

## **Chapter 2 Japan growing with Asia's development - Asia -Pacific framework toward sustainable growth**

### **Section 4 Japan's contribution to the infrastructure development in Asia**

As shown in the previous Sections, Asia has high potential growth and gains substantial expectation as consumer market. However, to realize the expectation, it is inevitable to develop industrial infrastructure that is a foundation for corporate activities, life infrastructure that is a base for consumption expansion and logistics infrastructure that connects industrial clusters. This section will introduce the needs for infrastructure that is estimated to require about \$8 trillion to achieve Asia's sustainable economic growth within 11 years from 2010 to 2020 and the infrastructure development plans that Japan has been rendering its cooperation.

#### **1. Industrial clusters in Asia and the progress of urbanization**

##### **(1) Development of industries as the driving force for urbanization**

Supported by the expansion and accumulation of foreign direct investment, industrial clusters have been formed in Asia and making significant contribution to Asia's economic growth which is characteristically export-driven growth model.

An industrial cluster which is the concentration of operations of one industry in certain location (see Figure 2-4-1-1) nurtures related industries, attracts human resources, achieves various division of labor among companies and improves the competitiveness of the industry. So far, the focus of the export production bases of Asia was the simple processing trade which imports materials and parts, conducts simple assembly processes utilizing cheap local labors and exports final products. However, along with the enhancement of production for exports, it became more beneficial to locally produce materials and parts rather than importing considering transportation costs and economy of scale. Therefore, local production progressed even in the area of parts production that is capital-intensive. Moreover, some companies launched businesses that are not product assembly. For example, some people started their own businesses after obtained skills working at factories for exports. There are also companies that began the production of goods targeting the local market using material and parts of which local production had started. In this way, the development of related industries and the concentration of human resources have made the area more attractive, accelerated entries of new foreign companies, and advanced the further concentration of industry.

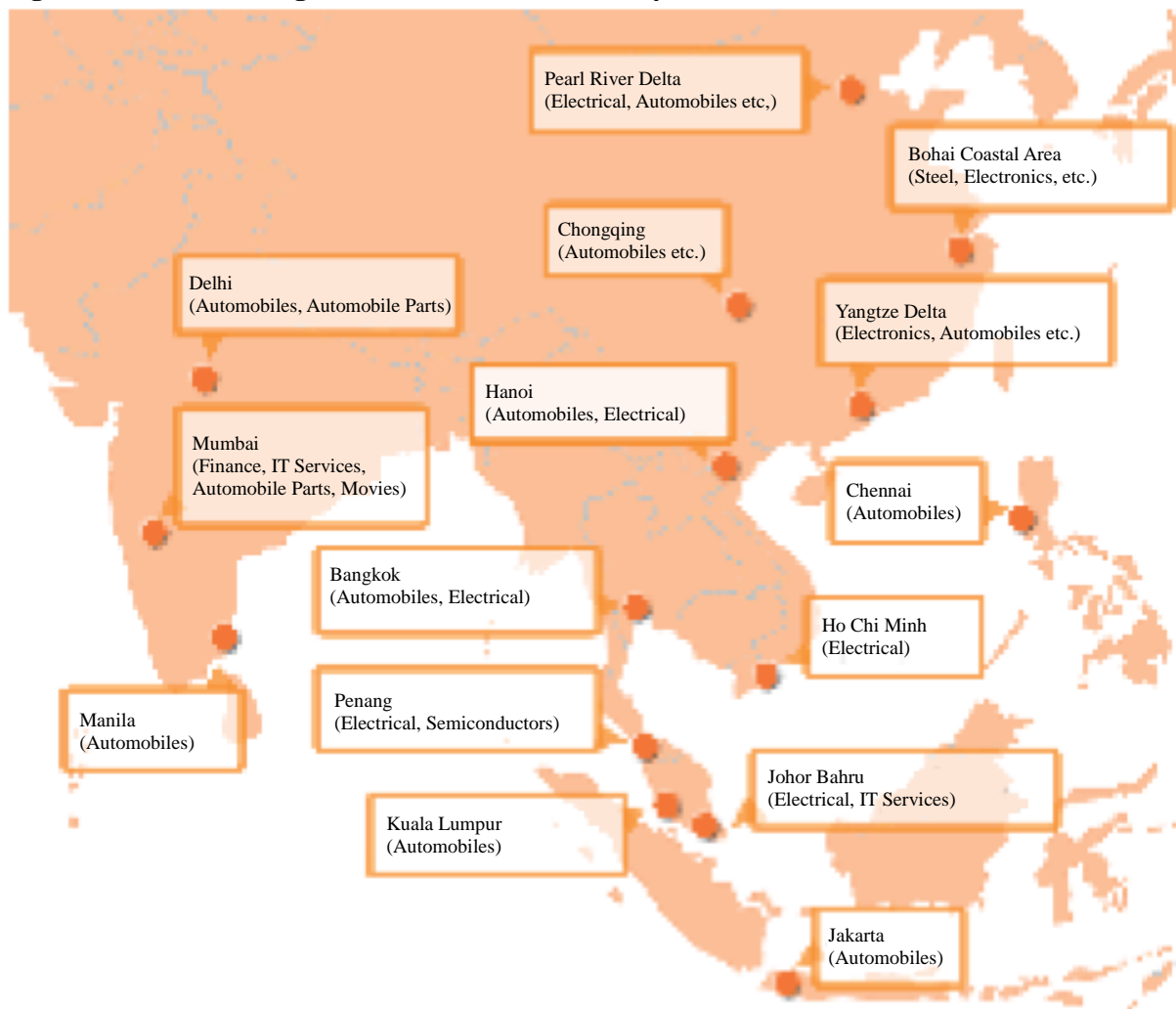
In addition, the formation of industry clusters in cities is linked to the progress of urbanization such as through the concentration of workers as one of production elements. Demographics transition and the trend of urbanization rate in Asian cities display that city population increased by 700 million people from 1980 to 2005 and is expected to add more 670 million people by 2020 (see Figure 2-4-1-2). Urbanization rate is also increasing and it is forecasted that about a half of population of Asia will concentrate in cities by 2025. Particularly in population giants such as China and India, urbanization has been rapidly progressed since the 1990s. City population rate of each country in 1990 was 27% and 26%, respectively. It is estimated that the rates accelerate further and reach 60%

and 40%, respectively, in 2030<sup>1</sup>.

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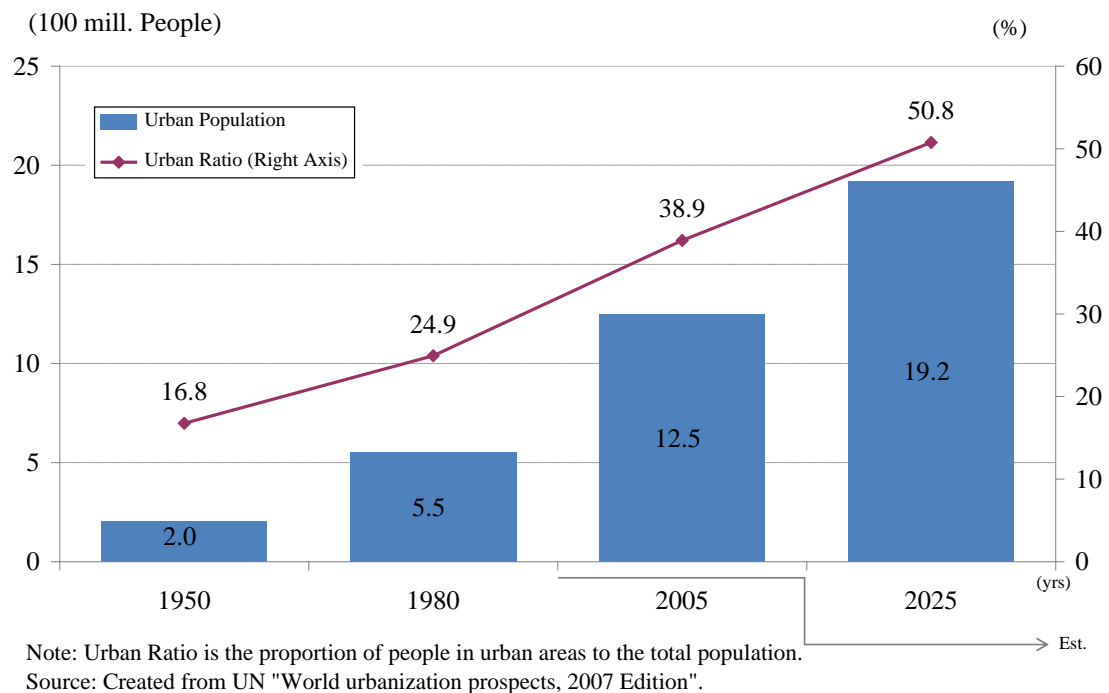
<sup>1</sup> The United Nations “World urbanization prospects, The 2007 Revision”

**Figure 2-4-1-1: Main regions of concentrated industry in Asia**



Source: Ministry of Economy, Trade and Industry

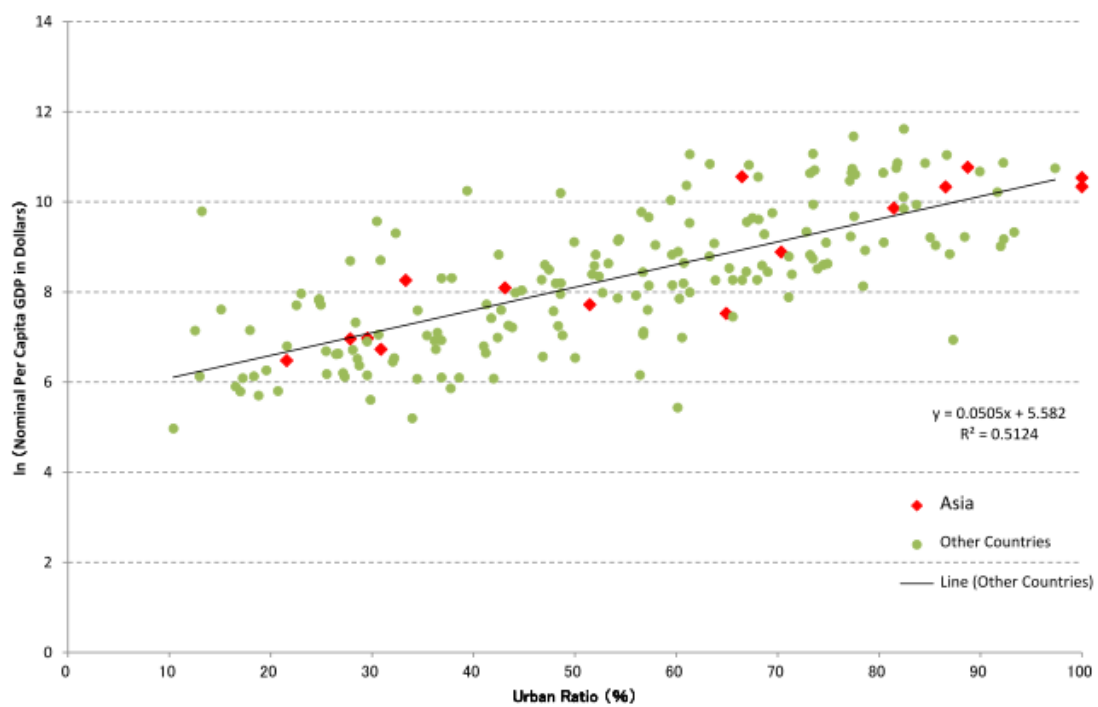
**Figure 2-4-1-2: Urbanization trends in Asia**



## **(2) Urbanization that promotes economic growth by economy of concentration**

Urbanization and economic growth have strong positive correlation (see Figure 2-4-1-3). It is assumed that Asia's high economic growth was achieved by high productivity enhanced with economy of concentration and huge consumer market formed with population concentration.

**Figure 2-4-1-3: Urbanization rate and GDP per capita in Asia (2008)**



Source: Created from World Bank "WDI".