

CASE STUDY

High-technology industries in China – an NIC

Towards the end of the 20th century, the Chinese government decided that it needed to encourage the development of high-technology industries in China. The country has some clear incentives for achieving this goal. It has an enormous population of over 1.3 billion (official government estimate), so there is a vast potential domestic market for consumer electronics. Although there are many rural and remote areas where the population is poor, China's urban population is growing quickly. With better salaries, urban workers have more purchasing power.

What has the Chinese government done?

- The government has made enormous improvements to the country's transport infrastructure, by building new airports and fast roads – as well as developing a good telecommunications network.
- It has also encouraged education, especially in science and technology. In the 1990s, it sent thousands of researchers to the west to gain research experience.
- It has established major technological development zones in Beijing, Shanghai and Shenzhen. Shenzhen is near Hong Kong (a leading financial centre). In Shanghai and Shenzhen, multinational companies from Europe, the USA, Japan and Taiwan played a large part in the developments.
- It has invested massively in research and development. By 2008, China had 54 high-technology parks with 6.5 million workers!
- It has recruited foreign investors to encourage the growth of silicon chip manufacturing. They are given exemption from income tax for the first two years after the business makes a profit, with reduced taxes after that.
- Foreign scientists have also been encouraged to work in China.
- Bank loans are available for new businesses.

A senior government official stated that there were 100 million new subscribers to telecommunications every year in China between 2000 and 2007, and that the country produced more computers, mobile phones, antibiotics and vaccines than any other country.

The Shanghai area concentrates on pharmaceuticals. China is particularly keen to develop biotechnology. As in the USA, its computer manufacturers cluster with software and hardware manufacturers.

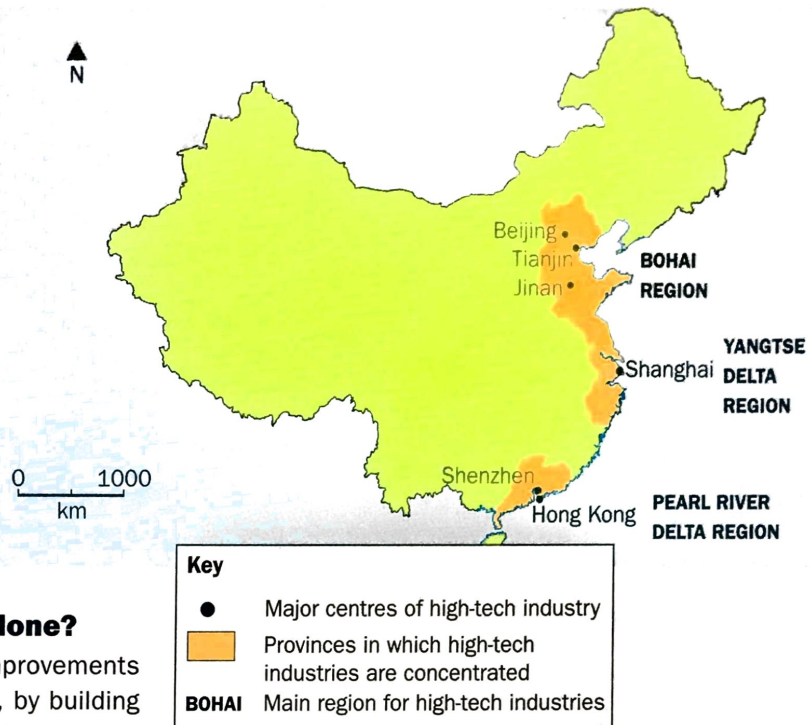


Fig. 10.23 The areas with the highest concentrations of high-technology industry in China

Jinan – a high-tech industrial development zone

Jinan is the capital of Shandong Province. The high-tech industrial zone there has expanded since it was first started in 1991. When finished, it will cover 83 square kilometres. Its publicity describes it as 'an exquisite environment' with green mountains to the south of the flat site and many trees. It is near an expressway and 15 minutes away from the international airport. It is also close to the Beijing-Shanghai super-highway, and a three-hour drive along an expressway from the port of Qingdao (one of world's largest seaports for handling containers). The main railway station is only 20 kilometres away. A modern school, nursery and housing have been provided. Jinan has 37 universities and colleges, 11 of which are within the zone. There are over 500 software factories on the Qilu Software Park, which specialises in information technology, biopharmaceuticals and precision machinery. More than 10 multinational companies have set up joint ventures there.



Fig. 10.24 Jinan