

Building India's 'iPhone city': Lessons from Zhengzhou's transformation

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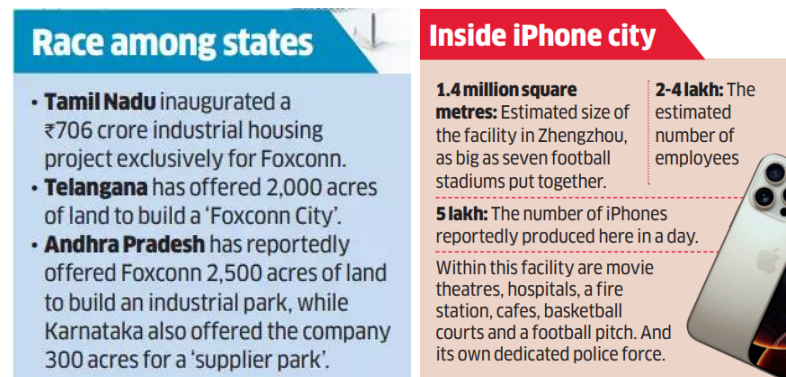
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Synopsis

Zhengzhou evolved from a modest industrial center into a powerhouse after Foxconn's 2010 entry, aided by massive social infrastructure supporting over 200,000 employees. India's ambitions to replicate this model hinge on robust social infrastructure, such as housing, healthcare, and education. States like Tamil Nadu are pioneering industrial housing, but experts stress a need for better facilities, policies, and talent-friendly ecosystems to attract global investment and drive sustainable growth.



The rapid transformation of Zhengzhou, the capital of China's Henan province, into 'iPhone City' underlines the challenges and opportunities that India faces in its pursuit of becoming a global electronics manufacturing base.

Zhengzhou was a commercial and administrative centre when the People's Republic was founded in 1949. While the city initially lacked industrial prominence, it gradually emerged as an industrial centre. Located on the south of the Yellow River, Zhengzhou became home to cotton-textile plants, spinning mills, textile-machinery works, flour mills, tobacco and cigarette factories, and various food-processing plants.

However, the biggest shift in the city's social and economic landscape came with the entry of Taiwanese contract manufacturing giant Foxconn with its largest factory globally in 2010. For a city home to the famous Shaolin Temple, considered the cradle of the Chinese martial arts, Foxconn's entry changed its fortunes overnight.

The sprawling Zhengzhou plant of Foxconn, is estimated to be over 1.4 million square metres or the size of seven of the world's largest football stadiums, boasts everything from entertainment facilities like movie theatres, hospitals, a fire station, supermarkets, cafes, basketball courts and a football ground.

It also has its own dedicated policing! The facility is entirely self-sufficient for its estimated 200,000-400,000 employees who reportedly produce an astounding 500,000 iPhones every day.

As India looks to scale greater heights in electronics manufacturing with the government setting ambitious targets like touching \$300 billion in electronics production, including \$100 billion in exports, in the coming years, experts said the success of these endeavours relies heavily on having a robust social infrastructure. This includes schools, universities, hospitals, community housing, sports

facilities, parks, leisure and entertainment centres, and government services and offices.

In countries like China and Taiwan, the backbone of their exceptional growth in the electronics manufacturing services (EMS) segment has been the solid social infrastructure created around these factories.

"For India to scale further in the EMS segment, a lot will hinge on the social infrastructure that we build," said S Krishnan, secretary in the Ministry of Electronics and Information Technology. "We have seen some states step up to provide large industrial housing initiatives, but we need to also look at developing allied services and facilities."

He said bringing in more component makers will be crucial for India to upgrade to more advanced manufacturing.

"This would mean smaller Taiwanese, Japanese, South Korean players and their executives who would not only need good housing but also a superior quality of life. We need to start looking to attract that talent and provide them with an appealing lifestyle for which developing high quality social infrastructure will be the key," Krishnan explained.

Currently, Foxconn has taken the lead with mega investments in the EMS segment. For instance, the company has set up large operations in Tamil Nadu and it was only three months ago that the iPhone maker opened a massive industrial housing project - the first of its kind - at Vallam Vadagal near Chennai.

In addition to housing projects, Sana Hashmi, a postdoctoral fellow at the Taiwan-Asia Exchange Foundation said a Taiwan-focused science park or township could serve as a beacon for Taiwanese investment in India.

"Given the preference for collective movement and risk aversion often seen in East Asian investment approaches, such a project would provide confidence and appeal to investors who may otherwise hesitate," she said. "Beyond just financial investments, it establishes a structured framework for ongoing collaboration, allowing commercial ties to mature into sustainable, mutually beneficial relationships."

Hashmi noted that the time is also ripe for India to lure more Taiwanese firms, especially in light of the recent geopolitical shifts including the incoming Trump administration's policies. She added that more Taiwanese companies are likely to diversify away from China and consider India as a viable alternative.

"While cities like Dholera are promising developments, fully integrated social infrastructure—like the kind seen in Foxconn's ecosystems—can provide a decisive edge," Hashmi said. "Such infrastructure doesn't just address immediate logistical needs; it creates an environment where both local and international talent can thrive, increasing India's appeal as a global electronics hub."

In the long run, she explained that establishing self-sufficient, purpose-built communities around manufacturing zones directly supports India's larger objectives of meeting its manufacturing needs and driving innovation and continuous investment, which will help the country truly integrate into global supply chains.

"Having formidable social infrastructure is not an option but a necessity," said Pankaj Mohindroo, chairman of the India Cellular & Electronics Association (ICEA). "The race is between countries now. China is well ahead in terms of their social infrastructure around these large factories but India is making some solid strides. But the pace needs to improve and the vision needs to be to provide not just the employees but also top tier talent with great facilities."

Jenny Chan, associate professor of sociology at The Hong Kong Polytechnic University said Chinese local governments were instrumental in luring the likes of Foxconn to build these sprawling facilities.

"They not only offered land at very subsidised rates but also took on the mantle of building a lot of the social infrastructure for not just Foxconn but several foreign companies to bag the investments," she said. "They also provided these companies with lucrative tax holidays or provided them with a very preferential tax rate for a certain period, making it an offer the companies could not refuse."

A tax holiday is a governmental incentive that temporarily reduces or eliminates taxes for consumers or businesses.

Indian states are taking a leaf out of China's playbook. Tamil Nadu, for instance, worked on a Rs 706 crore industrial housing project exclusively for Foxconn. This marked the first time an Indian state government had implemented a hostel project of this scale for a private firm — a model that's been successful in China and Vietnam.

At the inauguration of this facility, Foxconn chairman Young Liu had told ET that the company was also looking to build an 'industrial township' in the state. This would be a first for the company in India. The announcement started a competitive frenzy in the region, with each state in the region aiming to outdo their neighbour.

For instance, Telangana offered the iPhone maker 2000 acres to build a 'Foxconn city' modelled on the lines of its facilities in Taiwan and China. Karnataka and Andhra Pradesh also started courting the company.

People aware of the developments said Andhra Pradesh had offered Foxconn 2500 acres to build an industrial park, while Karnataka offered 300 acres for a 'supplier park.'

"States like Telangana are batting for a Zhengzhou-like city in Telangana where Foxconn can even build and lease space to other Taiwanese players or vendors," one person in the know had told ET at the time.

The person said however that Foxconn was currently not looking at developing social infrastructure but that it could eventually become part of its initiatives. "It will take some time," he said.

Email requested Foxconn to comment went unanswered as of press time Saturday.

Not too far away from Foxconn's Sriperumbudur facility, another large, homegrown EMS player is also rapidly expanding. Tata Electronics, the only Indian vendor to Apple, is not only doubling down on its factory but also working tirelessly to build a modern township.

ET had reported in August about how the Tata Group is transforming the landscape of Hosur to make it 'the next Jamshedpur' or as Tamil Nadu industries minister TRB Rajaa called it, 'Jamshedpur Plus.'

There too, one can see the large industrial housing facility - Vidiyal Residency - being built by the Tata Group in collaboration with the state government in Nagamangalam village. The Rs 508 crore project involves proposed construction of dormitories for industrial workers.

As per the Tata Electronics website containing a copy of its environmental clearance application, the facility will also have amenities like medical care, creche, recreation, central kitchen, and commercial, among others.

While states are going full throttle to offer these large companies with land, experts noted that though this was an essential starting point, a lot more needs to be done.

Dhruv Shekhar, senior associate at Koan Advisory said state governments could look at offering tax breaks or subsidies for companies investing in housing, healthcare, and educational facilities around their manufacturing hubs.

"They should also collaborate with urban planners to design worker-centric townships that could make such investments more attractive to corporations," he said. "And finally, PPP (public-private partnership) models could help build affordable housing and basic amenities, sharing the responsibility between the state and corporate investors."

Also, in a sector that is a huge employer of women, having good social infrastructure ensures more female participation in the workforce. Providing facilities such as housing, healthcare, childcare, and transport are essential to retaining and supporting these workers, especially those coming from distant villages or towns.

"The Brandix India Apparel City (BIAC) in Andhra Pradesh is a strong precedent—its model of providing on-site amenities, including crèches and transport, has led to a thriving ecosystem where 76% of the workforce is women," Shekhar said.

"Many Indian states are keen to develop electronics manufacturing hubs, and creating robust social infrastructure could give them an edge. Family-oriented infrastructure could also encourage families to relocate with working women and support their participation in formal employment."

He, however, cautioned that any conversation around social infrastructure must extend beyond greenfield investments like townships.

For instance, he said technology and business hubs such as Karnataka, Maharashtra, and New Delhi face a severe shortage of affordable housing which limits the influx of essential talent. Shekhar said addressing this issue will require affordable housing policies tailored to these high-cost regions, ensuring that burgeoning industries can attract and retain the talent they need to scale operations.

And while the China-model is one that India should aspire for - in terms of scale and efficiency – The Hong Kong Polytechnic University's Chan said there was potential for India to better the model in some regards.

"China does not have as many women at their factories. Foxconn is largely male-dominated there," she said. "In India, it seems to have a large female workforce which means it should look into the health, safety and security of the employees even further. Having social infrastructure is good but also providing them with adequate means to use that is what matters."

She said free and quality healthcare is basic but that providing employees with health insurance, pensions and incentives in addition to wages was vital. Further, having periodic health checkups organised, especially for pregnant women, and coverage for health conditions caused by exposure to aluminium dust would be an added benefit.

Also, giving workers the right to organise—in the form of trade unions—could be another positive differentiating factor as opposed to China where there are no worker unions, she said.

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