

## KEY POINTS

- The Department for Promotion of Industries and Internal Trade (DPIIT), Government of India, has developed an Industrial Information System (IIS) that maps 3,373 industrial areas across the nation covering 475,000 hectares (ha).
- The industrial parks across states are largely owned, managed, and operated by the respective State Industrial Development Corporations (SIDCs).
- The Asian Development Bank (ADB) has supported the DPIIT in developing an Industrial Park Rating System (IPRS), a framework-based performance evaluation system for industrial parks.
- The pilot IPRS that was launched in November 2018 evaluated 177 parks, nominated by 21 SIDCs across 34 key parameters under 4 verticals of the framework.
- Based on the success of the pilot, the DPIIT intends to transform the IPRS into an annual exercise with wider coverage and better qualitative assessment along with greater user feedback and perspective.

## The Industrial Park Rating System in India

Sabyasachi Mitra  
Asian Development Bank

Mohamed Athar  
Consultant

Atul Sanganerla  
Consultant

Kavita Iyengar  
Asian Development Bank

Nikhil Gupta  
Consultant

Nirav Vidwans  
Consultant

## OBJECTIVE

The Industrial Park Rating System (IPRS) was developed in India the user to evaluate the competitiveness of an industrial park against global benchmarks along four dimensions—internal infrastructure and utilities, external infrastructure and connectivity, business services and facilities, and environment and safety management. It was hoped that assessment under the IPRS could assist informed decision-making by stakeholders involved in India's industrial development including policy-makers, investors, and financing institutions.

## KEY OUTCOMES

During the pilot, while better access to internal and external infrastructure was reported in most of the 177 industrial parks evaluated, major gaps were flagged in sustainability solutions, environment and safety management measures, and access to quality services.

\* ADB supported DPIIT in the preparation of the IPRS report. The report was released by The Union Minister for Commerce & Industry and Civil Aviation in November 2018. Prior to this, in May 2017, DPIIT launched the Industrial Information System (IIS), a GIS-enabled database of industrial areas and clusters across the country to optimize resource utilization and enhance the efficiency of the manufacturing sector. The portal serves as a one-stop solution to the free and easy accessibility of all industrial information including availability of raw material (agriculture, horticulture, minerals, natural resources), distance from key logistic nodes, layers of terrain, and urban infrastructure.

## INDUSTRIAL INFORMATION SYSTEM

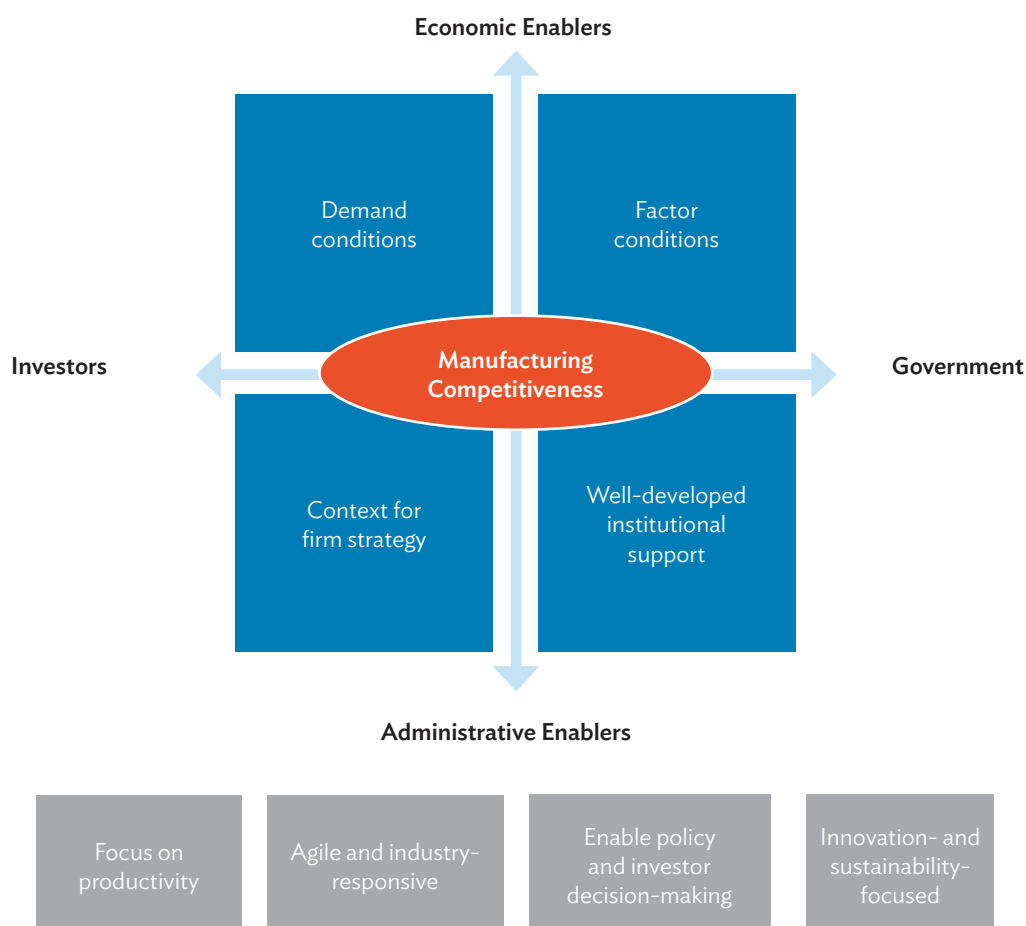
Keeping in view the importance of industrial development in driving India closer to its objective of becoming a \$5 trillion economy by 2025, the government initiated several programs such as, Make in India, Start-up India, and improving the business climate in states through the Business Reform Action Plan (BRAP).

To achieve the target of 25% share of manufacturing in gross domestic product (GDP) by 2022, the government plans to invest into improving industrial infrastructure and its service delivery, provide policy and fiscal support to industry, and bring in transparency in information dissemination. In this context, the Government of India's Department for Promotion of Industries and Internal Trade (DPIIT) developed the Industrial Information System (IIS) with participation of states, union territories, central departments, and ministries through extensive data sharing over a geographic information system (GIS) platform. The objective of the IIS is to consolidate information about the industrial landscape of India and make it available in a transparent way.

Industrial infrastructure in India are dispersed across a variety of ecosystems including special economic zones (SEZs), free trade and warehousing zones, and export processing zones, as well as integrated ecosystem concepts like the integrated manufacturing cluster (IMC), special investment region (SIR), industrial corridor nodes, petroleum chemicals and petrochemicals investment region (PCIPR), and coastal employment unit (CEU). While the economic and governance models across these ecosystems vary, state-sponsored industrial parks in India have traditionally been managed by the State Industrial Development Corporation (SIDC) under each state government. In the recent past though, models have begun to evolve along cluster- and ecosystem-based approaches to ensure resource efficiency, mitigation of demand risk, financial support in creation of infrastructure, technological intervention, etc.

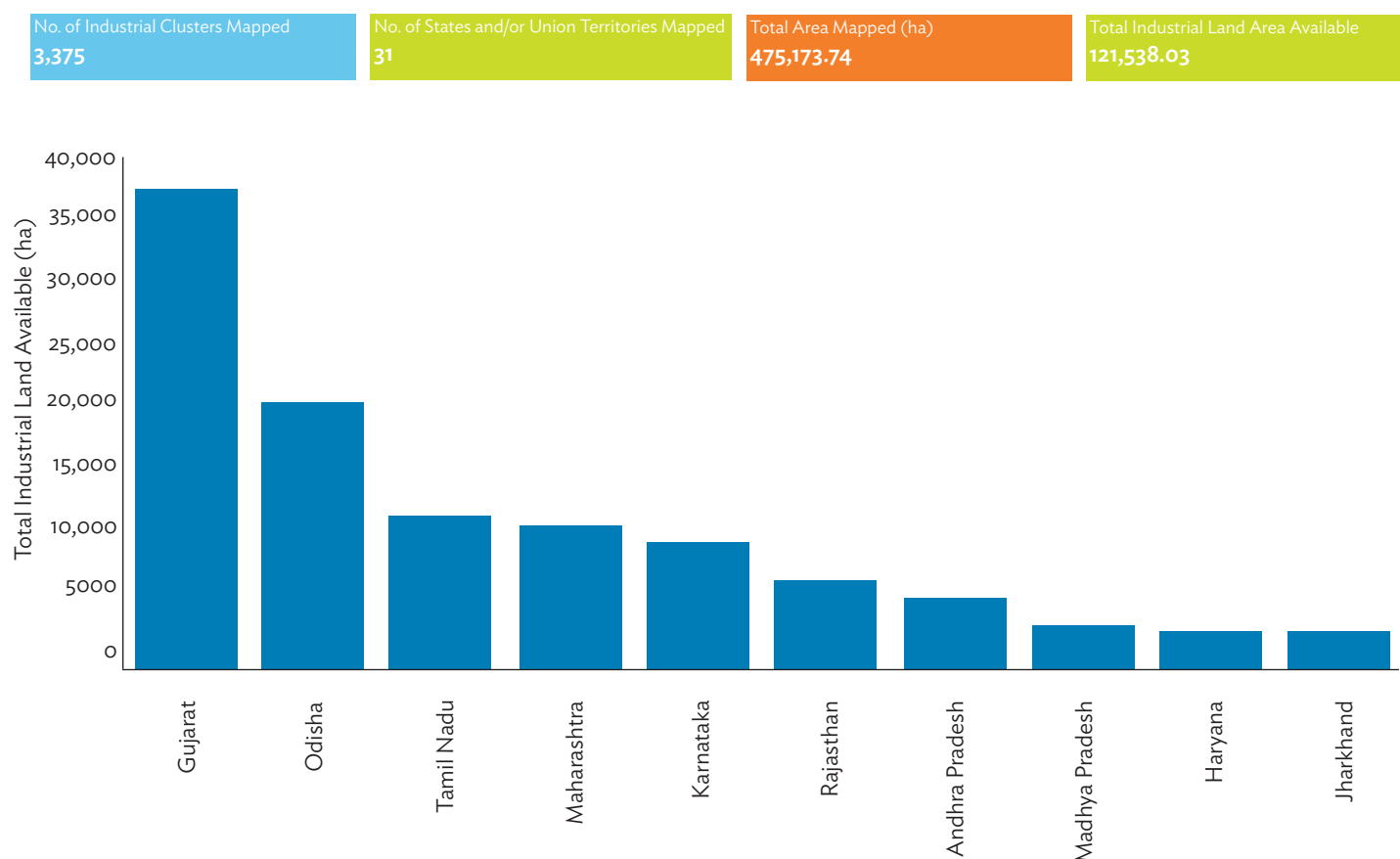
At the regional level, multiple industrial areas work as clusters forming economic centers that generate value addition, employment, and investment. ADB has supported the DPIIT through **a framework for increasing cluster-level competitiveness for industrial development** (Figure 1).

Figure 1: Enablers of Manufacturing Competitiveness



Source: ADB study team.

Figure 2: The Industrial Information System Dashboard



ha = hectare.

Source: National Centre of Geo-Informatics. 2017. Industrial Information System. <https://iis.ncog.gov.in/admin/mainDashboardIPRSUrl>.

“Access to Information” is identified by the BRAP 2017 as the primary enabler of informed and solutions-oriented decision-making in policy and infrastructure by stakeholders in industrial development including governments, financing institutions, investors, and developers. The IIS provides key institutional support to the information dissemination systems in industrial infrastructure developed by various states under the BRAP. It acts as a one-stop shop and a solutions center for location suitability assessment across various sectors, identification of key support required by various industrial areas, and designing of schemes and programs around industrial development.

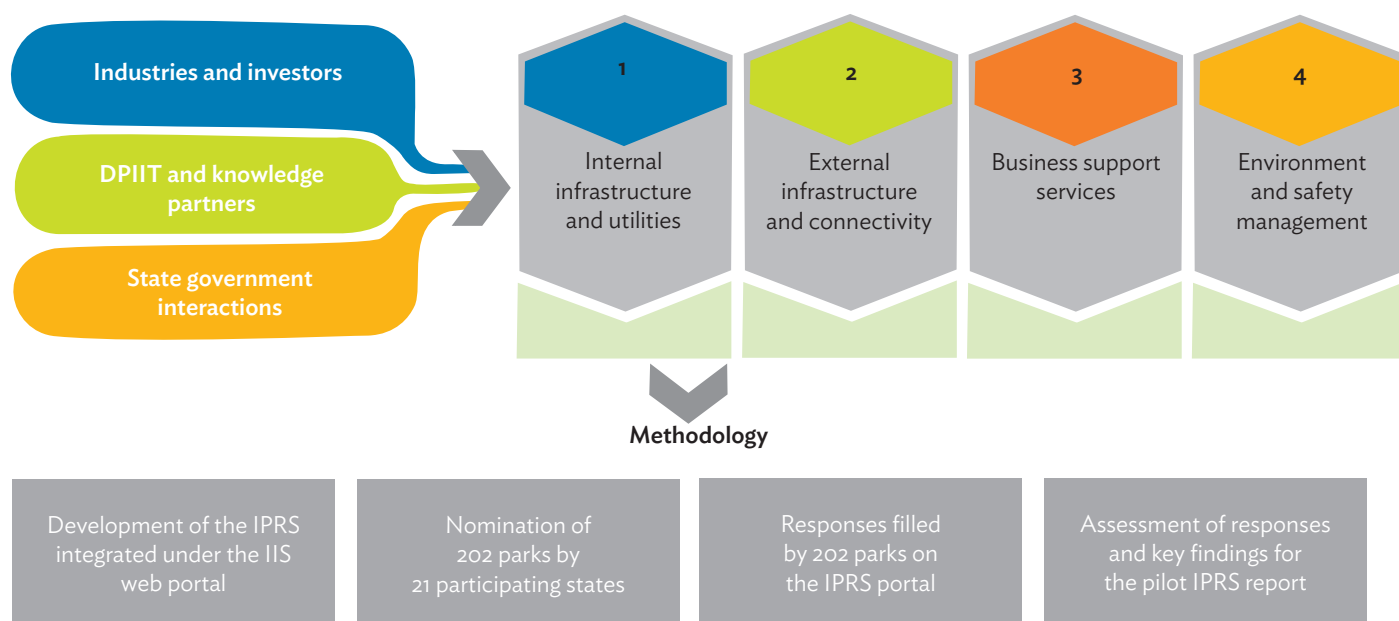
The system is a repository of information on 3,373 industrial areas (parks, clusters, estates, SEZs, and growth nodes) covering about 475,000 hectares (ha) of land mapped on the GIS platform (Figure 2).

## DEVELOPING THE INDUSTRIAL PARK RATING SYSTEM

To leverage this huge repository of information, ADB along with its knowledge partner, PricewaterhouseCoopers, conceptualized the IPRS that could be integrated with the IIS. Developed as a pilot system in 2018, the IPRS aimed to:

- provide information to tenants and compare parks on identified parameters;
- propose a framework by which competitiveness of industrial parks could be measured and areas of intervention identified (Figure 3);
- rate industrial parks to recognize best practices and promote a competitive spirit among park developers and operators; and
- seek feedback from stakeholders (including developers and tenants) to identify gaps in existing infrastructure and ecosystem to enable the DPIIT, ADB, and other departments and agencies to develop relevant programs and policies.

Figure 3: Framework for Assessing Competitiveness of Industrial Parks and Identifying Areas of Intervention



DPIIT = Department for Promotion of Industries and Internal Trade, IIS = Industrial Information System, IPRS = Industrial Park Rating System.

Sources: Asian Development Bank; Government of India, Department for Promotion of Industries and Internal Trade; and PricewaterhouseCoopers.

The IPRS could support central and state governments to develop strategies for future industrialization and better capacity utilization, help lenders review the preparedness of proposed industrial projects, and discover infrastructure issues within and external to the industrial zone or park.

Select industrial parks nominated by the relevant state and central development agencies were assessed during the pilot in 2018. It was assumed (and reasonably so) that SIDCs and concerned central departments and ministries would likely nominate those parks that they considered the best performing.

The IPRS pilot rating framework was conceptualized to be standing on four pillars of the industrial ecosystem—**internal infrastructure and utilities, external infrastructure and connectivity, business support services, and environment and safety management.**

These pillars were assessed across 34 parameters finalized in discussion with the DPIIT and various state government agencies such as SIDCs, and departments of industry. These 34 areas of inquiry were supported by 27 additional or supplementary questions totaling to 61 questions. The supplementary questions were used to gain insight into the degree of readiness and level of service offered and provided by the park developer or operator (the supplementary questions were not used for rating the parks and/or zones).

Nominations under the IPRS were sought based on two key parameters: the nominated parks need to (i) have minimum 25% occupancy and (ii) be at least 250 acres (about 100 ha) in size.

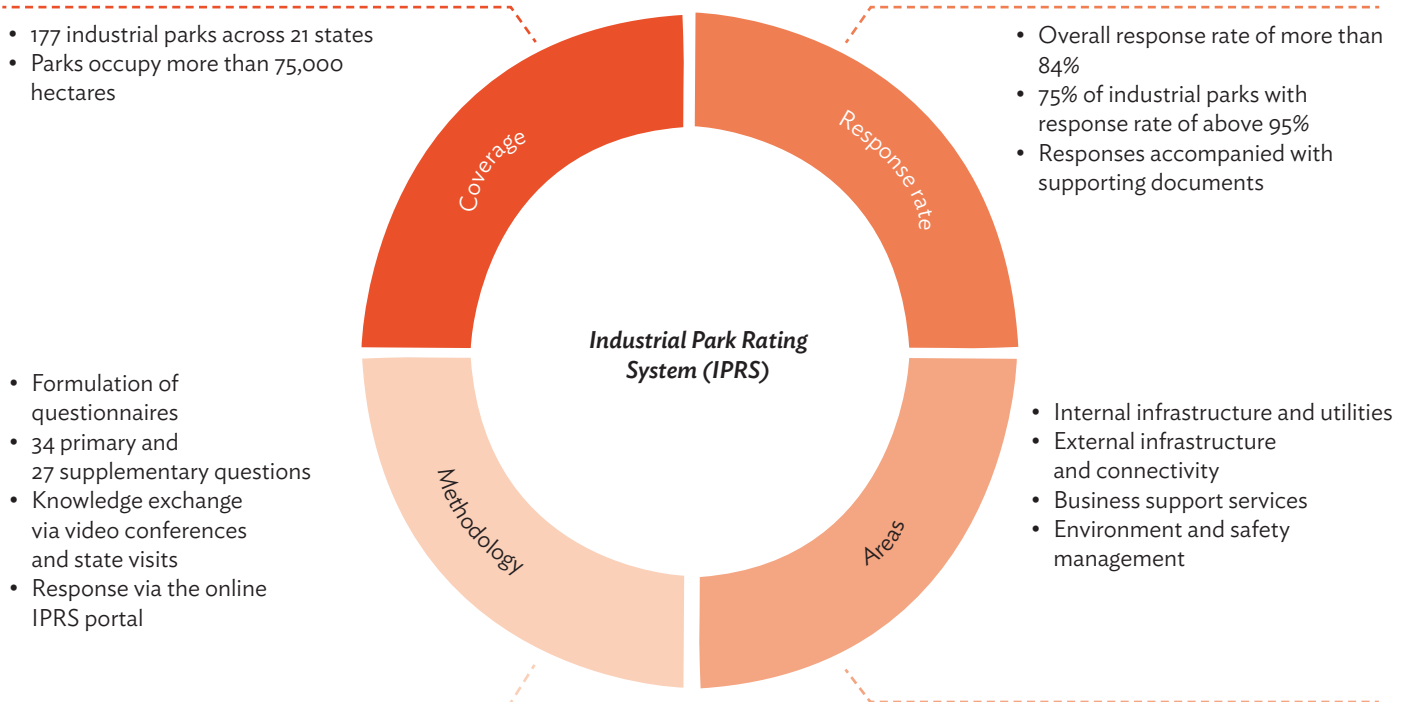
The second condition was relaxed pursuant to representations by various states during consultative interactions. The methodology adopted for the IPRS was consultative and participatory in nature for early onboarding of concerned stakeholders in the development of the system.

Under the pilot phase of the IPRS, the system received 202 nominations out of which 177 were evaluated (balance parks were not evaluated because of data insufficiency) (Figure 4).

This pilot rating system was formally launched through a workshop on 19 November 2018 by the Union Minister for Industries and Commerce, Government of India. It was announced during the event that the IPRS aims to emerge as an annual rating exercise that would support in continuous evaluation and assessment of industrial infrastructure in India. It would showcase the best practices adopted across the country by various development corporations and industrial infrastructure owners and/or developers. It was also announced during the event that the IPRS would widen the scope of coverage and bring in further qualitative assessment along with greater industrial infrastructure user feedback and perspective.

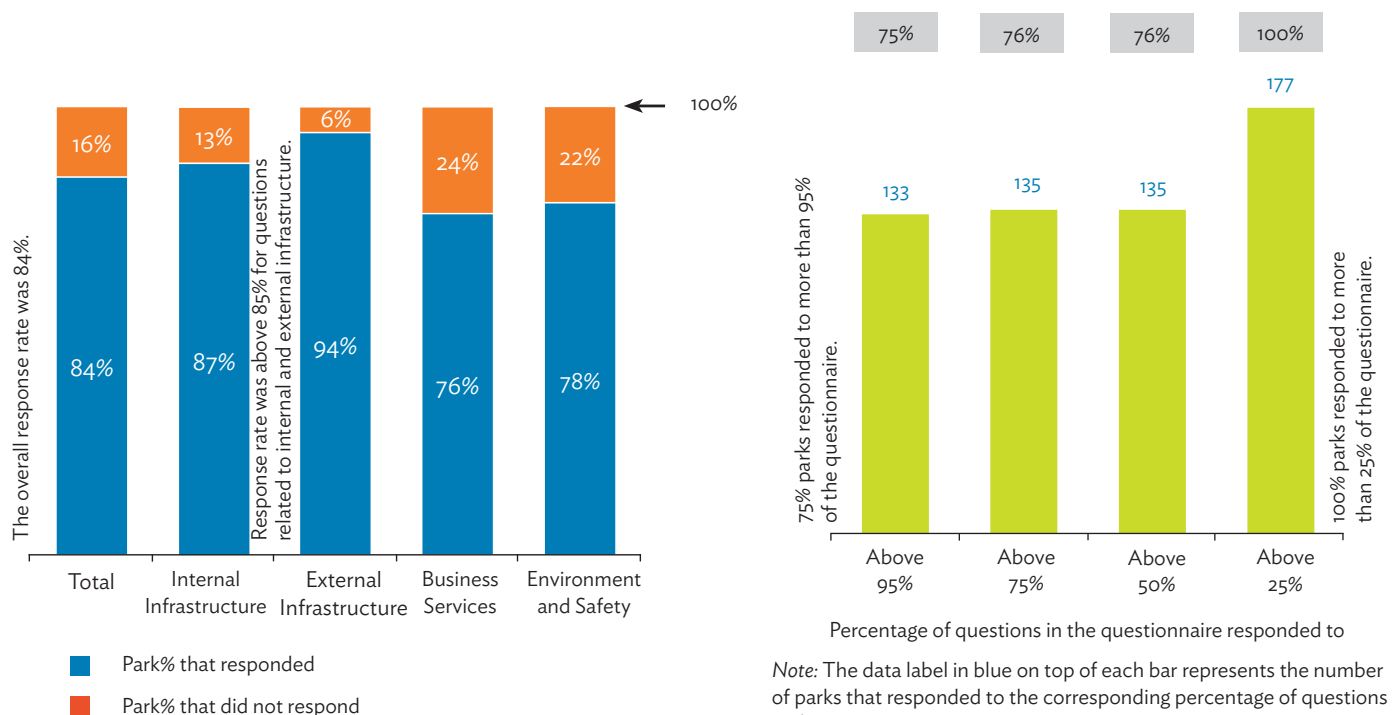
The IPRS received a response rate of 84% from the 21 participating states with more than 130 parks (greater than 75%) responding to over 95% of the questions under the framework. This is an indication of the acceptability of the IPRS framework and the overall initiative (Figure 5).

Figure 4: Key Features of the Industrial Park Rating System Pilot 2018



Sources: Asian Development Bank; Government of India, Department for Promotion of Industries and Internal Trade; and PricewaterhouseCoopers.

Figure 5: Response to the Industrial Park Rating System Pilot 2018



Sources: Asian Development Bank; Government of India, Department for Promotion of Industries and Internal Trade; and PricewaterhouseCoopers.

## FINDINGS OF THE INDUSTRIAL PARK RATING SYSTEM PILOT 2018

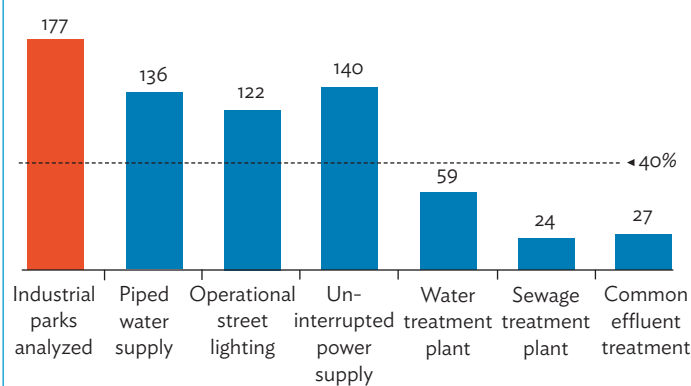
In the assessment under the IPRS, it was found that the 177 parks evaluated met the requirements for the first two pillars—internal and external infrastructure. But significant improvements were required for the other two pillars—business facilitation and environment and safety management. Provision of sustainability-centric features was found to be poor across all four pillars.

Stakeholder consultations revealed several reasons for this pattern in assessment. These include: (i) poor utilization of facilities in the parks; (ii) installation and provision of multiple facilities leading to escalation of lease rent and operations and maintenance costs; and (iii) suboptimal demand (especially in multiproduct industrial zones) for facilities such as, common effluent treatment plants, which can only be provided if a certain minimum scale of demand exists.

### Pillar 1: Internal Infrastructure and Utilities

There is a need for common sewage and effluent treatment plants, otherwise tenants would incur huge costs in setting up their individual treatment facilities. Ideally, such facilities should be introduced at the cluster level so that the individual park or zone does not need to invest in such capital intensive services and the scale of demand does not pose a problem (Figure 6).

**Figure 6: Number of Parks with Availability of Internal Infrastructure and Utilities**



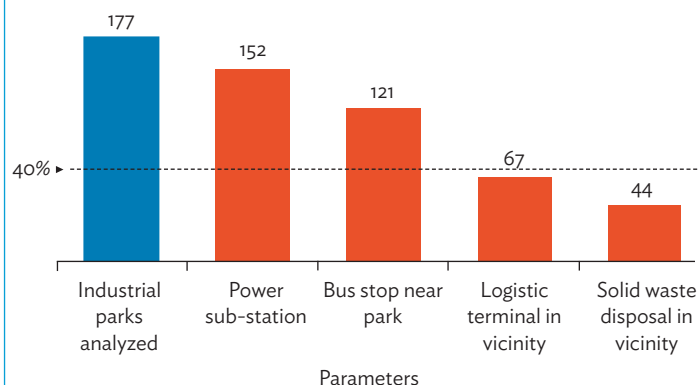
The assessment findings show that critical internal infrastructure facilities were available in most parks, e.g., 79% had uninterrupted power supply.

Sources: Asian Development Bank; Government of India, Department for Promotion of Industries and Internal Trade; and PricewaterhouseCoopers.

### Pillar 2: External Infrastructure and Connectivity

It was observed that while most of the nominated parks were close to a major city, an airport, or a railhead, 60% did not have a logistics facility in the vicinity. Workforce in over 68% parks had access to public transport, that is, there was bus stop near the park. In over three-quarters of the nominated parks, however, there was no solid waste disposal facility available in the vicinity. (Figure 7).

**Figure 7: Number of Parks with Availability of External Infrastructure and Connectivity**



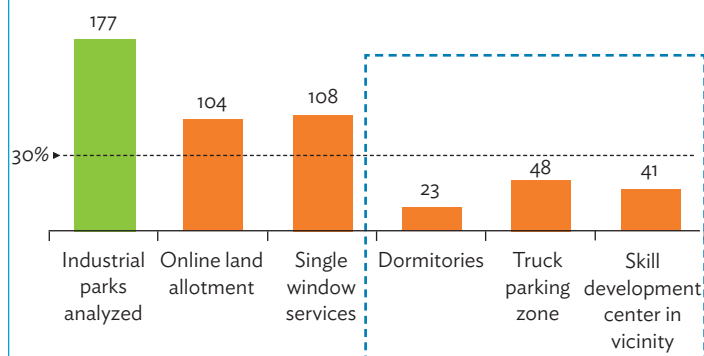
The assessment findings show that critical external infrastructure facilities were available in most parks, e.g., 86% had a power substation within the park premises.

Sources: Asian Development Bank; Government of India, Department for Promotion of Industries and Internal Trade; and PricewaterhouseCoopers.

### Pillar 3: Business Services and Facilities

A direct correlation between the size of the park and availability of business support services was observed. Over 60% of the nominated industrial parks provided single window and online land allotment services as a part of the BRAP reform actions. Most of the parks did not provide dormitories for their workers or the floating population (truck drivers, temporary labor, etc.) (Figure 8). Therefore, facilities under the third pillar were found to be geared to serve the users or the enterprises rather than their workers, helpers, and vendors.

**Figure 8: Number of Parks with Availability of Business Services and Facilities**



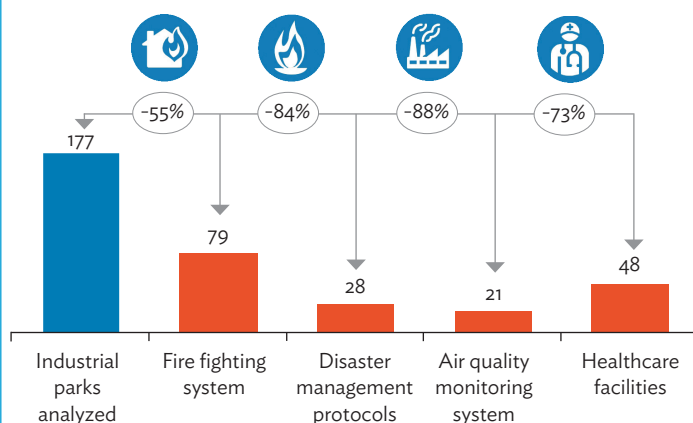
The assessment findings show that business services and facilities were poor in many parks, e.g., 40% did not have single window services.

Sources: Asian Development Bank; Government of India, Department for Promotion of Industries and Internal Trade; and PricewaterhouseCoopers.

## Pillar 4: Environment and Safety Management

It was observed that not even 50% of the nominated parks complied with any of the environment and safety management features. There was poor emphasis on pollution control measures across the parks and less than 16% of the parks have disaster management protocol in place as a part of safety management system. Furthermore only 45% parks had firefighting infrastructure and only 27% had healthcare facility within the park (Figure 9).

**Figure 9: Number of Parks with Environment and Safety Management Measures**



The assessment findings show that environment and safety management systems were lacking in most parks, e.g., only 12% had an air quality monitoring system.

Sources: Asian Development Bank; Government of India, Department for Promotion of Industries and Internal Trade; and PricewaterhouseCoopers.

## CONCLUSION AND WAY FORWARD

Based on the findings of the pilot, the DPIIT aims to transform the IPRS into an annual exercise covering larger number of parks across India. The DPIIT intends to implement the IPRS based on an advanced framework which includes a qualitative perspective as well as user feedback-based assessment. The IPRS 2020 shall help in identifying key gaps in industrial infrastructure across India and in making better schemes and programs toward this purpose.

The IPRS 2020 envisages fulfillment of the following objectives:

- Provide information to tenants and compare parks based on identified parameters.
- Include in the rating framework, qualitative assessment of industrial parks' competitiveness and clear ways to identify areas of intervention.
- Recognize best practices and promote competitive spirit among park developers and operators.
- Seek constructive feedback from park users so that SIDCs and park developers can identify priority interventions.
- Identify gaps in the industrial infrastructure that may be addressed for the development of the overall industrial ecosystem of the zone and/or region in the state.
- Benchmark the performance of industrial infrastructure across the country.
- Develop a framework for improvement of public-private partnership investment in industrial infrastructure.
- Support central and state governments in bringing policy-based interventions for industrial infrastructure development in the country.

## Best Performers

The best performers across the 177 nominated parks are listed in the Table.

**Table: Best Performers in the Industrial Park Rating System Pilot 2018 by Pillar**

Pillar 1: Internal infrastructure and utilities	Pillar 2: External infrastructure and connectivity	Pillar 3: Business support services and facilities	Pillar 4: Environment and safety
IMT Manesar, Haryana	Hebbal Industrial Area, Karnataka	Dahej 1, Bharuch, Gujarat	Autonagar and Apparel Park, Visakhapatnam, Andhra Pradesh
APSEZ Atchutapuram, Andhra Pradesh	SIPCOT IP, Thoothukudi, Tamil Nadu	Industrial Growth Center, Urla, Chattisgarh	Bommasandra Jigani Link Road, Bangalore, Karnataka
Talegaon Industrial Area - Pune, Maharashtra	Welspun Anjar SEZ Ltd., Gujarat	SIPCOT IP, Irungattukottai, Kancheepuram, Tamil Nadu	SEZ P1 and P2, Dhar, Madhya Pradesh

APSEZ = Andhra Pradesh Special Economic Zone, IMT = Industrial Model Township, SEZ = Special Economic Zone, SIPCOT IP = State Industries Promotion Corporation Tamil Nadu Industrial Park.



### About the Asian Development Bank

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 68 members—49 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

**ADB Briefs** are based on papers or notes prepared by ADB staff and their resource persons. The series is designed to provide concise, nontechnical accounts of policy issues of topical interest, with a view to facilitating informed debate. The Department of Communications administers the series.

The views expressed in this publication are those of the authors and do not necessarily reflect the views and policies of ADB or its Board of Governors or the governments they represent. ADB encourages printing or copying information exclusively for personal and noncommercial use with proper acknowledgment of ADB. Users are restricted from reselling, redistributing, or creating derivative works for commercial purposes without the express, written consent of ADB.

Asian Development Bank  
6 ADB Avenue, Mandaluyong City  
1550 Metro Manila, Philippines  
Tel +63 2 8632 4444  
Fax +63 2 8636 2444

[www.adb.org/publications/series/adb-briefs](http://www.adb.org/publications/series/adb-briefs)



Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO)

© 2020 ADB. The CC license does not apply to non-ADB copyright materials in this publication.

<https://www.adb.org/terms-use#openaccess>    <http://www.adb.org/publications/corrigenda>    [pubsmarketing@adb.org](mailto:pubsmarketing@adb.org)