics investors include APM Terminals, ANREPCo, Aqaba Airports Company Tourism investors include Berenice Beach Club
Kulim Hi- Tech Park	 Productive labor force Stable country with well-developed legal system Close proximity to industrial parks in Bayan Lepas (electronics cluster) 	 Attraction of key anchor tenant (Intel Corporation) Strong federal government support in skills training and MNE-SME linkages Master planning and phase development (45% industrial land, 25% residential, 30% other including R&D, training, recreational) 	 Major investors include Intel Corp, Osram Gmbh, Infineon Technologies, Fuji Electric, Panasonic Corp, Fuji Logistics
Sindh Province SEZs, Pakistan	 Rich natural resource base (fish, livestock, minerals, oil & gas) Gateway to the Central Asian Republics Large and growing domestic market (40 million emerging middle-class consumers) 	 Investment guidelines encourage use of local factor endowments instead of imported inputs/raw materials, as well as joint ventures for technology and knowledge transfer Jurong International - largest Asia-based master planning and engineering firms with global track record – was commissioned to develop SEZ design concepts and master plans 	Yamaha Motor, KIA Lucky Motors, Techno Auto Glass, Universal Packaging, Scilife

Infrastructure Development

- 48. It is reported that critical infrastructure at existing SEZs is not yet developed, and critical services not yet provided on-site as provided for in the SEZ Act. Although SEZ developers are required to develop 30 percent of the land into common facilities for training, residence, health, research, and so on, no developer has yet done so The existing parks that were given SEZ status have been unable to provide enterprises with on-site services such as a one-stop shop, customs office, and utilities, which are required SEZ facilities stated in the SEZ Act. It is reported that many of the existing SEZs still lack basic utility facilities such as sewerage systems and dedicated electricity, water, and gas connections. Although the SEZ Act states that infrastructure can be developed as public-private partnership (PPP), the BOI as the national SEZ secretariat has no mechanism to track the fiscal impact of PPPs, and it is reported that provincial SEZAs lack the proper expertise and capacity to deal with matters related to land acquisition, PPP transactions, labor rights, intellectual property rights, dispute resolution, and regulatory compliance.
- 49. Recent research on SEZ firms around the world reveals that the provision of infrastructure was one of the most important factors driving their decision to invest in SEZs. 52 percent of firms mentioned this as an important advantage for locating in a SEZ. Firms appreciated the ease of setting up operations when pre-built factories units were available, but also the more general provision of serviced industrial land. One investor in Santander ZF, for instance, said that they had very tight time restrictions for starting operations because of client demands, and the zone was able to guarantee that they could meet their deadlines—something that would not have been possible in most other places. An investor in Ethiopia emphasized that they would not invest outside of an industrial park because of the challenges resulting from a lack of general infrastructure—for example, poor and inefficient power supply, roads, and wastewater treatment plants. Furthermore, investors in sectors with highly integrated global value chains highlighted that they needed industrial park infrastructure to fulfill their customers' increasing requirements in terms of sustainability standards; water treatment plants and waste management were of particular importance in this regard. Firms in more high-tech industries emphasized infrastructure standards as particularly important for the smooth functioning of their operations, and others stressed the convenience of pre-built factory units constructed to their own specifications. A few investors suggested that without the pre-built factory units, investment costs might have been too high for them.
- 50. The ability to meet critical infrastructure standards and offer low-cost land to investor firms is linked to the ability to cost-effectively design and construct the SEZ. The design and construction of a SEZ typically requires large capital investments: land acquisition and resettlement costs, land clearance and earthworks, construction of roads and utility networks, construction of industrial plots or pre-built facilities, and so on. Furthermore, these capital assets require significant maintenance throughout the operational period, and they also need to be replaced once they have exhausted their useful lives. The level of CAPEX involved in developing and maintaining a SEZ plays an important role in determining the financing composition, as well as the amount of government subsidy (if any), required for SEZ development.
- 51. Most early SEZ programs followed a public-sector-led development model in which government agencies or state-owned development companies bear the costs and risks of land development. For example, nearly all of the initial SEZs developed in China in the 1980s were developed by local government agencies. They received strong political and financial support from the central government, but it was local government agencies that were responsible for raising funds, formulating plans, approving projects, relocating industry, and acquiring land and constructing infrastructure. In the State of Penang in Malaysia, the State Government of Penang established the Penang Development Corporation (PDC) to spearhead

industrial park development and urban redevelopment. For SEZs, PDC was responsible for acquiring land in strategic areas for industrial and mixed-use development, planning and developing industrial areas complete with good infrastructure and facilities, and promoting Penang to investors as a choice location. Multilateral development banks also played a large role in early SEZ development. For example, the World Bank financed \$2.4 billion for 35 SEZ projects between 1973 and 2015.

- 52. Over time, the development and management of SEZs has been opened to the private sector. When China's economy became more marketized, private firms were allowed to participate in SEZ development, especially after 2000. Under this model, the local government selects a private developer through an open bidding process. The government is responsible for the macro affairs of the SEZ (urban and land-use policies and planning), while the private developer assumes the risk of infrastructure development (and enjoys the benefits from land lease/sale). SEZs in China that use this model tend to be smaller in scale than public SEZs. China has been a pioneer in promoting private SEZ development globally, as part of the Chinese Government's strategy to develop SEZs overseas. Under this model, Chinese contractors—chosen through competitive building—develop zones, and the Chinese government provides them financial support in the form of long-term loans, subsidies, and grants to reduce their commercial risks. For example, the Eastern Industrial Zone in Ethiopia is entirely owned and managed by the Jiangsu Quiyuan Group, a private Chinese investor that was competitively selected by the Chinese Ministry of Commerce and was entitled to receive financial subsidies of up to 40 percent of the total investment, as well as favorable financing terms from the Exim Bank of China. The Ethiopian Government supported the development of the zone by providing land and favorable lease terms, as well as off-site infrastructure.
- Although global assessments of SEZ performance suggest that privately developed SEZs do not perform better than publicly developed ones (SEZ study 2017), and that firms operating in SEZs show no clear preference between private and public operators, the Chinese model suggests some benefits of private developers. Large private developers typically possess (a) a track record of developing SEZs in multiple countries, with the ability to navigate different legal and economic environments; (b) experience with the complexity and scale of a SEZ-type project, in terms of financing and infrastructure standards; (c) financing from international banks and institutions, often at favorable terms; and (d) a deep network of industry-specific contacts that can help promote investment in the SEZ after construction. Participation of the private sector as developers/operators or partners in PPPs is critical for financial risk-sharing, speed of implementation, and technical expertise, and it provides an important market signal. Table 8 presents several models of private sector infrastructure development across five SEZ globally, including the Rashakai Economic Zone in Pakistan which was jointly developed with the China Bridge & Road Corporation (CBRC), a subsidiary of the publicly-listed China Communications Construction Company Ltd.

Table 7. Public-private SEZ development

	Private developer /operator models	Infrastructure developed	Other services offered to investors on-site
Tan Thuan Export Processing Zone, Vietnam	 Joint venture between Tan Thuan Industrial Promotion Company and Central Trading and Development Group Received investment certificate from federal gov't to establish EPZ on 50-year lease 	 Power station, telecommunications, wastewater treatment, firefighting station, health clinic, dormitories, food retail outlets Serviced land for lease, pre- built factory, warehouse, or incubation center for lease 	 Export & import services, licensing, legal consultancy, investment procedure, entry-exit visa, one-stop service with the regulator, HEPZA, built-to-suit factory/office construction
Aqaba International Industrial Estate, Jordan	 PBI Aqaba Industrial Estate LLP, US and Turkish investors, received a concession from ADC to develop and manage the zone 70% of revenues to developer, 30% to gov't 	 Electricity network, telecommunications, road network, water supply and distribution network, sewer network and drainage, on- site fuel station Serviced land for lease or sale, pre-built factory for lease or sale 	 Landscaping, waste removal, security, fire protection, subleasing services Other investor aftercare services provided by ADC
Laguna Techno-Park, Philippines	 Joint venture between Ayala Land Inc and Mitsubishi Corporation Licensed as SEZ developer /operator by Philippines Economic Zone Authority (PEZA) 	 Highway-grade roads, telecommunications, water supply and distribution network, sewage, wastewater treatment, gas pipelines, power substation Pre-built factory or warehouses for lease 	 Banking facilities, fire brigade services, security, transport terminals, PEZA office, Bureau of Customs office Electricity provider is owned by the developer /operator and also registered as SEZ entity
Eastern Seaboard Industrial Estate and Free Zone, Thailand	 Joint venture between Hemaraj Land & Industrial Estate Authority of Thailand (IEAT) Received license from Dept of Customs to construct and operate free zone 	 Concrete roads, electricity substation, telecommunications, water supply and distribution, wastewater treatment, gas pipeline, health clinic, banking facilities Pre-built factory or warehouse for lease or sale 	 Built-to-suit factory / office construction, industrial skills training Dept of Customs provides customs services on-site Other investor aftercare services provided by IEAT
KP Economic Zone, Pakistan	 Joint venture between KPEZDMC and CRBC, under a PPP with a ratio of 10:90 for financing and revenue share KPEZDMC purchases the land, while CRBC to develop infrastructure 	 Concession Agreement is currently being finalized Infrastructure will be developed in three phases over next five years (Phase 1: 159 acres; Phase 2: 279 acres; Phase 3: 264 acres) 	 On-site services to include: training center and services; technology transfer center and services; finance center and services; electronic manufacturing center and services; hi-tech innovation center and services

Chapter 3: Suggested Steps Towards Improved Implementation

54. As Chapter 1 highlighted, stakeholders in Pakistan have identified a number of challenges surrounding Pakistan's current SEZ program, which includes both existing SEZs (notified under SEZ Act 2012) and PSEZs. These challenges have been identified primarily as: (1) lack of stakeholder consultation during policy design; (2) institutional fragmentation resulting from multi-layered governance model; (3) lack of technical studies during site selection and planning; and (4) delayed and non-functional delivery of quality infrastructure and services. The Government of Pakistan may consider to implement some of the suggestions put forward in this Chapter 3, towards resolving the challenges identified in Chapter 1.

Policy Design

- 55. **Designing an appropriate policy package is a critical first step toward setting up a SEZ for success.** Because firm investment decisions are driven by factor inputs, market demand, networks of existing suppliers, firm-level strategy, and so on, certain types of investors will have a higher or lower probability of making investment in a SEZ, and will place higher or lower value on various aspects of the policy framework. For example, globally integrated manufacturers may value duty-free imports and scope for how they can benefit from local inputs and competitively skilled and priced services to benefit from location in Pakistan, while logistics and trade service firms are more interested in streamlined customs procedures and services. Significant tax reductions in areas that otherwise do not have conditions to attract investment will likely not generate the desired outcomes. Global evidence suggests that the design of the policy package should target the specific characteristics of the economic activities countries seek to promote, and the specific needs of the investors they seek to attract.
- The Philippines SEZ regime established in 1995 is a good example of targeting specific sectors in policy design. To achieve better linkages between SEZs and the local economy, and to attract more technology-intensive sectors, the Philippines SEZ regime sets out guidelines and incentives tailored for seven different sectors (export manufacturing, IT service export, tourism, medical tourism, agro-industrial export manufacturing, agro-industrial bio-fuel manufacturing, and logistics services). These sectors were identified to align with the Philippines' resource endowment, in terms of labor skills, location, and natural resources. Similarly, Pakistan could prioritize certain sectors in which Pakistan's resource endowments have a competitive advantage, identify which types of investors in those sectors have a high probability of locating to Pakistan (given their demand profile), and design specific policies to attract the high-probability segment.

Suggested steps towards improved implementation

- 57. Conduct a wide range of stakeholder consultations to identify the strengths and weakness of the existing policy regime, and where government resources are most effective. This should include consultations with MOIP, Ministry of Planning, Development and Reform, Trade Development Authority of Pakistan, provincial BOIs, utility providers, SEZ developers, Chinese investors, local chambers of commerce, and representatives of the Pakistani private sector, especially from manufacturing. Successful SEZ policies have involved the private sector in setting the right mix of incentives and identifying complementary policies, including job trainings, supplier development, and technology transfer programs.
- 58. Conduct a background Investor Survey to assess, among other things, the potential factor demands and financial flows of investing firms in different sectors. The main objective of a demand forecast is to identify the number and types of industry sectors/companies that may locate in a SEZ over

a defined, long-term period. The demand forecast also identifies and estimates the amount of land, utilities, and employees needed by each industry sector in the SEZ over the same timeframe. The information produced from the demand forecast is used to prepare a SEZ master plan and phasing plan and to determine specific infrastructure and utility requirements, which can then be costed to identify a project's internal rate of return (IRR). Three demand scenarios are developed in a demand forecast—a conservative scenario, a base-case scenario, and an aggressive scenario—each with its own defined parameters showing what the industry demand in a SEZ would be under poor, normal, and good circumstances.

59. Based on above-mentioned studies, develop a set of policy amendments intended to more specifically target the high-probability investors. For example, if IT-based industries are shown to be high-probability investors, the Act's minimum area requirement (50 acres) may be reduced to allow for innovative projects like tech parks. Although developers already receive certain incentives provided for in the SEZ Policy, if policymakers envision the development of zones that target specific sectors (e.g., tech parks), the Policy could be revised to provide these types of developers with specialized guidelines and incentives, as in the Philippines.

Institutional delivery of the policy regime

- 60. Delivery of the policy regime which refers to the provision of all the public goods and services promised by government to SEZ developers, investors, and service firms requires coordination between all relevant ministries, departments, and agencies at various levels of government. Strong SEZ programs typically feature dedicated teams to handle the day-to-day administration of land acquisition and designation, investment promotion, and government services. Development of SEZ infrastructure is increasingly left to the private sector. While institutional arrangements differ across successful SEZ programs, strong support from the highest level of government is typically key in resolving coordination issues between the different tiers of governments and branches of the administration.
- 61. Institutional fragmentation and lack of clarity on institutional responsibilities appears to be a major problem constraining the successful implementation of the SEZ regime in Pakistan. The BOI (highest SEZ authority) lacks the appropriate composition of board members: it consists of elected government representatives and bureaucrats who already have full-time mandates and who lack the operational knowledge and capacity to handle the day-to-day administration of the SEZ regime. The fiscal incentives offered under the SEZ Act are administered by authorities that operate under different mandates, and the coordination between tax officials and federal/provincial BOIs is very weak, leading to delays. Provincial authorities are responsible for determining location, labor and investment policy, while federal authorities are responsible for overall implementation. The process of tax and duty administration remains complex, time-consuming, and costly. Machinery and capital equipment of SEZ companies is reportedly being held up by Customs for up to 8 weeks, and then released only against payment of exorbitant duties, even though the SEZ law provides for duty-free imports. For example, Chinese investors are reportedly not informed about the status of CPEC supported SEZs, the incentives being, and the terms and conditions of investment. Interviewees could not name specific business opportunities in any of the CPEC SEZs. Local chambers of commerce reportedly still lack the desired interaction with government agencies. Concrete mechanisms are needed to create awareness and establish coordination among all the relevant stakeholders.

62. Global evidence suggests that there are many different institutional setups that can successfully deliver all the relevant public goods and services to SEZ stakeholders. While the establishment of a centralized authority with full management autonomy appears to be a straightforward way to improve and streamline the delivery of public goods and services to SEZ stakeholders, many countries have been successful with delivering the SEZ policy through multiple institutions across all levels of government. Successful SEZ programs have found ways to minimize the burden of service delivery on government resources, for example, by bringing in private developers and service providers, as in the Philippines and Vietnam. However, certain public goods and services should remain squarely the responsibility of the host government, and specifically of the agency or group of agencies responsible for SEZ implementation. Land acquisition left to the private sector produces the risk of land speculation and unintended land use. Investment promotion is best handled by dedicated teams with sector-specific expertise in overseas markets. For resolving existing government coordination issues, the case study on Agaba (Annex I) suggests important lessons in terms of personal involvement from the highest level of government, streamlining the delivery of public goods and services to investors on-site, and using private finance in infrastructure development.

Suggested steps towards improved implementation

- Assemble a special delivery unit chaired by the BOA. The task force would primarily be responsible for (a) operationalizing the federal SEZ Secretariat (i.e. the BOI); (b) procuring the technical capacity to properly assess SEZ applications; (c) streamlining the application process for SEZ designation—that is, removing duplicative activities and developing template documents for filing zone applications; (d) designing the framework for a one-stop shop, which would provide all government services in one location at each SEZ; and (e) streamlining the process for dealing with incentives and customs clearance.
- 64. Publish the outputs of the task force as a set of governing rules and guidelines on SEZ designation, development, and operation. The outputs of the task force should first be circulated to the various stakeholders (SEZ developers and Pakistani private sector), and their views taken into account. Once there is a certain level of consensus, the governing rules and guidelines should be published and circulated, providing clarity and transparency on how public goods and services are being delivered to SEZ investors, developers, and service providers.

Site Planning and Leveraging Location-specific Strengths

65. Locations have varying degrees of endowment in terms of levels of education, infrastructure, and quality of institutions, and thus different competitive advantages. Certain types of investors will have a higher or lower probability of locating to a specific location, depending on the attractiveness of the location's endowments. Successful SEZs tend to build on local strengths and lift the regional/local capacities and development. For example, in low-income countries, zones focused on low-tech, low-cost manufacturing have generally been more successful than those aimed at attracting sectors with higher technological components. When SEZ planning and implementation take place without legislative guidance, infrastructure may be built that is not needed and funds may be misused. Solid SEZ frameworks clearly lay out all of the different specifications of SEZ planning and development, and establish a sunset clause on the designation period.

- In Pakistan, the process of conducting a feasibility and other technical studies associated with SEZ development appears not to be institutionalized. Interviews with stakeholders revealed that so far no formal feasibility study has been undertaken at the federal or provincial level. It is reported that land for SEZs was selected through brainstorming during official meetings, rather than on the basis of professional site analysis and feasibility study. It was reported that no formal study has been undertaken to identify the skill sets needed by prospective Chinese investors. The need for proper feasibility and land utilization studies is demonstrated through the experience of existing industrial estates in Pakistan. Established in 1960, the Quaid-e-Azam Industrial Estate is one of Pakistan's oldest industrial estates, and located close-by to the provincial capital of Lahore, where property prices have become high. In 2017, a new industrial estate (Sundar) opened for business on the outskirts of Lahore, and it is reported that many manufacturing investors who initially set up at QIE have begun to relocate to Sundar to get larger plots at lower cost. The vacant plots at QIE are apparently now being leased or purchased by non-industrial enterprises such as TV stations and universities, who are attracted to QIE by the relatively lower rents (compared to downtown Lahore) and better infrastructure.
- 67. Successful SEZs tend to build on local strengths driven by proper feasibility studies and site planning. Location advantages, in terms of market access and proximity to trade infrastructure and labor markets, are one of the most important factors driving firm investments into SEZs globally. Strong SEZ policies target sectors that highly value the location-specific elements of potential SEZ sites, for example, the Aqaba SEZ policy was driven by feasibility studies and site planning that targeted tourism and logistics industries, based on its proximity to major tourism attractions and its positioning as a key transit point in the Middle East. The policy regime that works at the outset may not position the SEZ for long-term growth, as in the case of Dominican Republic, and local strengths and investor values may change over time. The case study on Penang Development Corporation (see Annex I) demonstrates the importance of connecting industry with skills programs, and connecting Multinational Enterprises (MNEs) with local suppliers, which over time allowed local strengths to evolve with industry needs.

Suggested steps towards improved implementation

- 68. **Conduct site assessments for every potential SEZ location.** The assessment should focus on the underlying commercial viability of each location and site, with the goal of identifying any "fatal flaws" that could jeopardize the success of a zone. Factors to be assessed include land and soil characteristics, access to national transportation infrastructure, availability of utilities, environmental and social issues, quality-of-life factors, existing markets, and local labor resources.
- 69. **Conduct location analysis for every potential SEZ location.** This analysis includes an in-depth cost-competitive analysis of the selected location, to quantify the cost of doing business for the SEZ site location versus other comparison cities in the country, along cost factors such as labor, facilities, transportation, utilities, cost of capital, and taxes. The assessment will help indicate the likelihood of investor interest in each zone, the types of businesses that may be attracted to a given zone, and the potential need for special incentives to offset any cost disadvantages of a particular zone.
- 70. **Establish and publish a set of requirements governing SEZ site selection.** These requirements may include (a) compliance with regional growth plans or strategies; (b) existing infrastructure, or suitability to absorb infrastructure improvements; (c) availability of electricity and water supply; (d) vacant land adjacent to the site for residential development and future expansion; (e) minimum road and connectivity standards; and (f) proximity to urban centers and trade infrastructure (ports, airports). In

parallel, in accordance with the emerging international concerns there should be a code for environment, social and governance (ESG) standards to ensure zone and its industries comply with best practices.

Infrastructure Development and Financing

- The ability to meet critical infrastructure standards and offer low-cost land to investor firms is linked to the ability to cost-effectively design and construct the SEZ. The design and construction of a SEZ typically requires large capital investments: land acquisition and resettlement costs, land clearance and earthworks, construction of roads and utility networks, construction of industrial plots or pre-built facilities, and so on. While early SEZ programs predominantly followed a public sector-led development model, over time, the development (and management) of SEZs has been opened to the private sector. Large private developers typically possess (a) a track record of developing SEZs in multiple countries, with capabilities to navigate different legal and economic environments; (b) experience with the complexity and scale of a SEZ-type project, in terms of financing and infrastructure standards; (c) financing from international banks and institutions, often at favorable terms; and (d) a deep network of industry-specific contacts, to assist in promoting investment in the SEZ after construction.
- 72. In Pakistan, while several SEZs have reportedly fulfilled their infrastructure commitments (Hattar SAEZ and QIE), many still lack basic facilities like water and sewerage systems and dedicated electricity, and gas connections. Several SEZ management companies attribute delays in timely completion of SEZ infrastructure to lack of basic utilities and connections, which is the responsibility of the federal Government. The disparity in infrastructure development seems to reflect differences across provinces. The provincial SEZAs are responsible for the financing and establishment of SEZs, and they pursue different models to achieve this. Some SEZAs have established PPPs with Chinese developers (like Rashakai SEZ), while others finance SEZ establishment entirely with public resources.
- Global evidence shows that large private developers have sophisticated infrastructure capabilities, but also capabilities in terms of on-site service provision. The ability of a private entity to offer on-site service provision to investors and workers (training, job placement) enhances the location endowment of the SEZ location, and minimizes the burden on government to deliver these types of services. Governments have engaged large private developers in a number of ways; in some cases, they are selected through a competitive bidding process, and awarded a license or contract to develop and manage an SEZ. In other cases, private developers arrange the land and site planning independently, simply submitting an application with supporting documentation to the government for approval. The case of Aqaba (see Annex I) demonstrates the importance of a trial period to evaluate a potential PPP operator against pre-determined metrics. The Philippines case (see Annex I) demonstrates success in institutionalizing private development of SEZs through dedicated legislation.

Suggested steps towards improved implementation

- 74. Conduct a cost-benefit analysis of every SEZ location (through a financial model) to determine which SEZs may require public subsidy and which may attract private financing. A financial and economic model can demonstrate the financial and economic impact of a SEZ, and the sensitivity of this impact to a variety of financial and economic variables.
- 75. Develop a phased approach to SEZ infrastructure development, and establish clear sunset clauses on the designation period. The ability to divide land development into separate time periods

allows the developer/operator to achieve sufficient occupancy in an initial phase before developing additional land in a second (or third) phase. Thus the proceeds from the successful development of the initial phases can finance the development of later phases, rather than requiring additional external financing. A sunset clause on the designation period helps prevent speculative activities and unauthorized land use.

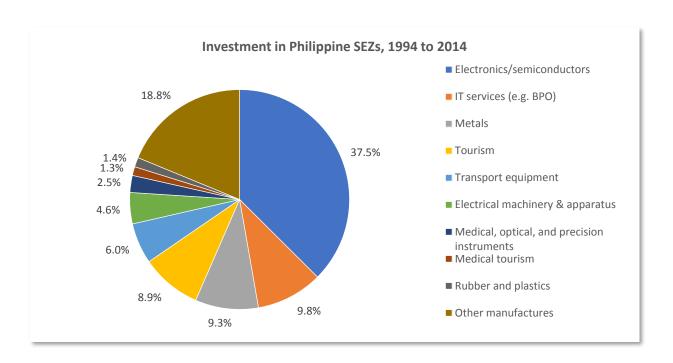
76. **Establish and publish clear requirements of SEZ developers, to ensure they have the appropriate technical and financial capacity.** These requirements may include: institutional requirements, in terms of public vs. private, or joint venture arrangements; technical requirements, in terms of previous experience in SEZ development, as well as SEZ operations; and financial requirements, in terms of annual revenues or net worth or amount of reserves.

Annex I: Sector-Specific Policy Design in the Philippines

- 1. **From EPZs to SEZs.** The Philippines had an EPZ regime in place since 1969, following the traditional model under which zones are considered to be outside the country's customs territory and investors export all of their output and receive duty-free treatment on the import of intermediate inputs and capital equipment. By the 1990s, four government-administered zones hosted 280 investors; however, the EPZ program was not achieving the desired outcomes. EPZ investors sourced less than 10 percent of their inputs locally, and were mainly engaged in textiles or electronics manufacturing, sectors in which the potential for technology transfer is limited (textiles technology is typically universally available, while electronics is highly guarded). Therefore, in 1995 the Philippines enacted the Special Economic Zone Act, replacing its EPZ regime with a new policy framework.
- 2. **Sector-specific incentives regime and rewarding good performance.** The new SEZ policy was designed to target specific sectors and subsectors, with a view to promoting the development of activities that would establish greater linkage between SEZs and the domestic economy and to attracting more technology-intensive industries from abroad. Five priority sectors were identified, each receiving a tailored policy framework regarding eligibility and incentives. The incentives regime would also reward investors that generated desired outcomes in terms of foreign exchange earnings, labor-intensive operation, and purchase of indigenous raw materials. Registered SEZ manufacturers receive 100 percent exemption from corporate income tax for 4 years for a non-pioneer project, and for 6 years for a pioneer project. The tax holiday may be extended if the investor complies with the following criteria (each criterion is equivalent to one extension year, and the total entitlement period may not exceed 8 years): (a) average net foreign exchange earnings for first three years of operation of at least \$500,000; (b) the capital-equipment-to-labor ratio does not exceed \$10,0000:1 for the year immediately preceding the ITH extension year being applied for; and (c) the average cost of indigenous raw materials is at least 50 percent of the total cost of raw material for the preceding year being applied for.
- 3. **Sector-specific zone development and operation.** The Philippine SEZ policy also establishes five types of SEZs, each with a focus on one of the priority sectors, and each with dedicated rules and guidelines for their development and operation. For example, infrastructure and site location guidelines tend to differ across the different zones. IT Zones are required to provide specific infrastructure for IT investors: a high-speed fiber-optic telecommunication and data system; clean uninterrupted power supply; and computer security and building monitoring and maintenance systems. Agro-Industrial Zones must be located outside the National Capital Region, in areas pre-identified by the Department of Agriculture and/or the Bureau of Fisheries and Aquatic Resources to be suitable for the processing of agriculture and aquatic products. Tourism Zones must be located in priority areas identified in the Department of Tourism's Master Plans, and must conform with the Department's development guidelines and operating standards. Developer/operators of the different zones are required to submit zone-specific documentation as proof of compliance with the dedicated guidelines and rules.
- 4. **Phased development guidelines and sunset period.** The Philippines SEZ policy establishes clear guidelines for the phased development of SEZ infrastructure. It must be completed within five years (the "sunset period"), and the phasing of development is intended to occur in five phases: 30 percent of the area is to be developed in Phase 1, 30 percent in Phase 2, 20 percent in Phase 3, 10 percent in Phase 4, and 10 percent in Phase 5. At the end of each phase, the area must be provided with the basic infrastructure facilities and utilities required in the guidelines, for immediate use and occupancy. Areas

that are not developed and completed within the five-year period (unless extended by the Board) will be reverted to agricultural or other uses in accordance with land use and zoning laws and regulations.

- 5. **Sector-specific zone development led by private sector.** The SEZ Act established that private developers and utility providers could become registered SEZ entities, outsourcing much of zone operation and service provision to the private sector, and leaving the SEZ Authority responsible for administrative services and investment promotion only. The Act requires that private developers comply with the sector-specific guidelines discussed above. Utility providers are required to be engaged in the establishment, operation, and maintenance of light and power systems and/or water supply and distribution systems inside a registered SEZ. Registered SEZ developers and utility providers receive a special 5 percent tax on gross income earned from the registered activity, as well as exemptions from all national and local taxes, including a VAT zero-rating of local purchases. As of 2016, there were 348 special economic zones operating in the Philippines, 95 percent of which were managed by a privately registered SEZ developer/operator. The developer/operators of manufacturing zones typically manage a only single zone, while developer/operators of IT zones typically manage a portfolio of zones, and have become some of the largest real estate companies in the Philippines (e.g., Robinsons Land Corporation, Ayala Land, SM Prime Holdings).
- 6. **Emergence of higher-technology sectors.** In 1995, just before the new SEZ policy was enacted, 30 percent of all enterprises registered under the EPZ regime were engaged in manufacture of textiles and garments, 28 percent were engaged in manufacturing various industrial goods (plastics, paper, rubber, chemicals), and 18 percent engaged in manufacturing electrical and electronic goods. The figure below shows the sector-specific investment in the SEZ program from 1994 to 2014. More than 40 percent of investment was made in electronics sectors (electrical machinery, semiconductors), while IT services and tourism together account for approximately 20 percent of total investment. Mactan Economic Zone is a good example of a zone that began with low-skilled industries such as garments, shoes, and toys, but gradually shifted to higher-skill industries such as electronics, machinery, and medical equipment. Clearly, the SEZ policy regime has achieved some level of success in attracting more technology-intensive industries; in particular, the business process outsourcing (BPO) services industry in the Philippines has turned into a billion-dollar market, generated massive domestic employment, and led some to declare Philippines as the world's BPO capital.



Incentive Framework in Philippines

	Incentive Framework in Philippines			
Enterprise type	Fiscal incentives			
Export Manufacturing	• 100% exemption from corporate income tax (4-6 years with possible extension			
Investor	based on enterprise performance)			
	Tax- and duty-free import of raw materials, capital equipment, machinery, and parts			
	Exemption from wharfage dues and export tax			
	VAT zero-rating of local purchases subject to compliance with federal requirements			
	Exemption from all local gov't taxes and fees			
	Exemption from expanded withholding tax			
Information	• 100% exemption from corporate income tax (4-6 years with possible extension			
Technology Investor	based on enterprise performance)			
	Tax- and duty-free import of equipment and parts			
	Exemption from wharfage dues and export tax			
	VAT zero-rating of local purchases of goods and services, including			
	telecommunications, electrical power, water bills, and building lease			
	Exemption from all local gov't taxes and fees			
	Exemption from expanded withholding tax			
Tourism Investor	100% exemption from corporate income tax (4 years)			
	Tax- and duty-free import of capital equipment			
	VAT zero-rating of local purchases of goods and services, including			
	telecommunications, electrical power, and water bills			
	Exemption from expanded withholding tax			
Medical Tourism	100% exemption from corporate income tax (4 years, only on income from servicing)			
Investor	foreign patents)			
	Tax- and duty-free import of medical equipment, including spare parts and			
	equipment supplies			
	VAT zero-rating of local purchases of goods and services, including			
	telecommunications, electrical power, and water bills			
A sure the december	Exemption from expanded withholding tax			
Agro-Industrial	100% exemption from corporate income tax (4 years)			
Investor	Tax- and duty-free import of production equipment and machinery, breeding stocks, Tax- and duty-free import of production equipment and machinery, breeding stocks, Tax- and duty-free import of production equipment and machinery, breeding stocks, Tax- and duty-free import of production equipment and machinery, breeding stocks, Tax- and duty-free import of production equipment and machinery, breeding stocks, Tax- and duty-free import of production equipment and machinery, breeding stocks, Tax- and duty-free import of production equipment and machinery, breeding stocks, Tax- and duty-free import of production equipment and machinery, breeding stocks, Tax- and duty-free import of production equipment and machinery, breeding stocks, Tax- and duty-free import of production equipment and machinery, breeding stocks, Tax- and duty-free import of production equipment and machinery, breeding stocks, Tax- and duty-free import of production equipment and machinery, breeding stocks, Tax- and duty-free import of production equipment and machinery, Tax- and duty-free import of production equipment and machinery, Tax- and duty-free import of production equipment and machinery, Tax- and duty-free import of production equipment and machinery, Tax- and duty-free import of production equipment and machinery, Tax- and duty-free import of production equipment and machinery, Tax- and duty-free import of production equipment and machinery, Tax- and duty-free import of production equipment and machinery, Tax- and duty-free import of production equipment and machinery, Tax- and duty-free import of production equipment and machinery, Tax- and duty-free import of production equipment and machinery, Tax- and duty-free import of production equipment and machinery, Tax- and duty-free import of production equipment and machinery, Tax- and duty-free import of production equipment and machinery equipment and machinery			
	farm implements including spare parts, and supplies of equipment and machinery			
	 Exemption from export taxes, wharfage dues, impost, and fees VAT zero-rating of local purchases of goods and services, including 			
	telecommunications, electrical power, and water bills			
	Exemption from payment of local government fees such as Mayor's Permit,			
	Business Permit, permit on the Exercise of Profession/Occupation/Calling, Health			
	Certificate Fee, Sanitary Inspection Fee, and Garbage Fee			
Logistics Service	Exemption from duties and taxes on raw materials, semi-finished goods for resale to			
Investor	- or for packing/covering, cutting, altering for subsequent sale to, PEZA-registered			
	export manufacturing enterprises, for direct export, or for consignment to PEZA-			
	registered export enterprise			
	VAT zero-rating on raw materials for checking, packing, visual inspection, storage,			
	and shipping to be sourced locally			
SEZ Developer/	Special 5% tax on gross Income and exemption from all national and local taxes,			
Operator Investor	except real property tax on land owned by the zone developer.			
	VAT zero-rating of local purchases			
	Exemption from expanded withholding tax			
Facilities Investor	Special 5% Tax on Gross Income and exemption from all national and local taxes,			
	except real property tax on land owned by the Zone Developer.			
	VAT zero-rating of local purchases			
	Exemption from expanded withholding tax			
Utilities Investor	Special 5% tax on gross Income and exemption from all national and local taxes,			
	except real property tax on land owned by the zone developer.			
	VAT zero-rating of local purchases			
	Exemption from expanded withholding tax			

Annex II: Case Study on Institutional Governance at Agaba SEZ

- 7. Institutional fragmentation at Aqaba Port. When the Government of Jordan originally prioritized the development of Agaba port and the Agaba region in the 1980s, it gave the Agaba Regional Authority (ARA) the mandate to undertake development projects in the region, formulate development strategies and detailed planning, and coordinate functions with other public and private agencies. Although the ARA was a financially independent institution and would eventually be responsible for all the infrastructure work in Aqaba City, a large number of essential aspects of the ARA's work, like budgetary matters and sale of land or other changes in land lease, still required approval from the Cabinet. Further, when Agaba was designated as a Governorate in 1990, a number of other central government departments, (electricity and water authorities, financial bodies, etc.) opened regional offices in Aqaba, reporting their activities, plans, and projects to their respective head offices in Amman. In addition, by law the new Governor of Agaba had all government institutions and agencies in Aqaba under his mandate, including the activities of all central government agencies, including ARA. Such institutional governance overlaps in Agaba, combined with public sector control over port activities, made the cost of services at Agaba port uncompetitive with those at ports in neighboring regions. By the late 1990s, Iraq had changed the destination of its imports from Agaba to Tartous and Dubai.
- Strategic planning and implementation. In 1998, the Government of Jordan commissioned a study (the TSG Report) to identify Agaba's competitive advantages as an investment destination; evaluate the infrastructure, services, administration, and layout of the port city; and make recommendations on future planning. The TSG Report envisaged a SEZ in Agaba, pointing to the city's natural advantages: advanced infrastructure, an international airport, a port, booming tourism, and modern road grids. It also made specific recommendations on implementation and planning, including replacing the ARA by a broader authority with full autonomy and widened powers, including the power to make decisions on economic planning, investment promotion, industrial estate management and marketing, PPPs in infrastructure development, and environmental licensing and monitoring. The TSG report also produced a Master Plan that suggested several major undertakings: (a) relocation and upgrading of the container port, improving the environment of its current location for tourism development; (b) construction of a new airport (via concession with private sector) to accommodate increased numbers of air passengers; (c) construction of a new road for commercial trucks, to relieve pressure on the coastal road now intended for tourist transport; and (d) extension of the existing railway to connect the planned "industrial area" with the new port location. The Land Use Plan envisioned 50 percent tourism, 30 percent logistics, and 20 percent industry.
- 9. **Special task force appointed.** In December 1999, the King of Jordan sidestepping the Cabinet created the Economic Consultative Council (ECC) to monitor the implementation of vital socioeconomic, administrative, and educational reforms. One of its first tasks was to prepare an integrated plan for the development of Aqaba, based on the recommendations from the TSG report. The ECC was noteworthy for two things: the young technocrats from the private sector who were among its members, some of whom would soon become ministers and key ambassadors, and the fact that a new body appointed by the king and personally supervised by him was charged with this massive task of national economic transformation, rather than the existing institutions of the state, such as Parliament and the Cabinet. The 20-member ECC, whose sessions are attended by the Prime Minister and concerned ministers (even though none is a member) acts as an advisory body to the King and debates socioeconomic development plans and projects presented to it before sending final recommendations to the Government. The ECC designed an administrative and institutional system in Aqaba that would have exclusive jurisdiction over

the provision of all types of public services, governed by a six-member commission that would include the president and would be directly accountable to the King, and could be called for questioning by the Government and Parliament.

10. Agaba Special Economic Zone Authority. In August 2000, the Government of Jordan passed the Agaba Special Economic Zone Law No. 32, establishing the Agaba Special Economic Zone Authority (ASEZA) as the legal heir of both the ARA and the Agaba Municipality. ASEZA would therefore act as the local government of the land under its jurisdiction, which means that it would be responsible for tax collection/administration and the provision of various public services usually administered by the federal Government. For example, in accordance with a memorandum of understanding (MoU) signed with the Ministry of Health (MoH), ASEZA is responsible for granting permits to medical and health-related enterprises; monitoring and evaluating hospitals, pharmacies, food establishments, potable water and mineral water factories and laboratories; and generally upholding national health and safety standards throughout the zone. The MOH remains responsible for licensing medical practitioners in the zone, and vaccinations, combating diseases, health awareness remain under the MOH's jurisdiction. The former Transport Minister was named as Chief Commissioner of ASEZA, heading a team of technocrats from both public and private sectors to form the Board of Commissioners of ASEZA. Ultimately the Board of Commissioners would operate as regulator of the SEZ, and a private sector shareholding company would be assigned as the "developer" to invest in infrastructure and promote the SEZ worldwide. The Cabinet would retain power to approve the budget for ASEZA, and the Government would receive 75 percent of ASEZA's revenues.



11. **Aqaba Development Corporation.** The Aqaba Development Corporation (ADC), jointly owned by the Government of Jordan and ASEZA, was created in 2004 as the development arm for theSEZ. Within the SEZ, ADC owns the ports, airports, and strategic parcels of land, as well as the development and management rights for these strategic infrastructure assets and other key infrastructure and utility assets. ADC's approach is to optimize the participation of private developers and investors in the development and management of these assets. A key example of this has been the development of public-private partnerships (PPPs) at Aqaba port. In 2004, APM Terminals signed a 2-year management contract with the ADC, during which time ADC measured the operator's performance against selected indicators (anchorage waiting times, average port stay, container dwelling times, etc.), testing the viability of a longer PPP arrangement. In 2006, based on positive performance, a 25-year joint development agreement

was signed between ADC and APM Terminals Jordan (part of the global A.P. Moller-Maersk Group) to operate, manage, and market the Aqaba Container Terminal. ADC has entered into other public-private transactions (see table below).

Key Metrics of Private Developers in Agaba Special Economic Zone

	Aqaba International Industrial Estate	Ayla Tourism Zone	Aqaba Logistics Village
Developer	PBI Aqaba36 full-time staff	Ayla Oasis280 full-time staff	 AMP Terminals 67 full-time staff
Phased Development	 Phase 1: 570,000 sqm of serviced land plots and prebuilt facilities Phase 2: 430,000 sqm of serviced land plots and prebuilt facilities Investors/tenants are preidentified before development starts 	 Phase 1: marina village, hotels, apartments Phase 2: 3,000 residential units (planned) Phase 3: TBD 60% occupancy before new phase 	 Phase 1: 140,000 sqm, container freight station, distribution center, open yards Phase 2: 120,000 sqm, warehouses, storage and distribution, yard space Phase 3: 210,000 sqm, storage and cargo handling 75% occupancy before new phase
Financing	 100% equity financing: \$15M from USAID, \$8M from private equity 	70%-80% private equity, the rest debt	Unknown
Revenue model	 Lease or sale industrial investors 	• 20%-30% will be leased, the rest sold	Lease or sale to logistics, service investors
Expected IRR	• 15%-16%	Unknown	• 10%-12%

Attracting investments in industry and tourism. Since the establishment of Aqaba SEZ (ASEZ) in 2001, investment attracted has reached about \$20 billion, and the population has more than tripled from 60,000 in the late 1990s to about 190,000 people today. After about 10 years of operation, the Agaba International Industrial Estate – one of ASEZ's key industrial areas – has attracted investment of approximately \$600 million, with an associated 3,500 jobs and more than 100 different companies. Investors include Orbit Aluminium Industries, a Canadian company; Wiosun for Renewable Energy, a German/Iraqi joint venture; Sydney Garments, a Hong Kong/Indian company; and Bareeq Li Tiknolojia Tarsheed Al Tagah Co, an LED lighting company based in China. "We chose Agaba because of its unique location in the Middle East," says the Managing Director of Bareeq, "With its Free Trade Agreements with US, EU, and other Middle East countries, we believe that having our advanced LED products made here can help us expand our market all over the world. Costs here are reasonable compared to China, which makes our "Made in Jordan" products more price competitive in the market." Further, tourism investors remain on Aqaba as a destination for tourism, with major attractions including Aqaba's coral reefs and sandy beaches, the ancient city of Petra, and the desert and cliffs of Wadi Rum. Ayla Oasis Development Company, a private shareholding company, has invested close to \$1 billion in mixed-use developments, including 350 residential units (60 percent of which were sold by 2018), as well as a new Hyatt Regency Hotel with 286 rooms. The entire mixed-use development is designed to handle around 50,000 people when it is fully developed, with more than 3,000 residential units and 1,500 hotel rooms.

Annex III: Case Study on Dominican Republic FZs Reliance on Trade

- 12. **Early performance.** The Dominican Republic is probably the Western Hemisphere's most widely recognized success story in the literature on free zones. The FZs were principally responsible for the Dominican Republic's shift away from a commodity-oriented economy. They became the most dynamic engine of growth in the Dominican Republic's economy during the 1980s and 1990s. Between 1985 and 1989, the number of FZs more than tripled, from 6 to 19; the number of FZ companies rose from 146 to 220; and employment jumped from 36,000 to nearly 100,000. The program reached its peak in terms of employment (195,000) in 2000; this was equivalent to up to 10 percent of the country's total employment.
- Trade preferences and low-wage labor. The early growth of the FZ program in the Dominican Republic was primarily fueled by the off-shoring of the US textile and garment industry and supported by preferential trade agreements. The US Caribbean Basin Initiative introduced in 1984 provided duty-free access to the United States, including of apparel. Linked to this, a huge wage arbitrage opportunity existed between the US and Dominican Republic in the 1980s. Hourly compensation for semiskilled workers in export-manufacturing sectors in the Dominican Republic was only 6 percent that of the United States in 1987 (US\$0.79 per hour versus US\$13.66 per hour). Special provisions inside the FZs (lower minimum wage and no compulsory profit-sharing) facilitated DR's low-wage competitiveness, and the country became a favored location for relocating factories to serve the US market. Textiles and apparel accounted for approximately one-third of FDI in FZs, and approximately half of FZ exports. The US accounted for 46 percent of the FDI flowing to the FZs.
- 14. **Lack of transformational initiatives.** Despite many efforts over the years, a critical failing of the Dominican Republic FZ program has been its inability to forge effective links between the FZ sector and the rest of the economy. This has been one of the main factors inhibiting the FZs from diversifying and upgrading. In 2008, only 12 FZ companies sold to the Dominican Republic market, making the Dominican Republic only the 13th most important market for FZ companies. Further, FZ companies imported virtually all of their manufacturing inputs, limiting the development of supply links with local suppliers. The FZs have been criticized for not having contributed significantly to the upgrading of the workforce, relying instead on low-skilled, low-wage workers and showing little interest or incentive to move these workers upward. Real wages for FZ workers have been largely stagnant over the last 15 years. Some of the blame for the poor skills development can be attributed to the FZ enterprises (and is linked to the issue of poor integration), although much of this failure derives from the wider policies of the Dominican Republic Government, particularly its failure to invest in social spending (including education).

Declining competitiveness. Over the past decade, the FZs have faced major challenges related to competitiveness in the core textile and apparel sector. The performance of the apparel sector began to decline in 2001, with increasing competition from companies established in Central America, and with subsequent competition from Asia. For example, exports of knitwear to the US fell by more than half from 2004 to 2008, as exporters in the Dominican Republic were replaced by exporters in Asia and Nicaragua. Although most other producers in the region also experienced declines, none was as deep as the Dominican Republic's. The Multifiber Arrangement (MFA) ended in 2005. Since 2009, the FZs have experienced absolute declines in employment, exports, and investments, illustrating the potential pitfalls of a FZ program that is heavily reliant on one sector (textiles and garments) and one market (the US), and does not prioritize transformational initiatives that promote linkages with the local economy.

Annex IV: Case Study on Structural Change in Penang's Export Cluster

Structural Change in Penang's Export Cluster. Following the loss of Penang's free-port status in 15. 1969, the Malaysian government commissioned a study that recommended an export-led growth strategy for the region, given its comparative advantages in terms of transport accessibility and access to a large pool of labor. The government also established the Penang Development Corporation (PDC) with the mandate to plan, develop, and implement development projects in Penang State. PDC opened the first Free Trade Zone (FTZ) at Bayan Lepas in 1972, a second FTZ in Seberang Perai in 1980, and five industrial estates in close proximity to the FTZs to accommodate supplier industries to the FTZs. An export cluster would emerge in Penang, with a sizable number of major electronics and electrical MNEs (e.g. National Semiconductor, Intel, Hewlett Packard, Bosch, Hitachi). Most of these early firms were almost exclusively engaged in simple downstream assembly processes in the semiconductor manufacturing chain. Over the next few decades, domestic cost pressure in the form of increasing wages and land rents, as well as competitive pressure from China, led to a significant contraction in the final assembly of consumer electronics and electrical goods. Companies like Sony, Dell and NEC significantly scaled down their operations in Penang SEZs. Firms in the disk drive industry shifted the more labor-intensive segments of production to other low-cost locations in the region, particularly Thailand and the Philippines. However, the structural shift did not result in the decline of Penang SEZs. Electronics firms involved in component design, assembly, and testing were able to restructure their operations by moving into high-value tasks in the value chain, shifting simple low-end assembly activities to other low-cost locations. Further, the production base began to diversify into other electronics-related product lines, including medical services and equipment, light-emitting diodes (LEDs), and photovoltaic design and development. A key success factor in Penang's growth has been the ability to retain key anchor tenants and to facilitate structural transformation of the export activities.

Decade	Phase of	Economic Activities
	Development	
1960s	Pre-SEZ	 Trading,
		Agriculture
1970s	Initial entry of MNEs	Low cost operations
		Labor-intensive operations
1980s	Mechanisation	Precision tooling, semiconductor automation, assembly & test,
		consumer electronics,
		Local contract manufacturing, development of local supporting
		industries
1990s	High-automated	Hard disk drive, test system development, supply chain
	manufacturing	management, R&D applications,
		Vertical integration,
2000s	Diversification out of	 LED- packing and testing, wireless/RFIP, medical devices,
	semiconductors	biotechnology, optoelectronics, solar support, aerospace /
		avionics
		 Local SME migrating to system design and development,
2010s	Rising up the value chain	Design & development,
		 LED – solid state, chip, display/design, integrated solar,
		computing & mobile electronics

- 16. Continuous Master Planning. PDC reported in interviews that one of its key value propositions to investors is its integrated master plan approach, in terms of the ability to offer industrial land and high quality infrastructure, along with close-by supporting amenities, affordable housing, and township development. PDC's establishment as an autonomous, quasi-public body enabled it the power to borrow money from banks and increase its land holdings. Ownership of land by PDC provided confidence to investors that projects would be developed, and also allowed PDC to enter into PPP arrangements for development projects. To ensure Penang's economic resilience, PDC would undertake studies periodically to examine how Penang clusters could diversify into new production activities or new product areas, and would actively identify new projects with potential to attract new sectors and industries. PDC maintained a database of local suppliers, which it used to identify matchmaking opportunities with new MNCs. Knowledge of local supply chain capabilities was a crucial element in generating linkages and technology upgrading. The PDC reported that its business strategy changed over time, from simply selling undeveloped industrial plots of land to developing land and buildings and leasing them. They report that this "Build-and-Lease" model has attracted companies that prefer not to invest large capital amounts in land and buildings upfront, and has been a key factor in attracting companies higher up the value chain engaged in R&D and global business service activities.
- Tailored investment promotion and post-investment care. From its inception, the Penang 17. Development Corporation (PDC) undertook promotion missions to various countries to target firms in the electronics sector, with the main message that Penang's workforce was a comparative advantage, and that local labor was well-tuned to meet the needs of these high-tech investors. Investment opportunities in FTZs were marketed to these high-tech investors at trade fairs, roadshows, and eventually through SME-MNC matchmaking programs. These early activities are identified by PDC as key factors in securing the original eight anchor tenants with the Bayan Lepas FIZ. The autonomy of PDC also provided it with the ability to act as the central point of strategy formulation, implementation and coordination. PDC members reported that this ability to act as the central point was also a key success factor in the initial phases of development. PDC also established a process of investment aftercare to ensure that ongoing business needs are appropriately addressed, and to maintain close links with multinational corporations with the FTZs. Delegations led by the PDC chairman often personally called on the CEOs of companies that had invested in Penang, to maintain close relationships and to obtain inputs for PDC's continuous master planning approach. InvestPenang, a dedicated investment promotion agency for the state of Penang, was set up in 2004 to work with federal government agencies on developing policies for state housing, housing for international workforce, as well as international education. It is also intended to act as an advocate on behalf of Penang investors, to lobby the federal government on issues regarding national policies, incentives, and strategies. The creation of InvestPenang allowed the PDC to focus exclusively on developing and operating industrial estates, infrastructure, and township development.
- 18. **Investment in skills training and development.** At the formative stage of the export hub, PDC played an important facilitating role in labor absorption by the newly established MNEs by conducting vocational training programs. By the later 1980s, when skill shortages began to hamper the expansion of the electronics industry, PDC joined with representatives from Intel and Motorola to establish the Penang Skill Development Centre (PSDC). The PDC provided the building and land for the Center, while the private sector would establish a management council to coordinate and implement its activities. The PSDC would be 80% financed by the private sector, and operate as a non-profit organization with a mission to service local industries with up-to-date, industry-specific training and educational programs, based on identified operational requirements. The federal government also supported PSDC by offering general tax deductions on MNEs' contributions to PSDC schemes and their own skill development efforts. Today there

are 149 participating member firms: 32% are electronic companies, 22% are engineering, and 19% are manufacturing. PSDC has trained over 200,000 participants through more than 10,000 courses since its inception in 1989. PDC reports that the activities of PSDC were instrumental in retaining electric and electronic MNEs through the evolution of Penang's export cluster. The continued presence of MNEs within Penang have further had significant impact on human capital development in the region. It is estimated that only 8% of CEOs in foreign companies in Penang are foreigners, reflecting the decision of MNEs to locate headquarter functions within global production networks to the SEZs in Penang. It is reported that many MNEs leverage the managerial and technological expertise of their Penang operation when expanding to other countries.