INDUSTRIAL-ESTATE DEVELOPMENT MECHANISM IN INDONESIA: A COMPARATIVE ANALYSIS

by

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ABSTRACT

Many countries have used industrial estates as a method for regional and local industrialization. In so doing, they applied decentralization of decision-making to the industrial-estate development process. The success of implementing and operating industrial estates depends on the decision that is used at the local levels. Moriarty et al. have postulated that local public authorities must to be involved in deciding the industrialization process within their areas of jurisdiction in order to encourage the community’s participation in the industrial-estate development.

The government of Indonesia also has developed industrial estates in the regional and local areas dominated by the small and home/cottage industries. It regulated the industrial-estate development in 1989. The government want to increase regional and local levels of industrialization and the rate of its growth. Based on the industrial-estate development mechanism, we hypothesize that in developing industrial estates, Indonesian government does not encourage decentralization of decision-making concerning the development
of regional and local industries, especially the small and home/cottage industries.

To prove our hypothesis, we apply a comparative analysis by comparing the Indonesian industrial-estate development mechanism with that of other countries, especially the United States and the Philippines. To complete this approach, we evaluate industrial-estate development mechanism in Indonesia. We show that Indonesian government favors centralization of the decision-making process and has adopted a deconcentration strategy to control industrial-estate development. This approach is not the same as the way other countries promoted industrial-estate development.

Under these circumstances, our hypothesis is proven to be correct. We therefore recommend that Indonesian central government consider a decentralization of its decision-making power to regional and local governments in developing industrial estates. The autonomous government at the regional and local levels will then be encouraged to be involved directly in the process of industrial-estate development.

Thesis Supervisor: Karen R. Polenske
Title: Professor of Urban Studies and Planning
ACKNOWLEDGMENT

The knowledge gained in the process of doing this thesis is very special to the author, primarily in organizing the author’s way of thinking to prove a hypothesis. The process itself has broadened the author’s perspective concerning the mechanism of industrial-estate development in Indonesia and other countries as well. Although, the writing of this thesis has come to an end, establishing the ideas behind this thesis into the real life has just begun. The author expects to have the opportunity of doing so.

In completing this thesis, the author has received valuable assistance from Professor Karen R. Polenske and Dr. Omar M. Razzaz, into which without their continuous and serene assistance the author will not be able to organize and complete this thesis. The author express his thankfulness to both of them and others who have taught, helped, and encouraged the author to complete this thesis.
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CHAPTER 1
INTRODUCTION

The development of manufacturing industries in Indonesia has gradually shifted the national economic structure from one of a dominant agricultural economy into a more industrialized economy (Hill, 1989; Poot et al., 1990; EIU, 1991). The government has played a very important role in promoting industrialization in the country, following the implementation of a series of five-year plans called Repelitas (Poot et al., 1990). The government has targeted Indonesia to be a newly industrialized country by the end of Repelita VI (1994/1995-1999/2000). To arrive at this target, Indonesia is pursuing an export-oriented path of industrialization, by broadening and deepening the regional and local participation in the growth of manufactured exports.¹

In pursuing the export-oriented path of industrialization, Indonesia should continue to use industrial estates as a policy instrument, but the government needs to make important modifications in its implementation. Indonesia has used this tool, and, in 1989, it set up regulations to encourage the establishment of industrial estates in regions and local areas.

¹ Broadening and deepening the industrial structure in the regions are among the six priority areas for industrial development during Repelita V (see P.J.S. Wymenga, 1991). These priorities are related to the national concern to increase the nonoil manufacturing export products. Here, the national industrial-development strategy has been shifted from an import-substitution industrialization to an export-promotion industrialization.
The Presidential Decree No. 53, 1989 (Keppres. No. 53 tahun 1989 tentang Kawasan Industri) governs the establishment of Industrial Estates, providing a general guideline for industrial-estate development in Indonesia. To support this decree, the Ministry of Industry (Departemen Perindustrian, DP), National Board of Land Affairs (Badan Pertanahan Nasional, BPN), and the Capital Investment Co-ordinating Board (Badan Koordinasi Penanaman Modal, BKPM) launched detailed regulations concerning permits for establishing industrial estates, acquiring land, and making investments. Under these regulations, the central government (DP, BPN, and BKPM) is responsible for all of the permits concerning industrial-estate development.

Indonesia is not the only country that has implemented the industrial-estate concept. This concept has been used widely by many countries in the world, such as the United States, Germany, France, Italy, Japan, Malaysia, and the Philippines, as a tool to promote industrialization, to guide industrial locations, and to induce manufacturers to establish themselves on the estate (see Mathur, 1971; Hilpert, 1991). The United Nations has recognized that industrial estates is an important instrument to promote local interests and to induce decentralization in the development of industries. The way in which this instrument has been used in countries like India, Japan, Italy, Taiwan, United Kingdom, and the United States underlines the importance of decentralizing the decision-making process to regional or local institutions for industrial-estate development. These regional and local
institutions receive considerable assistance, guidance, and control from central institutions or government.

The Indonesian government is challenged by the industrialization process, which varies (in the levels of industrialization) among regions from the making of "koteka" \(^2\) (traditional industry) to aircraft (modern industry). The government must develop the industrial sector, which is dominated by the small and home/cottage industries (World Bank, 1991a, pp. 8-10; and see Table 1). In so doing, the government divides the responsibility of developing the industrial sector within central, regional, and local governments. The regional and local governments are responsible for developing small and home/cottage industries, while the central government is responsible for organizing the development of medium-scale and large industries, including the industrial estates.\(^3\) To assist and administer industrial development at regional and local areas, the central government put its agencies into these areas. These agencies play important roles in the process of industrial-estate development.

In regard to the Indonesian industrial development arrangement and the international industrial-estate development experiences, we hypothesize that in developing industrial estates, the Indonesian government does not encourage

\(^2\) Koteka is a male vital organ sheath of Irian Jaya.

\(^3\) Communication with the Attache of the Ministry of Industry's at the Indonesian Embassy, Washington, D.C.
decentralization of decision-making concerning the development of regional and local industries, especially for the small and home/cottage industries. We assume that the Indonesian government, as a whole, favors encouraging the development of small and home/cottage industries over the development of medium-scale and large industries. Besides that, we also assume that the government encourages the development of industrial estates in order to facilitate the establishment of not only medium-scale and large industries, but also small and home/cottage industries.

There are two major issues related to this hypothesis. The first issue is who will implement the industrial-estate development policy better, the central government or the regional or local governments. According to many international industrial-estate experiences, the central government should give the decision-making power to the regional or local government. In the case of Indonesia, the development of industrial estates involves some institutions at the central, regional, and local levels of government. Yet, regional and local autonomous governments presently have a very limited role in deciding industrial-estate development. The regulations assert that the only involvement of regional and local governments is for the Governor of the provinces to provide land for industrial-estate development. Besides that, there is also a role for the Bupati and Walikota (the Head of the district and Municipality, respectively) to give their recommendation regarding industrial-estate development proposals in their areas of jurisdiction.
After that, the central-government institutions will arrange the other tasks, either for promoting or developing the industrial estates (Government of Indonesia, 1989).

The Indonesian government should expand the provincial role in order to broaden and deepen the regional and local participation in the growth of manufactured exports. By giving the power to the provincial governments to implement industrial-estate development policy, the Indonesian government may attract regional and local economic agents (government or private) to participate in the development process of industrial estates and in the industrialization process of the regions as a whole. To decentralize this power in Indonesia, the officials can refer to the National Act No. 5, 1974 about the Government Administration in the Regions. The problem then is for the government officials to search for a mechanism that is appropriate for expanding the provincial governments' role in the industrial-estate establishments.

The second issue concerns the uneven regional distribution of industry. In 1987, Java had more than 79% of the nonoil manufacturing industry firms; therefore, it dominated the industry, as shown in Table 1. Under this circumstance, Java contributes the highest nonoil manufacturing value added in the country (74.5% of the national total in 1988), as shown in Table 2. The problem is how to foster a more even regional distribution of manufacturing activity by using industrial estates as a regional policy instrument. International
Table 1

Number of Establishments, Employment and Value Added of Medium & Large, and Small-scale & Home Nonoil Manufacturing by Province, 1975, 1986 and 1987

<table>
<thead>
<tr>
<th>Provinces/Regions</th>
<th>Number of Firms Established</th>
<th>Employment (1)</th>
<th>Value Added (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 Aceh, DI</td>
<td>18</td>
<td>43</td>
<td>0.24</td>
</tr>
<tr>
<td>02 North Sumatra</td>
<td>345</td>
<td>740</td>
<td>4.62</td>
</tr>
<tr>
<td>03 West Sumatra</td>
<td>47</td>
<td>106</td>
<td>0.63</td>
</tr>
<tr>
<td>04 Riau</td>
<td>47</td>
<td>135</td>
<td>0.63</td>
</tr>
<tr>
<td>05 Jambi</td>
<td>27</td>
<td>89</td>
<td>0.36</td>
</tr>
<tr>
<td>06 South Sumatra</td>
<td>73</td>
<td>158</td>
<td>0.98</td>
</tr>
<tr>
<td>07 Bengkulu</td>
<td>1</td>
<td>10</td>
<td>0.01</td>
</tr>
<tr>
<td>08 Lampung</td>
<td>52</td>
<td>153</td>
<td>0.70</td>
</tr>
<tr>
<td>09 Jakarta, DKI</td>
<td>1054</td>
<td>1746</td>
<td>14.11</td>
</tr>
<tr>
<td>10 West Java</td>
<td>1566</td>
<td>2486</td>
<td>20.97</td>
</tr>
<tr>
<td>11 Central Java</td>
<td>1808</td>
<td>2141</td>
<td>24.21</td>
</tr>
<tr>
<td>12 Yogyakarta, DI</td>
<td>182</td>
<td>204</td>
<td>2.44</td>
</tr>
<tr>
<td>13 East Java</td>
<td>1790</td>
<td>2934</td>
<td>23.97</td>
</tr>
<tr>
<td>14 West Kalimantan</td>
<td>37</td>
<td>103</td>
<td>0.50</td>
</tr>
<tr>
<td>15 Central Kalimantan</td>
<td>21</td>
<td>73</td>
<td>0.28</td>
</tr>
<tr>
<td>16 South Kalimantan</td>
<td>50</td>
<td>139</td>
<td>0.67</td>
</tr>
<tr>
<td>17 East Kalimantan</td>
<td>26</td>
<td>115</td>
<td>0.35</td>
</tr>
<tr>
<td>18 North Sulawesi</td>
<td>19</td>
<td>78</td>
<td>0.25</td>
</tr>
<tr>
<td>19 Central Sulawesi</td>
<td>8</td>
<td>26</td>
<td>0.11</td>
</tr>
<tr>
<td>20 South Sulawesi</td>
<td>74</td>
<td>170</td>
<td>0.99</td>
</tr>
<tr>
<td>21 South East Sulawesi</td>
<td>31</td>
<td>170</td>
<td>0.42</td>
</tr>
<tr>
<td>22 Bali</td>
<td>80</td>
<td>284</td>
<td>1.07</td>
</tr>
<tr>
<td>23 West Nusa Tenggara</td>
<td>73</td>
<td>73</td>
<td>0.98</td>
</tr>
<tr>
<td>24 East Nusa Tenggara</td>
<td>20</td>
<td>146</td>
<td>0.27</td>
</tr>
<tr>
<td>25 Maluku</td>
<td>9</td>
<td>42</td>
<td>0.12</td>
</tr>
<tr>
<td>26 Irian Jaya</td>
<td>11</td>
<td>18</td>
<td>0.15</td>
</tr>
<tr>
<td>27 East Timor</td>
<td>n.a.</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Sumatera</td>
<td>610</td>
<td>1434</td>
<td>8.17</td>
</tr>
<tr>
<td>Jawa</td>
<td>6400</td>
<td>10162</td>
<td>85.69</td>
</tr>
<tr>
<td>Kalimantan</td>
<td>134</td>
<td>430</td>
<td>1.79</td>
</tr>
<tr>
<td>Sulawesi</td>
<td>132</td>
<td>311</td>
<td>1.77</td>
</tr>
<tr>
<td>Eastern Islands</td>
<td>193</td>
<td>441</td>
<td>2.58</td>
</tr>
<tr>
<td>Indonesia</td>
<td>7469</td>
<td>12778</td>
<td>100.00</td>
</tr>
</tbody>
</table>

(1) Employment data are in persons, source: BPS, Economic Census, 1986.
(2) Value added per establishment in million of Rupiah.
(3) L&M: Large and medium-scale nonoil manufacturing industry.
(4) S&H: Small and home/cottage nonoil manufacturing industry.
n.a.: data are not available
DI: Daerah Istimewa (Special Region)
DK1: Daerah Khusus Ibukota (Special Capital Region)
Source: Central Bureau of Statistics (BPS) and Ministry of Industry (Pusdata)
Table 2
Nonoil Manufacturing Value Added
by Province, 1983 - 1988

<table>
<thead>
<tr>
<th>Provinces/Regions</th>
<th>Share of Provincial MVA in National MVA</th>
<th>MVA Share in Provincial GDP</th>
<th>MVA per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aceh, DI</td>
<td>1.4</td>
<td>1.3</td>
<td>9.0</td>
</tr>
<tr>
<td>North Sumatra</td>
<td>6.2</td>
<td>6.3</td>
<td>13.9</td>
</tr>
<tr>
<td>West Sumatra</td>
<td>1.7</td>
<td>1.4</td>
<td>10.0</td>
</tr>
<tr>
<td>Riau</td>
<td>0.9</td>
<td>0.7</td>
<td>6.6</td>
</tr>
<tr>
<td>Jambi</td>
<td>0.6</td>
<td>0.6</td>
<td>8.6</td>
</tr>
<tr>
<td>South Sumatra</td>
<td>6.5</td>
<td>4.4</td>
<td>19.6</td>
</tr>
<tr>
<td>Bengkulu</td>
<td>0.1</td>
<td>0.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Lampung</td>
<td>1.1</td>
<td>1.4</td>
<td>7.7</td>
</tr>
<tr>
<td>Jakarta, DKI</td>
<td>18.1</td>
<td>19.1</td>
<td>17.1</td>
</tr>
<tr>
<td>West Java</td>
<td>20.2</td>
<td>23.2</td>
<td>17.6</td>
</tr>
<tr>
<td>Central Java</td>
<td>10.9</td>
<td>10.9</td>
<td>11.5</td>
</tr>
<tr>
<td>Yogyakarta, DI</td>
<td>0.9</td>
<td>0.8</td>
<td>8.7</td>
</tr>
<tr>
<td>East Java</td>
<td>23.9</td>
<td>20.6</td>
<td>16.3</td>
</tr>
<tr>
<td>West Kalimantan</td>
<td>1.6</td>
<td>1.7</td>
<td>13.6</td>
</tr>
<tr>
<td>Central Kalimantan</td>
<td>0.6</td>
<td>0.7</td>
<td>9.9</td>
</tr>
<tr>
<td>South Kalimantan</td>
<td>1.4</td>
<td>1.2</td>
<td>12.4</td>
</tr>
<tr>
<td>East Kalimantan</td>
<td>0.9</td>
<td>2.4</td>
<td>7.1</td>
</tr>
<tr>
<td>North Sulawesi</td>
<td>0.5</td>
<td>0.3</td>
<td>5.4</td>
</tr>
<tr>
<td>Central Sulawesi</td>
<td>0.3</td>
<td>0.2</td>
<td>5.8</td>
</tr>
<tr>
<td>South Sulawesi</td>
<td>1.0</td>
<td>1.1</td>
<td>4.3</td>
</tr>
<tr>
<td>South East Sulawesi</td>
<td>0.0</td>
<td>0.1</td>
<td>0.8</td>
</tr>
<tr>
<td>Bali</td>
<td>0.5</td>
<td>0.6</td>
<td>4.3</td>
</tr>
<tr>
<td>West Nusa Tenggara</td>
<td>0.2</td>
<td>0.1</td>
<td>2.3</td>
</tr>
<tr>
<td>East Nusa Tenggara</td>
<td>0.1</td>
<td>0.1</td>
<td>1.9</td>
</tr>
<tr>
<td>Maluku</td>
<td>0.3</td>
<td>0.8</td>
<td>5.0</td>
</tr>
<tr>
<td>Irian Jaya</td>
<td>0.1</td>
<td>0.1</td>
<td>1.3</td>
</tr>
<tr>
<td>East Timor</td>
<td>0.0</td>
<td>0.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Sumatera</td>
<td>18.4</td>
<td>16.0</td>
<td>12.4</td>
</tr>
<tr>
<td>Jawa</td>
<td>74.0</td>
<td>74.5</td>
<td>15.7</td>
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<tr>
<td>Kalimantan</td>
<td>4.5</td>
<td>6.0</td>
<td>10.7</td>
</tr>
<tr>
<td>Sulawesi</td>
<td>1.8</td>
<td>1.7</td>
<td>4.4</td>
</tr>
<tr>
<td>Eastern Islands</td>
<td>1.2</td>
<td>1.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>100.0</td>
<td>100.0</td>
<td>13.4</td>
</tr>
</tbody>
</table>

MVA: Manufacturing Value Added
DI: Daerah Istimewa (Special Region)
DKI: Daerah Khusus Ibu Kota (Special Capital Region)
Source: Central Bureau of Statistics and Ministry of Industry (Pusdata)
experiences have shown that by promoting decentralization of industrial-estate development policies and programs to the regions, the state empowered the regions with initiatives to develop their own strategy for industrial-estate development. Under this circumstance, the policy makers can expect that a more even regional distribution of industry in Indonesia can be fostered.

OBJECTIVES OF THE STUDY

The main objective of this study is to prove the hypothesis that in developing industrial estates, the Indonesian government does not encourage decentralization of decision-making concerning the development of regional and local industries, especially the small and home/cottage industries. This hypothesis is important to be proven, because it will explain how the Indonesian government approaches the industrial-estate development as a way to promote regional and local industrialization, which are dominated by the small and home/cottage industries. By knowing the approach, we can consider whether the industrial-estate development mechanism in Indonesia needs to be strengthened or not, and if it needs to be strengthened, how it will be. This attempt to strengthen the industrial-estate development mechanism relates to the government efforts to encourage the participation of the regional and local private sector in industrial development.

Besides that, this study is directed to search for the
appropriate mechanism within the Indonesian bureaucratic system that can expand the regional and local governments' role for industrial-estate development. This objective signifies the need for decentralization in the industrial-estate decision-making process. Decentralization is an important condition for industrial-estate development in other countries, because it empowers regional or local governments to initiate their own strategy for accommodating the vast labor-intensive cottage industries in the regions to engage with the industrial-estate businesses or to establish themselves on the estate (United Nations, 1966; Mathur, 1971; Moriarty et al., 1980; Hilpert, 1991).

The other objective of this study is to observe whether the available industrial-estate development mechanism is effective enough to distribute industrial activities evenly over the regions and localities in Indonesia. This objective highlights the strategy needed for developing industrial estates in the regional and local areas. In this case, an industrial estate is treated as a method for regional development. In the current Repelita V, the Indonesian government has considered that industrial estates is one of the development programs aimed at

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4 Hill (1989) and Wymenga (1990) have indicated that there are a few huge capital-intensive industries bunched around the extractive enclave industries outside Java. This kind of industry is also concentrated in several places in Java together with the modern manufacturing-investments. Conversely, there are the vast labor-intensive cottage industries scattered throughout the regions. In 1986, of the total national industrial firms, cottage industries represented 93%.
encouraging an industrial-business climate in the regions and localities (Government of Indonesia, 1985).

**METHODOLOGY AND DATA**

In seeking the appropriate mechanism for developing industrial estates in Indonesia, we use a comparative analysis. We compare Indonesia's industrial-estate development mechanism with the mechanism of the international industrial-estate development as empirical evidence. For theoretical evidence, we refer to the explanation of Storper (1981) and Moriarty et al. (1980) about the industrialization process and the industrial development system from the community's perspective, respectively.

In this analysis, we begin by answering what, why, and how industrial estates should be developed, deriving the answers to these questions primarily from a theoretical perspective. We use Storper's article (1981) to explain the theory behind the industrialization process and the Moriarty et al. article (1980) to highlight the importance of the community in the industrial-development system. Moriarty et al. (1980) introduce a model of a decision-making process called the land-use planners' conceptual model of industrial development that signifies the industrial-development mechanism. They use this model to justify the decision-making process for industrial development planning, policies, and guidelines that occurred in the community.

We will use the empirical evidence, on the other hand, to
refine the answers to the what and why questions of the industrial-estate development. For this purpose, we examine international industrial-estate experiences in order to compare and contrast the relevant decision-making process of international industrial-estate experiences with those in Indonesia.

We then answer the how question, featuring the industrial-estate development mechanism. In this case, we use the international industrial-estate development experiences to highlight the objectives and the development mechanism of industrial estates. If the Indonesian government formulates the regulations of industrial-estate development in relatively the same format as shown by the international experiences, then they will find that decentralization of decision-making power to regional and local governments is necessary in promoting industrial-estate development in the regional and local areas. For this purpose, we also study the industrial-estate development regulations in Indonesia.

To complete all of the above analyses, we will use the following data and information:
1. The definitions and types of industrial estate,
2. The industrial-estate development objectives and mechanisms that are applied by countries other than Indonesia, and
3. The industrial-estate development objectives and mechanism for those that are regulated in Indonesia.

In regard to the first point above, we will specifically examine
the evolution of the definition regarding the industrial-estate concept and the terms that are commonly used to denote the concept, such as industrial park and industrial district. For the second point, we will study the U.S. and the Philippines experiences in developing industrial estates. We selected the United States because it pioneered in the industrial-estate development, and it represents developed countries. We selected the Philippines because of its unique experience in developing industrial estates that are being ruled by two different regimes of government and attached to the other development program. Besides that, it represents developing countries and is another Southeast Asia country. We will also review briefly experiences in other countries, such as France, Germany, India, and Italy that implemented an industrial-estate concept. We will then analyze the last point above.

In addition to this, we will review the roles of economic agents, the public and private sectors, in the industrial-estate establishment in Indonesia in terms of the following regulations:

1. National Act No. 5, 1984 about the industry (UU No. 5 tahun 1984),
2. National Act No. 5, 1974 about the governmental administration in the regions (UU No. 5 tahun 1974),
3. Presidential Decree No. 53, 1989 about industrial estates (Keppres No. 53 tahun 1989),
4. Ministerial Decree No. 291/M/SK/10/1989 from the Ministry of Industry, about the permits and technical standards for
industrial-estate development.

5. Chairman of National Board of Land Affairs' Decree No. 18, 1989, about land preservation and certification for industrial estate.

We will use these regulations to help explain the administration of business licensing and sponsorship, the mechanism to reserve and control land for industry and industrial estate, and the type of property rights.

ORGANIZATION OF THE THESIS

In the first chapter, we will describe the hypothesis formulation and the background of it. In Chapter 2, we will discuss the theories and concepts behind the industrial-estate development, viewing industrial estates as a concept for industrial development in regions or local areas. Industrial estates is a generic concept, having been used by many countries under many different terms. In regard to all of these terms, we will describe the definitions and development objectives of the more recent terms or types of industrial estate, industrial park, and industrial district.

In Chapter 3, we will discuss the international experiences to highlight their mechanisms in dealing with industrial-estate development, including the development issues, the goals, the policy and regulations, and the implementation process of industrial estates. In Chapter 4, we will describe the same things but for the case of Indonesia. In this chapter, we will
compare and contrast the relevant decision-making process for industrial-estate development, between international experiences with those in Indonesian, in relation to the decision guides, action instruments, and decision factors of the model. We will focus the analysis on proving the hypothesis and the consequences of it.

In Chapter 5, the last chapter, we will present a conclusion and recommendations for further adjustment in regard to the findings from the previous chapters. In this chapter, we will also describe the important and complex implications of changing regulations as a necessary alternative to meet the industrial-estate development demand. Finally, we expect that all of these analyses will provide policy makers with a way to make industrial-estate development a success in Indonesia.
CHAPTER 2
INDUSTRIAL ESTATES

Many countries have used "industrial estates" as a development concept. The main idea behind this concept is to provide a site or location, in advance, for industrial activities that tend to be clustered.¹ This concept was introduced in the late 19th century in the United Kingdom and the United States. Nowadays, analysts use terms such as industrial parks, planned industrial districts, export processing zones, etc., to denote the industrial-estate concept. All of these terms are very much alike in terms of the concepts.

The development of industrial estates itself cannot be separated from the industrialization process. It can be used as a component to facilitate industrialization in the area where the industrial estate is located. It involves a decision-making process to determine its location. The decision makers, in this case, are individuals from two major organizations, the public and private organizations. These decision makers may have

¹ According to Markusen (1985), the initial location of innovations attract industries, although sometimes an important resource pulls the industry toward the region where that resource is ample. At these initial locations, the rapidly growing firms will tend to draw subcontracting firms or suppliers around them. In that particular location, the industries tend to be clustered in order to be near to the ongoing innovative activity and to the ready access of information. Markusen calls this an agglomeration process, and it will increase the industrial concentration in its initial location.
different development objectives for industrial estates, yet they must agree in the end upon the use of a particular piece of land for an industrial-estate location. In this chapter, we explain the theories behind industrialization process and industrial-estate development in relation to industrial location and the local community served. We discuss some terms of industrial estate that are commonly being used (i.e., industrial parks and industrial district) to give a general idea about the characteristics behind the terms.

**INDUSTRIAL-DEVELOPMENT THEORIES**

There are many factors that must be considered in analyzing industrial-estate development and agreeing upon which factors are appropriate, both of which depend on an individual’s perspective. Storper (1981) has indicated that there are, at least, two perspectives concerning industrial development (in relation to industrial location and regional growth). The first focuses on the techniques of the system analysis used to analyze the growth and performance of industrial system. The second credits the influence of the most important element in the economic structure, labor, on the performance of corporations. Our study relies on both theories, yet we favor the system-analysis theory rather than the structural theory.

**Industrial Decision-Making Process**

Systems-analysis theorists admit that organization
(government and business), factories and offices, products and production processes (techniques), and cities and information are all associated in a system, and they are essential for industrial development. The organization (government and business) is the dominant factor that drives industrial development. Governments at all levels, on the one hand, act as legislators and create mechanisms and agencies to assure economic expansion (Moriarty et al., 1980). The corporations or firms (or quasi-public companies), on the other hand, usually are the economic owners of capital or any other assets, in which, on the basis of ownership, they may organize the process of production (Milanovic, 1989). This process involves activities such as fabricating, changing form, assembly and packaging.²

Behind these organizations, there are individuals who make decisions for industrial development. Wilkin and Sutton (1986) define a decision as a choice (which implies values) made by an individual or a group of people among alternative courses of action (options) that are expected to produce different outcomes. They consider that decision makers hold beliefs, mostly rational, based on information received. These decision makers will use information that might support their beliefs and interests. In regard to the industrial development and the community that will be served, this information is, among other things, those factors

² The activities mentioned (fabricating, etc.) can be regarded as the manufacturing activities. Manufacturing itself has been defined as the mechanical or chemical transformation of materials or substances into new products (SIR, 1984)
that determine the appropriate industrial development as mentioned by Moriarty et al. (1980) as: the decision guides, the action instruments, and the decision factors. They use these factors to assess a reasonable risk and other consequences of their decisions.

According to Moriarty et al. (1980), the decision guides are the plans or policies of local public decision makers known as indirect intervention for industrial development (i.e., land-use plans). The action instruments are the direct interventions in the industrial-development process into which regulations, public investments, and incentive or disincentive programs are being established. These decision guides and action instruments are parts of the community-development system.

The decision factors consist of: (1) contextual factors, (2) property characteristics, and (3) decision-agents characteristics. The contextual factors are those factors that determine the community's relative attraction to industrial development, such as overall characteristics of industrial land supply, economic structure, community attitude, etc. The property characteristics contain factors that determine the relative impact of property characteristics on development decisions. These factors may be physical, locational, and institutional. The physical factors include topography and soil. The locational factors include accessibility and neighborhood, while the institutional factors include zoning, service districts and size of parcel. The decision-agents' characteristics, in
particular, determine the impact such a development will have on the community’s goals and solution of its problems. These decision-agents could be the pre-development landowners, the development agencies, and the industrial firms or corporations (Moriarty et al., 1980). These decision factors are part of the industrial development system.

**Roles of Community**

To establish the industry as well as industrial estates, governments need the cooperation of businesses. Governments often use their political power to influence the decision makers in the business community. Yet, the concentration of this political power differs according to the system of governments. Under a centralistic government, most of the political power concentrates around the central government decision makers. For those countries that follow the federal system of governments, the regional and local level of governments may possess much of the political power for industrial development. Businesses must understand this type of decision-making process.

An industrial-estate location is the main issue on which governments and businesses must both agree that a certain piece of land is to be used for industrial development. The agreement upon the use of a location for industrial-estate also must be achieved within the government body itself, primarily between the levels of government (central, regional, and local levels). Moriarty et al. (1980) consider that the state agencies try to
direct the prospective industry to depressed areas, while communities with their own development organizations try to attract it to their locality. However, according to Moriarty et al. (1980), numerous private organizations and real estate development firms also try to attract their industrial development to specific sites that they own, so as to meet their expectation for particular location factors, such as transportation (accessibility), labor cost, and the appropriate community.

All of these mean that once the location is set up, the governments—primarily local government—and the businesses should agree to take the consequences of placing the industrial development in that particular location. The investors and the local community must have a mutual understanding to maintain the industrial activities. Both the investors and community must benefit from the activities. Yet, the success or failure of the industrial development may not fully be determined by local community. There are many other factors that might lead to the success or failure of industrial development, such as, the changing pattern of market demands, the shifting of political power among the public decision makers, etc.

Under the hierarchical government organization, Cochrane (1983) suggests that the central government must be aware of the comparative advantages of local governments over the central government in the development process. He remarks that local governments face most of the challenge to meet community needs.
and to make the best use of their local resources (both public and private) and power (both fiscal and nonfiscal). The central government must give a chance for the local governments to be effective participants in development activities. Besides that, the local government (or governments at any level) must make certain that the private sector is effectively involved and able to use its vast array of resources for local problem-solving (SRI, 1982).

To meet local needs for development, central governments may use a decentralization process. Rondinelli et al. (1984) define decentralization as the transfer of responsibility for planning, management and resource raising, and allocation to:

(a) field units of central government ministries or agencies,
(b) subordinate units or levels of government,
(c) semiautonomous public authorities or corporations,
(d) area-wide, regional or functional authorities, and
(e) nongovernmental private or voluntary organizations.

They also note that there are four types of decentralization that have been tried in many developing countries: (1) deconcentration, (2) delegation, (3) devolution, and (4) privatization. Deconcentration is the handing over of some administrative authorities to lower levels within central government ministries or agencies. Delegation means transfer of specially defined functions of managerial responsibility to organizations that are outside the regular bureaucratic structure and that are only indirectly controlled by the central
government. Devolution is the creation or strengthening—financially or legally—of subnational units of government, the activities of which are substantially outside the direct control of the central government. Privatization is a divesting of the responsibility for the handling some functions and transferring it to voluntary organizations or allowing the functions to be performed by private enterprises.

The willingness of the central government to do one or more type of decentralization, primarily delegation and/or devolution, will give local governments more opportunities to manage their own resources and develop their own development policies. According to Creech-Jones (in Cochrane, 1983), local governments have the potential to increase local participation in the development process. Besides that, they could assist their community to be more "efficient" than the central government; therefore, decentralization in reverse might give a chance for the central government to share the burdens of development with the local governments.³

INDUSTRIAL-ESTATE DEVELOPMENT

As mentioned earlier, the development of industrial activities can be seen from two perspectives, the system-analysis theory and the structural theory. System-analysis theorists

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³ Efficient here means that, in the management of development to deliver service functions (i.e., education, health, information, etc.), the local government is the closest to the people.
suggest that industrial activity is developed following the "product cycle" phenomena conveyed from its system of production. The industrial system of production does not operate by itself, it connects to other systems, such as, the government, the corporation and the spatial system, instead of being supported (Storper, 1981). Industrial-estate facilitates the system of production with the connections needed for proper operation.

Structural theorists consider that industry is a labor-demanding activity. Labor can either be critical of or supportive to industrial development. Industry, in this case, plays an important role in creating job opportunities for the community being served. This job creation is the primary benefit pursued by many governments in developing countries when they set up an industrial development policy. 5

An industrial estate is just a means to enhance industrial activities. Their location is more likely to be a result of compromises between the businesses (industrial-location seekers) and the governments (as initiators or sometimes also as developers) for industrial development. The interest of

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4 The product cycle, originated by Kuznets and Burns, describes an industrial development behavior that features several distinctive stages occurring between innovation and mass production in the industrial system of production (Markusen, 1985).

5 For this industrial development policy, Austin (1990) gives Zimbabwe as an example regarding the development of free trade zones in that country. A free-trade zone is one concept used for the industrial-estate concept.
businesses is to operate the industry for a satisfactory profit; while the interest of governments is to promote the economic well-being of the community (Moriarty et al., 1980). To maximize the profits, most of the industrial companies demand skilled productive workers that match the technology level used in the industry. Under this circumstance, the companies will prefer to locate where workers and the working environment can guarantee that the companies will have the most profitable industrial activities. In this case, governments can support this preference by directing into that particular location the infrastructure development that can support the industrial-estate development. Forcing industrial-estate development into a certain location may need extra attention, such as persistent promotion, law enforcement, training for employment, etc.

**What is an Industrial Estate?**

An industrial estate itself has been defined in many ways. In this case, Mathur (1971, pp. 10-11) provides the following definitions:

The earliest definition of industrial estate was provided by Dr. William Bredo in 1960 in his book *Industrial Estate, Tool for Industrialisation* when he called it "a tract of land which is sub-divided and developed according to a comprehensive plan for the use of a community of industrial enterprises." He further elaborated that the comprehensive plan must make detail provision for streets and roads, transportation facilities and installation of utilities, and may provide for the erection of factory buildings in advance of sale or lease to occupants. The plan may also ensure adequate control of the site and buildings through zoning.

In the same book, Bredo has also introduced the concept of fully packaged estate which is an improved tract of land
provided with industrial buildings large enough in area to provide sufficient economies of scale and offering special facilities and services to industrial occupants. These so-called fully packaged estates have now become to be known as industrial estates in developing countries.

Dr. P.C. Alexander followed up in 1961-62 with a pioneering study on the Industrial Estate in India and describes an industrial estate as "a group of factories constructed on economic scale in suitable site with facilities of water, transport, electricity, steam, bank, post office, canteen, watch and ward and first aid and provided with special arrangements for technical guidance and common service facilities."

The United Nations in its publication entitled Policies and Programmes for the Establishment of Industrial Estates defined an industrial estate as "a planned clustering of industrial enterprises offering standard factory buildings erected in advance of demand, and a variety of services and facilities to the occupants."

These definitions refer to the same things that comprise the industrial estate, such as: a plan, a tract of land (a site), a number of service facilities and utilities, factory and office buildings, and the occupants. The United Nations (1966) has recognized that there are also common features in the establishment of industrial estates. These features are venture undertakings to develop a site, where sometimes general purpose "speculative" factories are erected, prior to an agreement of sale and lease with prospective occupants (manufacturers). Besides that, a huge capital outlay from the public or private sector, or both public and private sectors together are tied up for long periods of time in land purchase and development expenditures. In many cases, this development is combined with promotional measures and incentives to induce manufacturers to establish themselves on the estate.
In developing countries (including Indonesia), the initiatives and responsibility for setting up the first industrial-estates usually are taken by the Government (United Nations, 1966). The government usually is able to promote financial support and other incentives for industrial-estate development. Without government support, the private sector would be hesitant to take all the risk of this highly capital venture-undertaking business. The government role, in this case, is very important for guiding the industrial-estate development. Yet, what level of government (central, regional, or local) should have the authority to guide the industrial-estate development is another issue. This issue primarily concerns the location of industrial-estate development and the community that will be served.

The industrial-estate definitions above describe an industrial estate more in terms of its physical characteristics as the outcome of a decision-making process, than in their representation as an organization. An industrial estate in itself is an organization (corporation or firm) that stands primarily between two interests, the government interest as the initiator or developer and the firms or corporations' interests as the participants or users. An industrial estate can be used as an effective bridge to connect these interests, yet it depends

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6 I associate the term "guide" here with the guidance system of the Land Use Planner's Conceptual Model of Industrial Development (Moriarty et al., 1980). This guidance system is the beginning of the decision-making process for industrial location decision initiated by local public decision makers.
on how the decision-makers in the government and private-sector could have the complement of interests and mutual understanding and the benefits from developing the industrial estates. By considering the government hierarchy, the interests that occur are not only between the government and the private sector, but also between the level of government itself as the initiator of industrial-estate development.

In Indonesia, the central government was the initiator of industrial-estate development. The central government defines an industrial estate as a site for clustering of manufacturing activities that are planned and equipped with infrastructures and other facilities as needed to support the manufacturing activities in the estate (site). The site is prepared and managed by an industrial-estate company (Government of Indonesia, 1989). The company that manages the development of an industrial estate can be a state-owned company, co-operative unit company, a domestic or international private company, or a joint venture between all of the above-mentioned companies.

Why Industrial Estates Need to be Developed

Mathur (1971) suggests that an industrial estate is not a multipurpose tool; and, therefore, no single type of industrial estate could possibly be therapeutic in all situations. This suggestion indicates that industrial estates are developed to meet some specific needs. There are many reasons implied in these needs. The United Nations (1966) has recognized that the
reasons for industrial-estate development can be categorized into three groups: (1) industrialization, (2) regional development, and (3) area and community development.

Industrialization is a process to increase the average level of technology used by industrial activities in a country. An industrial estate offers many facilities, such as promotion, assistance, and information that can be used by the occupants to enhance their industrial activities. In case of regional development, the reason is to guide the establishment of industrial estate into a certain location. This establishment and the fulfillment of industrial estate with industrial activities in this location, in the end, will change the economic structure of the community that are served. In the area and community development, the reason for industrial-estate development is fairly similar to the regional development; however, in this case, industrial estates are developed with a view to promoting local interests and to accommodating primarily small and medium-size manufacturing activities, which mostly develop in the local areas.

The United Nations (1966) has recognized that development policy concerning industrial-estate location can be used as an effective policy for inducing decentralization of industrial development in the regions or local areas. Mathur (1971) also recognized that an industrial estate is an effective catalyst for advancing the rate of industrial activity and for bringing about a spatial order in the economy that can maximize economic and
social growth. The industrial-estate development in Indonesia is not so different with all the needs and the purposes of industrial-estates development as mentioned above. Yet, the development of an industrial estate in Indonesia has to face the specific issue concerning national interests to expand and to deepen the regional and local participation in the growth of manufacturing export.

TYPES OF INDUSTRIAL ESTATES

The term "industrial estate" is used as a generic concept (United Nations, 1966) that slightly evolved from its original concept. This concept is being used in many countries under different terms, such as industrial park, industrial district, industrial subdivision and trading estate. Yet, all of these terms still denote an industrial-estate concept.

Mathur (1971) has identified that the development of industrial estates can be classified according to: (1) the industrial activity, (2) the industrial location, and (3) the types of sponsorship. There are, at least, ten types of industrial-estate that can be developed in relation to these categories:

1. In regard to the industrial activity:
   i. Industrial estate for general purposes,
   ii. Ancillary industrial estates,
   iii. Single trade industrial estates,
   iv. Functional industrial estates.
2. In regard to the industrial location:

v. Industrial estates in or around big cities and metropolitan areas,
vii. Industrial estates in small towns,
vii. Industrial estates in rural areas.

3. In regard to the type of sponsorship:

viii. Government industrial estates,
ix. Private industrial estates,
x. Privately assisted industrial estates.

In the development of an industrial estate, all of these categories may overlap. For example, when the formulation of industrial-estate development concepts must be focused on facilitating the needs to develop small-scale manufacturing activities in rural areas, then the type of industrial estate that should be developed is the one that is appropriate for rural areas (category vii), sponsored by a privately assisted industrial estate (category x), which developed for general purposes (category i).

Given the above classification, there are many types of industrial estate that can be developed from different combinations of the ten categories. Any combination that might occur must be designated as a particular concept of industrial estate. Here, different terms are being used in the application of industrial-estate concepts to emphasize the major characteristics of its implementation. The following are the terms that are currently being used by many countries in the
world to denote industrial-estate development concepts.

**Industrial Park**

The Urban Land Institute (ULI, 1975) has realized that industrial parks and their antecedents have had many names, such as: manufacturing district, planned industrial district, organized industrial district, industrial estate, and, since 1950, industrial park. Just like the other concepts, the industrial-park concept emphasizes the industrial character of many of its occupants. This concept has continuously evolved, and, in the United States, terms such as research park, business park, and office park are used to represent a variety of industrial activities and their related service activities.

Most of the developed countries, such as United Kingdom, Japan, and the United States, nowadays, are using industrial parks to maintain their interest in industrial-development and environmental protection. Murphy in Douglass and McMahon (ed., 1959, p. D-2) defined industrial park as:

... a tract of land subdivided and developed according to a comprehensive plan for the use of a community of industries. The plan must provide for continuous management and must be designed to insure compatibility between the existing character and activities of the community in which the park is located and the industrial operations conducted therein.

The Dartmouth Conference on Industrial Parks in 1958 (ULI, 1975, p. 5) defined the industrial park as:

... a planned or organized industrial district with a comprehensive plan which is designed to insure compatibility between the industrial operations therein and the existing activities and character of the community in which the park...
is located. The plan must provide for streets designed to facilitate truck and other traffic, proper setbacks, lot size minimums, land use ratio minimums, architectural provisions, landscaping requirements, and specific use requirements, all for the purpose of promoting degrees of openness and park-like character which are appropriate to harmonious integration into the neighborhood.

The industrial park must be of sufficient size and must be suitably zoned to protect areas surrounding it from being devoted to lower uses. The management is charged with continuing responsibility of preserving compatibility between the park and the community as well as protecting the investment of the developers and the tenants.

All of these definitions underline the importance of comprehensive planning, environmental restrictions, serving the neighborhood and community interests, and sufficient services in the park establishment. Restrictions are being considered in the development of industrial parks, because of the development objectives that have to be achieved. These objectives are:7

i. consistency with community goals,
ii. efficient business and industrial operations,
iii. human scale and values,
iv. compatibility with natural environments, and
v. achieving and sustaining the highest land values.

In regard to these objectives, industrial parks seem to be a useful mechanism for solving industrial-development problems that mostly occurred in urban areas, in which the industries are crammed into insufficient areas, hampered by inconvenient working environments and creation of pollution (see also ULI, 1975). The

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7 These objectives are accepted by the National Association of Industrial and Office parks (NAIOP) from the National Industrial Zoning Committee (NIZC), following the industrial-park definition and its code of standards.
development of an industrial-park is expected to solve all of these problems, regardless of the type of industrial activities that will be developed by the prospective occupants in the estate (site). The number and degree of restrictions in the industrial park, however, may prevent several types of industrial activities from occurring in the park. The other factor that may hamper the prospective occupants is that the sites in industrial parks are relatively expensive, compared to suburban industrial acreage, because the sites are often associated with better services and superior location (SIR, 1984).

The main distinction between an industrial park and an industrial estate is that an industrial park has more restrictions than an industrial estate to guarantee the acceptability of industrial activities and their physical impacts on the environment and the local community being served. Industrial-estate development does not use too many restrictions because its emphasis is on promoting industrial development. Thus, industrial estate is more receptive to a wider range of prospective occupants than industrial parks.

**Industrial District**

An industrial district had been defined as any area dominated by industrial activity (ULI, 1975; SIR, 1984); however, when the area is under some controls referring to some standard industrial-development procedures, then the area can be mentioned as the organized or planned industrial district. A planned
industrial district is a suitably located tract of land subdivided and promoted for industrial use by a sponsoring managerial organization (ULI, 1975).

Douglass and McMahon (1959) define a planned industrial district as a tract of land that is subdivided and developed according to a comprehensive plan for the use of community of industries, with streets, rail lead tracts, and utilities installed before sites are sold to prospective occupants. The comprehensive plan must provide for adequate control of the area and buildings through restrictions and zoning, with a view to protecting the investments of both developers of the district and industries occupying the improved sites. This definition describes, again, the essential elements for industrial development, such as the plan, the land (location), infrastructures and facilities, and development control. All of these elements more or less are the same with the elements required for industrial-estate or industrial-parks development.

The main distinction between industrial districts and industrial parks (as well as to industrial estates) is in their operational management. Industrial districts are operated usually by one management, but it can consist of several managements because of the division of tasks between firms, with the latter deriving all the benefits and economies from being spatially agglomerated (Amin and Robins, 1990). An industrial estate or industrial park is managed by one company.

The most common word being mentioned in all of the
definitions concerning industrial district, industrial park, and industrial estate is "zone." A zone or industrial zone is an area selected for industrial uses by public authorities or governments, and it is part of the comprehensive local (city) or regional planning (Mathur, 1971; ULI, 1975; and SIR, 1984). The term zone also is used to denote an area for a very specific industrial activity, such as the Export Processing Zone (EPZ). This EPZ is prepared primarily to facilitate investment in the export-manufacturing activities and consists of several industrial estates, or industrial parks, or even industrial districts.

Most of the concepts for industrial development in the world refer to the whole or some parts of the industrial-estate, industrial-park, and industrial-district definitions mentioned above. The terms used may vary, yet the concepts are essentially the same. They vary because of the industrial activities, the locational characteristics, and the types of sponsorship factors. The concepts themselves are used to facilitate industrial activities by clustering them at a particular location and then serving them properly. Under this circumstance, the term industrial estate used in further discussion may also be interpreted as an industrial park or planned industrial district.
CHAPTER 3
INTERNATIONAL INDUSTRIAL-ESTATE EXPERIENCES

Instead of being used as originally intended as a planned and organized site for clustering industrial activities, industrial estates are apparently being developed in other countries as an important element to facilitate national industrialization. Most countries consider that an industrial estate's location, and all of its attributes, is an important factor in attracting investors to invest in industrial activity that might help to increase the output not only for national economy, but also for the local economy. They have adopted industrial estates as part of their national economic and industrial development objective and of their urban and regional planning (Mathur, 1971). Some of these countries consistently apply this concept, while others do not.

Industrial-estate development is commonly associated with decentralization efforts for inducing industrial activities to regions or local areas as a process of local industrialization. Most countries employ these decentralization and local industrialization mechanisms as their main industrial-estate development objectives. Although they have the same development objectives, countries differ in their industrial-estate development mechanisms. These mechanisms can be categorized according to whether they occur in the developed or developing countries.
We will use these countries' experiences with industrial-estate development mechanisms as important elements for my evaluation of industrial-estate development mechanism in Indonesia. They will enrich my perspective in evaluating industrial-estate development in Indonesia. To serve this purpose, we have selected two countries: the United States to represent developed countries, and the Philippines to represent developing countries.

GENERAL DEVELOPMENT PATTERN

In general, governments and businesses of many countries have invested much of their capital in the activities of industrial estates. In developed countries, the private sector has played an important role in the industrial-estate establishment. Governments mostly act as a facilitator and establish regulations to attract or accommodate private-sector and community interests to develop industrial estates (see Douglass and McMahon, 1959). In developing countries, governments mostly engage with industrial-estate establishments. The big private firms, multinational companies, or cooperative agencies are encouraged to establish industrial estates or to settle their industrial activities in the estate as tenants (see United Nations, 1966; Mathur, 1971).

The United Nations, in a 1966 publication, indicated that developing countries were in the stage of experimenting with
different available methods that could be applied to facilitate industrializing and restructuring their economy to maximize economic and social growth. The industrial estate was one of the available methods at that time. Although this experiment stage occurred 25 years ago, the Indonesian government has just started to popularize industrial estates among its business community. Even so, the purposes indicated by the United Nations seem relevant to recent Indonesian needs in developing industrial-estates.

For developed countries, such as the United Kingdom, the United States, the countries of western Europe, and Japan, the United Nations, in 1966, recognized them to be in the stage of industrial acceleration. This acceleration was accompanied by a growing interest of public authorities at the regional and local levels to promote industrial estates in their areas. Also, industrial estates have been used to decentralize industrial activities from congested urban areas to newly planned and well-developed industrial areas. Industrial estates are supposed to be developed in an optimal environment for both the industrial activities and the community that they serve in order to obtain mutual benefits.

However, some of these developed countries today are in the stage of de-industrialization.1 Damesick and Wood (1987)

1 The United Kingdom is a country denoted as having these de-industrialization problems (Damesick and Wood, 1987). The United States is also facing the same problems, which can be seen from the closing of many factories and the increasing rate of unemployment (Bluestone and Harrison, 1982).
define de-industrialization as a "progressive failure to achieve a sufficient surplus of manufactured exports over imports to maintain the economy in external balance at full employment." This de-industrialization is more likely to be a consequence of macroeconomic problems, such as recession, rather than an industrial problem. Under this circumstance, developed countries still require using industrial-estate methods in re-organizing their industrial and economic structures. The term industrial park is commonly used in developed countries to represent a park-like industrial estate activity.

INDUSTRIAL ESTATES IN THE UNITED STATES

The United States is one of the pioneering countries that has established industrial estates, beginning in 1885. The Clearing Industrial District in Chicago was the first planned industrial district founded as privately owned (Douglass and McMahon, 1959). This establishment was followed by another industrial-estate development that operated based on commercial deals with or without aid from the government. This estate-like industrial development evolved into the modern industrial park as an outgrowth of the earlier industrial district; which then emerged as a major new trend in industrial development (ULI, 1975).
Development Objectives

Planned industrial districts (or industrial parks) in the United States grew rapidly in the 1950s as a manifestation of the industrial decentralization policies and as a new trend in the way of pursuing industrial location (Douglass et al. 1959; Malinowski, 1963). In this period, the industries had expanded their activities to a newly "suitable zoned land" in the outskirts of central cities because of severe problems in the cities to support the operation of industrial systems of production (Malinowski, p. 4, 1963). The industrial-park development objectives ranged from making profits (from developing and selling the land for factory sites) to the promoting of nonprofit schemes aimed at area and community development (Mathur, p. 3, 1971).

The last objective seems to be the major concern of the industrial-park developers during the past 30 years. This objective is a consequence of consistent efforts to decentralize decision-making process of industrial development from central (federal) government to the state and local organizations. This opportunity has been used by community organizations to establish industrial parks. It enriches the type of sponsorship behind the industrial-park development.

In the 1960s, there were at least five types of sponsorships: (1) Private real-estate developers, (2) Private local community groups, (3) Railroads, (4) Government sponsored groups, and (5) Joint government-private local
community groups (Malinowski, 1963, p. 10). Today, the types of sponsorship are more complex than in the 1960s, and community sponsorship is still an option. Besides that, the objective of industrial estates (parks) development has been shifted not only to promoting community and area development, but also to stimulating innovations in science and technology. This objective is important because de-industrialization disintegrates the local economy (Damesick and Wood, 1987; Hilpert, 1991).

**Development Mechanisms**

Community sponsorship emerges as a response to the ongoing concern that the community (and its organizations whether public or private), in the end, must meet the industrial needs for protecting life, properties, facilities and infrastructures, and for providing appropriate working environments (Nixon, 1964, p. 17). The community demands financial support, protection of its natural environment, employment, and tax revenue. In part, these demands can be fulfilled by the existence of the industry or industrial-park located in the community itself. In other words, the existence of an industrial park will increase land values, create related activities, increase the level of income, and contribute tax revenues to the local governments (SIR, 1984, p. 583).
Regarding the benefits that can be gained from establishing industrial parks, there is competition between states and between local governments in attracting manufacturers and businesses to invest in their areas. Local communities establish zoning regulations and other land-control management offered to ensure property values for industrial development (ULI, 1975). The Society of Industrial Realtors has indicated that zoning laws appear to be different from state to state (SIR, 1984, p. 112). These laws (zoning ordinances) may exclusively be formulated to determine special zones for industrial development. Yet, this law should not be regarded as rigid and difficult to change. After all, agencies that create the law are sometimes sensitive to political pressures.

The zoning regulations implemented by local governments determine the type, amount, location, and size of industrial activities within their area of jurisdiction (SIR, 1984, p. 115). In particular, zoning regulations will determine what types of businesses a community can attract. State and local governments have arranged working environments preferable for existing industrial development. Yet, the recent economic crises, as indicated by Hilpert (1991), have driven the United States to "re-industrialize" the economy. State and local governments have become important "catalysts" of this re-industrialization effort (Schmandt, in Hilpert, 1991). They must foster "techno-industrial innovation" to revive the
national economy (Hilpert, 1991). This type of industry relies on the importance of innovations based on research and development (R&D) activity.

State and local governments, again, have played an important role in providing space for this activity. They have launched programs to revive their old industries to create suitable environments and new business for R&D activities (Schmandt, in Hilpert, 1991, p. 158). The use of park-like industrial development has been re-oriented to promote the development of science and technology by implementing the R&D facilities. According to Schmandt, at least, there are three reasons pushing the state to deal with this particular activity: (1) smaller funds received from the central (federal) government, (2) "states want to make their own decisions on policy issues that are important to them," and (3) the available opportunity for making a partnership with the private sector and universities within their area jurisdictions without assuming large financial and administrative obligations.

The central (federal) government only marginally is involved in the R&D park-like development (Goldstein and Luger, in Hilpert, 1991, p. 134). It provides funds for R&D activities; however, only a small number of states received these funds, primarily those that already have had a convincing science and technology infrastructure (Schmandt, in Hilpert, 1991). Other states must rely on their own
capacities to encourage the R&D activities to their area jurisdictions. This funding support, according to Schmandt, may lead to inefficiency in creating adequate research centers around the country and in broadening local participation.

INDUSTRIAL ESTATES IN THE PHILIPPINES

The Philippines industrialization, according to Galang (1988), has been characterized by two periods of dynamic growth: the export-led phase (in the early 1900s) and the import-substitution era (during mid-1900s). During both periods, industry grew under government protection. Under the new regime (Aquino), the government has extended this protection, primarily for cottage industries by giving them financial and technical support.

The change of the regime from Marcos to Aquino has retarded the Philippines' industrialization process. The new governmental effort to decentralize industrial activity has not been supported by a quick response from the central government in the process of industrial development approval. As a result, several local governments have tried to speed up the process by cutting through the bureaucratic system. This can be done under the influence of strong local political leaders (governors).

Development Objectives

The United Nations (1966) discovered that, in Asia,
industrial estates had been developed as a major instrument for encouraging and supporting the creation, expansion, and modernization of small and medium-scale industries. Besides that, decentralization of industry, development of backward areas and rural industrialization also had been emphasized. The Philippines, as one of the Asian countries, has considered these objectives in encouraging its industrial development. The Philippines new government has set up industrial estates as part of its Export Processing Zones (EPZs), developed primarily to attract foreign investors and to promote exports (Triplett, 1991).

The development of EPZs was started in the late 1970s, mostly sponsored by the government. These EPZs were designed as a manifestation of the Nationwide Industrial Estate Program (NIEP) and directed primarily to improve the infrastructure in some selected areas scheduled for potential industrial development (World bank, 1980; Bacani, in Prantila, 1984; Triplett, 1991). They were also planned to attract and facilitate investors to establish their businesses in the zones; however, Galang (1988) has indicated that, during the Marcos administration, these policies (NIEP, EPZs and other supportive programs) were adopted to "force" industrialization. These policies resulted in an industrial structure that was vulnerable to domestic and international economic changes.
Development Mechanisms

The World Bank (1980) has indicated that the Philippines government policies in the 1950s focused on encouraging the development of capital-intensive industry oriented toward domestic markets, instead of exports. Manufacturing output grew rapidly, mostly because of being absorbed by the Philippines domestic market. Yet, as the domestic market became saturated, the output growth gradually declined and manufacturing no longer led the economy. Galang mentioned that manufacturing activities during this period contributed slightly to increasing industrial productivity. The Philippines' policies, basically, had made industry dependent on the government for entrepreneurship and cheap capital offered through their incentive programs.

Galang (1988) noted that investors were mostly attracted to invest because of the import-protection policy rather than because of a desire to be more competitive in the world market. This drove the Philippines' manufacturing industry to become dangerously dependent on imported raw materials and foreign markets, while most of the Philippines industry lacked backward linkages. This situation worsened during the transition from Marcos' to Aquino's government and in the early Aquino's government. Clad (1988) asserts that in the beginning of Aquino's government, the Philippines lost many

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2 Backward linkage is a relationship between an industry with its suppliers which provide inputs for the industry's production process.
good business opportunities because of the long decision-making process. Many programs remain stalled in the bureaucracy, while foreign aid remained unspent. All of this discouraged the business community in the Philippines.

Surviving political unrest, Aquino's government started to revive the Philippine economy by trying to solve on-going social problems, such as unemployment, urban/rural and regional disparities, and poverty (Government of the Philippine, 1986). Industrialization programs have been directed to solve these problems. With the assistance of foreign donors, the reforms have been aimed to make growth in the industrial sector more organic and self-sustaining (Paine, 1991). The government has continued the industrial-estate development program and EPZs in a way to provide a wide range of sites and necessary infrastructure to support manufacturing and assembly operations in the region (Galang, 1988).

In so doing, the central government has placed great effort on continuing the decentralization process.

These include granting and full implementation of the delegation to regional offices of administrative and substantive powers and authorities, and greater and genuine autonomy to the local government through devolution of powers and the transfer of resources and capabilities. (Government of Philippines, 1986)

In the Philippines, local government refers to the 77 provincial governments and other lower-levels of public institutions, such as the cities or municipal governments; and, at the lowest level, the so-called "Barangay." The regional offices are associated with the Regional Development
Councils (RDCs), which serve as the administrative-planning institution for their representative regions (a region consists of several provinces). These institutions embody the personnel from the central government sectoral-line agencies, provincial governors, local congressmen, and are coordinated by the representatives of the National Economic and Development Authority. The RDCs do not have decision-making power, and they only offer recommendations or proposals for regional development (planning, policies, programs, and funds) to the central government.\(^3\)

In general, decentralization in the Philippines still does not help to encourage regional or provincial initiatives to develop their own resources. The role of the central government is still very strong, primarily in the EPZs and industrial-estate development. In the decision-making process to approve locations for EPZs and/or industrial-estates, Tiglao (1990) indicated that for investors to convert the use of land from its present classification, they must submit the proposal for approval to the Department of Agrarian Reform at the central level.

Since the Philippines government intended to increase foreign investment for regional development (particularly in the EPZs and industrial-estate development), the central government is required for its role to be the prime guarantee

\(^3\) Communication with an MIT student who has worked for 10 years with the National Economic and Development Authority (NEDA) of the Philippines.
and liaison between foreign investors and local governments. Aquino's central government allows local governments to develop their own areas. Abueg (1990) has indicated that there are provinces (Cebu and Negros) that are so-called "friendly provinces to businesses." The governors of these provinces are known by many business people for their campaign to keep the provinces businesslike. These governors have used their political power to cut the bureaucratic red tape and speed up the approvals for new projects. As a result, these provinces have attracted a number of (domestic and/or foreign) major companies to invest in their area of jurisdiction.

It is obvious that the United States and the Philippines have different development mechanisms. Yet, both the United States and the Philippines consider decentralization to be an important aspect in industrializing the country. The central (federal) governments perceive that local governments have a very important role to play in the national development programs. The United States and the Philippines have their own style of encouraging local governments. The United States has embodied and practiced decentralization, not only in its physical manner (that is by spatially dispersing industrial activities), but also in its bureaucratic systems, primarily by decentralizing decision-making power of industrial development to its state and local governments. The Philippines promotes decentralization with considerable assistance, guidance, and control from central government.
The governments at all levels of these two countries consider that, in order to augment production, it is important to attract investors (to bring in new money) into their area jurisdictions.

INDUSTRIAL ESTATES IN OTHER COUNTRIES

Other countries, either from developed or developing countries, also have institutionalized the use of industrial estates to attract both foreign and domestic investors. India, Malaysia, Republic of Korea, Singapore, Spain, and Turkey, are among those developing countries that place emphasis in their industrialization policy on implementing the industrial-estate development concept (United Nations, in Ghosh, 1984). In developed countries, the French, Germans, Italians, and Japanese have established a park-like industrial estate (Hilpert, 1991).

Another aspect that is important to developed and developing countries is decentralization. Governments are interested in using decentralization primarily for the spatial dispersement of industrial activities, as well as their interest in decentralizing the decision-making process to local governments; however, the latter depends on the willingness of some decision makers (actors) at the central level. These actors decide to decentralize part of their authority based on the socioeconomic and political situation in the country.
For instance, India developed industrial estates as a major instrument for dispersing industrial activities to rural areas (United Nations, 1966; Mathur 1971). Although India’s main interest in industrialization focused on developing heavy industries, some of India’s central government leaders were not confident in the local governments’ capabilities to maintain these heavy-industry activities, or being participative in development activities on their own (Rondinelli et al., 1984). Therefore, India’s central government cooperated with state governments to stimulate local industrialization by providing a subsidized credit system for small industries and encouraging industrial-estate fulfillment (United Nations, 1962). Also, India’s central (federal) government promoted policies, such as import control and industrial licensing, to protect local industries (Austin, 1990).

Hilpert and Ruffieux (Hilpert, 1991) have recognized that France’s central government, in 1963, also had decentralized its economic activities (including industry) to eight selected cities as a response to the economic concentration in Paris, the capital city of France. France promoted two models of decentralization in developing industrial estates (parks). One is the central government sponsored industrial estates/parks (i.e., Sophia Antipolis), and the other is a locally sponsored organizations (i.e., Grenoble). The government sponsored industrial-estate development program has
the problems of low occupancy rates, lack of small innovative firms, and an inadequacy of a relationship between small and large firms. On the other hand, the locally sponsored organization is able to provide an appropriate working environment that attracts small innovative firms to establish themselves in the park. In this case, the locally sponsored parks have a relatively higher occupancy rate than the central government sponsored park.

Hilpert and Ruffieux also have indicated that, unlike France, West Germany relies on regional and local governments’ initiatives in restructuring its industrial distribution. Regional and local governments consider industrial estates (parks) as a good opportunity for introducing their own industrial-development policy. In this case, the decentralization of industrial activities is initiated by local governments’ and firms’ decisions to locate their production units in a particular region.

Italy has its own experience in industrial estates/parks establishment. Characterized by a large number of traditional and small firms, the Italian central government has assisted local governments--primarily in southern Italy--to create industrial zones, as part of a long-range, public-investment program (United Nations, 1966: Berra and Gastaldo, in Hilpert, 1991). Local authorities and other local institutions have been actively involved in the establishment of enterprises in industrial zones by providing financial assistance and
incentives, such as grants for site improvement, building and machinery costs, and tax concessions (United Nations, 1966; Amin and Robins, 1990). Berra and Gastaldo (in Hilpert, 1991) indicate that the local initiatives are being encouraged, by either the national strategy to decentralize innovation policies, or by the autonomous local/regional initiatives, into which the latter, by far, are the most useful.

CONCLUDING REMARKS

In regard to all of these countries' experiences with industrial-estate development, decentralization has been used by many as a strategy for industrial relocation or restructuring. It has played an important role in promoting local participation of industrial development. Industrial estates have been developed simultaneously with a decentralization effort. As a result, we have found at least three important dimensions to decentralization: (1) decentralization in terms of industrial dispersion over space; (2) decentralization in terms of the need to give assistance and directly promote local participation in industrial-estates/parks development; (3) and decentralization in terms of the power of local organizations to initiate their own decisions.

The effectiveness of these decentralization processes to create local initiatives depends on the industrial-estates' development objectives. On the one hand, if industrial
estates were developed to attract foreign investors, then some assistance from central governments would be needed, as in the Philippines and India. In this case, the central governments must guarantee the security and profitability of foreign investment. Yet, local initiatives for industrial-estate development may be limited by certain restrictions of local governments.

On the other hand, if industrial estates were supposed to encourage local participation in the industrialization process, then decentralization of decision-making process is needed, as in the United States, Italy, and West Germany. This decentralization will encourage local organizations to be innovative in providing an efficient process of production (as in Grenoble, France) and in inventing a new production (as in the United States). Initial local capacities to maintain industrial activities will determine the accelerating process of local communities becoming innovative.

If industrial estates, however, are supposed to attract both foreign and domestic investors, instead of increasing local participation, some assistance from the central government will be needed as well. Sharing decision-making powers will be appropriate for both parties, central and regional/local governments, to avoid the bureaucratic procedures, as in the Philippines. This power-sharing involves the determination of industrial location and regulations (zoning, permits, and tax revenue). The central
government may contribute to local industrialization using financial, technical and managerial assistance that can stimulate industrial activity. On the other hand, by preserving a better working environment through the promise of locations, establishing zoning regulations, developing the infrastructure and increasing skilled labor, regional/local governments may encourage local initiatives to establish new industries.

Under any circumstances, governments are mostly used as a "catalyst" in industrial estates/parks development. The responsibility of managing the industrial estate itself can be done by offering an operating concession to a private or subsidiary private company as in the Philippines and the United States. Governments must provide the private sector with an appropriate development orientation to create mutual benefits in developing industrial-estates/parks.

Characterized by a strong private sector and a national concern to revive their industrial supremacy, governments from developed countries have shifted their industrial orientation from a mass-production industry to a high-tech industry. To facilitate this new orientation, financial support and other assistance for industrial-estate/park development have been given to local governments (i.e., France, the United States, Italy and Germany). However, some developing countries have become more industrialized than previously and are able to mass produce commodities with cheaper production costs than
those of developed countries. These countries have oriented their industrial-estate/park development more to facilitating mass-production industry, based on a technology transfer from developed countries, rather than on facilitating high-tech industry. Because industrial-estate development requires huge financial assistance, most governments of developing countries have managed the industrial-estate development by encouraging foreign investments. Regional governments mostly cannot contribute directly to these programs, because provincial administrations usually do not have enough funds to invest in industrial-estate activities; therefore, in most developing countries, central governments are actively involved in industrial-estate/park establishments.
CHAPTER 4

INDUSTRIAL-ESTATE DEVELOPMENT IN INDONESIA

As mentioned previously, the government of Indonesia has only recently begun to focus the industrialization process on the promotion of exports. In order to promote exports, Indonesia is searching for a method that can broaden regional and local industrial structures in terms of industrial linkages, types, and levels of technology. The industrial estate in Indonesia, which represents clustered industrial activities in a planned and organized site, can be used for this purpose.

In this chapter, we will show how the process of industrialization in Indonesia might influence industrial-estate development. We divide this industrialization process into two periods: (1) the colonial era, and (2) the independent era. During the independent era, the government changed once, and this influenced the orientation of the industrialization process. The New Order of government came into power replacing the Old Order of government in 1968.\(^1\) Since then, the New Order has governed the country and directed the present industrialization process.

\(^1\) The New Order of government established in March 1967 when Suharto was elected to be the acting president of Indonesia. Since March 1968, he has been reelected four times and is still president of Indonesia (as of May 1992).
Characterized by a dominant central government, the New Order has used the industrial-estate concept to promote industrialization. We will now analyze the development mechanism of the industrial estate and the magnitude of its regulations to see whether or not they can be used to encourage regional and local (private sector) participation. Also, we will evaluate property-right characteristics of the industrial estate, because they are essential elements in the success of industrial-estate development, and they can be used to encourage local participation.

**INDUSTRIALIZATION PROCESS**

Industrialization in Indonesia--in terms of industrial plants with machinery--began with the Dutch during the colonial era in the 19th century. According to Sadli (1990), Java and Sumatra had been developed for plantation estates. At that time, these islands supplied the Netherlands with crops, such as, coffee, tea, tobacco, rubber, and sugar. Industries were then established primarily to convert raw material from the estate crops to marketable goods demanded by the Netherlands and other European countries.

The high productivity of Java resulted in the island becoming the focus of industrial development by the colonial government. The colonial government established most of its agro-industry in Java (see Sadli, 1990; Suhartono, 1991). Basic infrastructure was also built mostly in Java to
facilitate this industry. Most of the other islands were not yet developed, except for some parts of the islands, such as North Sumatra (see Sadli, 1990; Razif, 1991). During the colonial era, the eastern part of the country (eastern islands) was not affected by industrialization. After independence was won in 1945, the Indonesian Republic inherited this uneven distribution of industry.

The Old Order of government was in power from 1945 until 1967. This government was confronted by much political unrest which attempted to disintegrate the national unity (EIU, 1990; Raillon, 1990). Due to this condition, the economic development and industrialization programs could not properly be implemented. According to the Economist Intelligence Units (EIU, 1990), the annual GDP growth rate between 1950-65 averaged only about 2%, with the manufacturing sector contribution of less than 10% of the total GDP. This government did, however, provide some major projects that had to be completed by the New Order of government, such as a superphosphate plant in Cilacap, the Cilegon steel works in West Java, cement factories, etc. (Raillon, 1990). Again, most of these projects were implemented in Java.

The New Order of government has encouraged industrialization by implementing a number of policies that directly and indirectly affect the industrialization process and the Indonesian’s economy as a whole. In this case, major
development policies that were launched since the New Order came into the power include:

1. the 1967 Foreign Investment Law,
2. a series of Five-year Development Plans (Repelitas),
3. a series of deregulation packages.

The Foreign Investment Law implemented in 1967 (EIU, 1990) stimulated a rapid industrial growth in the country. This law attracted foreign investors to invest in industrial activities in Indonesia. It promoted a heavy investment in the upstream industries (metal, chemical, and agro-based industry) and downstream industries (textile and leather goods). Instead of using foreign resources, this investment also involved domestic capital (EIU, 1990).

The implementation of a series of five-year development plans (Repelitas), which was started in 1969/70, has significantly changed the national industrial structure. Until about the end of Repelita III, much of the government’s efforts focused on the inward-looking strategy 2 (see Poot, 1990; Aziz, 1990). This strategy was chosen in conjunction with the national goal of becoming self-sufficient in food production. During this period, development efforts were focused on increasing the production of the agricultural sector. Coinciding with this development were government

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2 The inward-looking strategy is the effort to increase the national economy’s growth into which the national system of production is focused on producing the commodities to fulfill domestic needs rather than exports.
efforts to develop the agro-based processing industries. The government also gradually shifted its policy to develop non-agricultural and manufacturing industries.

Included in this series of Repelitas were programs and projects to develop infrastructure that support industrial development in the regional and local areas. The government itself has put a greater emphasis to distribute industrial development evenly among the regions since Repelita IV (1984/85-1989/90). In so doing, the government encouraged industrial regionalization (see Government of Indonesia, 1985). It also has provided financial and technical assistance for regional and local industries (Poot et al., 1990).

Today, the government emphasizes its development policy to support the outward-looking strategy. Many policies have been launched by the Indonesian central government to support this outward-looking strategy. The government deregulation policy packages in the trade sector, which began in 1984, have stimulated the nonoil manufacturing sector to expand its production capacity (Aziz, 1990; Barichello and Flatters, in Roemer, 1990). In this case, the packages have been aimed toward rearranging import and export licensing and other regulations that might hamper trade and export activities,

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3 The outward-looking strategy is the strategy where development efforts are oriented to encourage exports of non-oil commodities through the expansion of the manufacturing sector (Aziz, 1990; Poot et al., 1990; EIU, 1990).
such as transportation/shipping cost, credit facilities, immigration rules, customs procedures, etc. (Barichello and Flatters, in Roemer, 1990).

The result of these packages is very impressive. The packages did remove unnecessary trade barriers. The production of the non-oil manufacturing sector has steadily increased. The Economist Intelligence Unit (1990) notes that, after the deregulation packages were implemented, the average growth rate of the manufacturing sector was more than 13% between 1984-1988. The share of the manufacturing sector in 1988 was 18.4% of the total 1988 Gross Domestic Products; in 1981, it was 15.6%. The value of the non-oil exports exceeded the oil and gas export value for the first time in 1987 (EIU, 1990). With this growth, the government became more confident about sustaining a rapid expansion of the manufacturing sector; however, in expanding this sector, the government will only contribute approximately 2% of the overall government expenditure for the fifth five-year development plan. This represented 45% of the total planned expenditure for developing the manufacturing sector (EIU, 1990). The government expects that the private sector will fulfill the remaining development investment.

These three major policies had a big influence on the industrialization process in Indonesia. The implementation of the Foreign Investment Law changed the shape of Indonesian’s manufacturing sector in terms of its managerial and technical
capacity (Poot et al., 1990). A consistent effort of implementing the Repelitas had increasingly improved the links between upstream and downstream industries (Poot et al., 1990; Government of Indonesia, 1982). The deregulation policy packages have given more accessibility to private companies for competition in the international market. The government itself, recently, has tended to allow the private sector a chance to be fully involved in the establishment of the nonoil manufacturing export-oriented industrial activities.

All of the above were not good enough to improve the industrial linkages, primarily between the upstream industries that mostly were enclave industries and the downstream ones that tended to be clustered or located nearby other industries with the same industrial-scale and type (Poot et al., 1990; Government of Indonesia, 1985). The concept of industrial estate was established as part of the government’s efforts to improve industrial linkages and to promote a regional distribution of industrial activities. For this purpose, the government introduced the "Wilayah Pusat Pertumbuhan Industri" (WPPI) concept at the end of Repelita III, in which industrial estates were also promoted.

INDUSTRIAL-ESTATE DEVELOPMENT

The industrial estate itself is not a new concept for Indonesia. The Old Order had recognized the concept in the 1950s as a way to cluster medium-scale, small, and
home/cottage industries. The government considered implementing this concept; however, it was not fully implemented until the era of the New Order. The New Order has regulated the implementation process of the industrial-estate concept, and settled different development objectives from the ones that settled by the Old Order.

**Old-Order Industrialization Concepts**

The Old Order launched various programs and projects to industrialize the country. Instead of establishing the state-owned large enterprises, the government prioritized the development of small industries (EIU, 1990; Poot et al. 1990). The well-known programs of developing small industries were "Pelopor" and "Induk." Pelopor was an industrial development program aimed at pioneering industrial activities in local areas, while Induk aimed at promoting "indigenously-owned, labour-intensive small enterprises" in areas where small industries were clustered and engaged in a similar industrial activity (Poot et al., 1990, p. 206).

The government began to assist in developing Induks or the central-production units in 1951. The United Nations (1962) recognized that the goal in establishing Induk is:

... to provide small-scale and cottage industries with technical and commercial services. The induks assist small entrepreneurs in organizing their production system, improving quality of their products, introducing standardization, new techniques and modern equipment, providing better design of manufacture products, improving management organization and training managers,
and organizing the sale of their products (United Nations, 1962, p. 272).

From the above definition, the readers can see that industrial estates were comparable to induk in terms of its concept of providing services for industrial activities. It is a similar industrial-estate concept, because induk was also initiated with a view to promoting community development, by assisting the development of small and cottage industries which mostly developed in the local areas (see Chapter 3). Yet, it was not fully comparable with the industrial-estate concept, because induk was concerned more with providing a co-operative type of assistance (Poot et al., 1990), than with providing a well-planned site as a way to organize industrial activities. Besides that, it assisted a similar type of industrial activity, while industrial estates assisted heterogenous industrial activities.

In the 1960s, the government considered establishing a site for industrial-estate activities with the assistance of the United Nations experts. The development of industrial estates was aimed at facilitating small and medium-sized industries. The government had a long list of reasons for developing industrial estates. According to the United Nations (1962), the purpose of industrial-estate development at that time was:

... to enable small-scale and medium-size industries to have the advantage of common services and facilities, to increase their productivity and the quality of their products, to stimulate the development of small-scale industries in villages and small towns and encourage the
use of improved techniques and better tools, to discourage the concentration of industries and population in large urban centers, to make available improved land and building at reasonable costs, and to make easier training and supervision (United Nations, 1962, p. 272).

All of these purposes aimed toward encouraging the development of industries in small towns and rural areas. Yet, the United Nations experts did not fully support this idea. Because rural areas did not have the infrastructure to support industrial-estate development, the experts recommended that Jakarta be the location for a pilot project of an industrial estate. In this case, the development orientation was no longer planned to encourage small rural industries, but to work out the coordinating capabilities among government institutions at the central level.

**New Order Industrial-Estate Concept**

The industrial-estate concept was not fully implemented until the 1970s when the New Order of government came into power (Supanto, 1992). Under this government, the Ministry of Industry at the central level initiated and assisted far more than in the past the industrial-estate development. It took quite a while before Industrial estates could become part of the government industrial-development programs and projects.

Implemented in Repelita II as pilot projects, industrial estates turned out to be one of the government development programs and projects in Repelita V. Within this period, the industrial-estate development concept had been arranged to
become part of the industrial development scheme, as part of a regional approach to industrial development (Government of Indonesia, 1985). This scheme demonstrated a spatial hierarchy of industrial development known as the "Wilayah Pusat Pertumbuhan Industri" (WPPI) concept, see figure below:

Figure 1
The Regional Approach for Industrial Development

 REGIONAL INDUSTRIAL GROWTH CENTER (WPPI)
    ↓
 INDUSTRIAL ZONES (ZONA INDUSTRI)
    ↓
 INDUSTRIAL ESTATES (KAWASAN INDUSTRI)
    ↓
 SMALL-SCALE INDUSTRIAL COMMUNITIES (LINGKUNGAN/PEMUKIMAN INDUSTRI KECIL)
    ↓
 SMALL-SCALE INDUSTRIAL CENTER (SENTRA INDUSTRI KECIL)

The purpose of creating this spatial hierarchy in industrial development (the WPPI concept) was to identify (from a national perspective) regional potentials and the opportunity to facilitate industrial development. By the end
of Repelita III, the Ministry of Industry identified at least five regional industrial growth centers/WPPI (Government of Indonesia, 1985). Each WPPI consists of several industrial zones. These zones are industrial development territories, which are created based on regional key/basic industries and their potential linkages. Industrial estates and other industrial activities are parts of these industrial zones.

Development Objectives

The spatial scheme for industrial development mentioned above was not effective enough to escalate industrialization. It was not being followed by investments from either the government or the private sector. Investors tended to invest their money in the regions where the accessibility of the business was the most promising. Most investors want to be near the market and public decision makers and to be supported by well-developed infrastructure.

Java has the advantage of being the most populated island in the country, having a well-developed infrastructure, and being the location for the central government. All of these qualities attract investors. Most of the nonoil manufacturing investments have been established in Java, primarily in Jakarta and Surabaya (Hill and Wiedemann, in Hill 1989; Wymenga, 1991). This has brought regional disparity, in terms of industrial productivity, factor costs, and economic growth (Poot, et al., 1990).
According to the Industrial Act No. 5, 1984 (Undang-undang No. 5 tahun 1984 tentang Perindustrian), the government has the responsibility of encouraging the development of industry throughout the nation. The policy of developing industrial estates was not encouraged until the government launched Presidential Decree No. 53, 1989 (Keputusan Presiden/Keppres. No. 53 tahun 1989 tentang Kawasan Industri) in 1989. This Decree governs industrial-estate development and provides the guideline for industrial estate development in Indonesia. According to this Decree, the development of the industrial estate is aimed at accelerating industrial growth. In so doing, the government has the responsibility of giving industrial companies the accessibility for conducting their businesses, encouraging industrial activities to locate in the estates, and providing industrial activities with planned sites that are concerned with the environment.

The implementation of this Decree has encouraged private companies to invest in industrial-estate development activities. They are encouraged to develop industrial estates, with or without financial and technical assistance from the government. According to Supanto (1992), 89 industrial-estate companies have been established in Indonesia, and five of them are owned by the government.

These establishments, however, do not encourage industrial companies to locate in the industrial estate
(Supanto, 1992). Shahab remarks (in Supanto, 1992) that, industrial companies hesitate to enter industrial estates because the price of land offered outside the estates is cheaper than in the estates. The development of infrastructure in the estate has increased the value and the price of land in the estate. Besides that, it is also easier to process land permits outside than in the estates. The Junior Minister (title sic.) of the Ministry of Industry has considered these problems and has initiated new regulations concerning business permits in order to force medium-scale industries to conduct business in the estates. This regulation will be forced in the regions that have established industrial estates (Supanto, 1992).

**Development Mechanism**

In developing industrial estates, the government has arranged a mechanism that contains regulations concerning institutions that are involved in a responsibility for setting up the permits, the procedures, and the physical standard for industrial-estate establishments. In this case, Presidential Decree No. 53, 1989, is the main regulation that acknowledged the general idea, development objectives, and concept of industrial-estate development in Indonesia. This decree motivated horizontal coordination among the ministries at the

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4 Halim Shahab is the Chairman of the Indonesian Industrial Estate Organization (Himpunan Kawasan Industri Indonesia).
central level, and vertical coordination with the regional and local institutions.

This decree was then followed by more detailed regulations concerning procedures to obtain business permits and land acquisitions, and physical standard to establish site plan. These regulations were established by several central government institutions: the Ministry of Industry (Departemen Perindustrian/DP), the National Board of Land Affairs (Badan Pertanahan Nasional/BPN), and the Capital Investment Coordinating Board (Badan Koordinasi Penanaman Modal/BPKM). Each of these institutions has a different responsibility; yet, they are complementary in processing industrial business permits.

The Ministry of Industry is responsible for granting business permits of industrial-estate development. The procedure to get the permits is regulated under the Ministerial Decree No. 291/M/SK/10/1989 of the Ministry of Industry (see Government of Indonesia, 1989). According to this Decree, the permits to establish industrial estates are divided into three parts: (1) the Principal Agreement (Persetujuan Prinsip), (2) the Permanent Business Permit (Izin Tetap), and (3) the Expansion Business Permit (Izin Perluasan).

These permits are given in a step-by-step process, discussed below, by the Ministry of Industry to allow control over industrial-estate development. The Principal Agreement
will be given to a competent company for the arrangement of industrial-estate development. In order to get this permit, the company must have the certificate from the Governor confirming that a piece of land in his jurisdiction will be used for industrial-estate location. By holding this permit, the company has the obligation to accomplish all the tasks of industrial-estate establishment. This will include the company’s responsibilities to appeal for land possession, to provide site planning, and to develop the land with all the infrastructure needed to support industrial activities. This permit is valid for three years, with the possibility of extending the permit for another three years maximum.

After the industrial-estate site is ready for use, the Principal Agreement is void and a Permanent Business Permit is given. The company will have this permit as long as the government considers that it is able to manage the estate. The Expansion Business Permit will be granted for industrial-estate companies that own the Permanent Business Permit and need to expand the site. For the expansion, the permit’s process will begin again with the proposition for the Principal Agreement, and so forth. The Minister of the Ministry of Industry has the power to cancel all of these permits.

Besides that, the Ministry of Industry is also responsible for physical standards of industrial-estate development. This physical standard is designed to guide the
industrial-estate companies in properly planning the site for industrial use. This standard concerns land-use planning, road and telecommunication networks, water and power supplies, industrial waste treatment and management, and other service facilities, such as terminals for public transportation, workshops, training centers, fire brigades, fitness centers, health centers, etc. The industrial-estate companies have the obligation to build all of those facilities except the provision of industrial-waste-treatment facilities when the industries in the site do not need one. The tenants also have an obligation to equip their industrial activities with industrial-treatment facilities if necessary.

In addition, the Ministry of Industry is also responsible for monitoring the industrial activities within the site and the industrial-estate company itself. This role especially includes industrial waste and environment control. The Minister of the Ministry of Industry may cancel the industrial-estate permit based on this monitoring and evaluation report. He may also propose to the Chairman of the Capital Investment Co-ordinating Board the cancellation of the operation of industrial activities in the estates if the tenants do not comply with the regulations.

The National Board of Land Affairs also launched Decree No. 18, 1989 which governs the procedure for providing and possessing land for industrial-estate development. The institutions involved in this procedure are;
at the Central level:
- The National Board of Land Affairs (BPN),
- The Ministry of Industry (DP),
- The Capital Investment Co-ordinating Board (BKPM),

at the Regional level:
- The Governor of the province,
- The Regional Office of the National Board of Land Affairs (Kanwil BPN),

at the Local level:
- The Head of the District (Bupati), or
- The Major of the City/Municipality (Walikota),
- The Head of the local office of the National Board of Land Affairs (Kanda BPN).

This Decree characterizes land ownership in the industrial estates. The land is treated as property that can be sold and purchased by companies. For this purpose, there are at least eight steps in the process of land acquisition for industrial-estate activities that must be followed:

Step 1. An industrial-estate company must search for available land to be used for industrial activities.

Step 2. The company must then propose to the Governor, who is responsible for the land used within his territory, the land to be preserved for industrial-estate development; or, for the companies that use facilities for investment (mostly national corporations/PMDN and foreign companies/PMA) propose to the Governor via the Chairman of BKPM.

Step 3. The permission to use the land must be proposed through Kanwil BPN with a recommendation from Bupati or Walikota. Kanwil BPN will issue the certificate to confirm that the land will be used as the location for an industrial estate.
Step 4. By having the land confirmed, the company proposes for the Principal Agreement to the Minister of DP.

Step 5. By having the Principal Agreement in hand, the company must propose again for the permit to use the land (Izin Lokasi) and land clearance (Pembebasan Tanah) to the Governor via Kanwil BPN with a carbon copy to Bupati or Walikota, and Kanda BPN. The Bupati or Walikota is responsible for submitting his or her judgement, upon the request to use the land under his or her area jurisdiction, to the Governor via Kanwil BPN.

Step 6. The Kanwil BPN will prepare the certificate for land use and land-status clarification to be signed by the Governor, or by the Chairman of BKPM at the central level for the companies that use the facilities for investment (PMA and PMDN). Included at this stage is the purchase of the land from the previous owner. If an agreement upon the land price cannot be achieved, then another piece of land with equal value or size will be offered to the previous owner.

Step 7. After the land is purchased, the industrial-estate company must obtain a certificate to possess the land. The company submits a proposal to the Chairman of BPN via Kanda BPN. The national and foreign corporations can propose directly to the Chairman of BKPM with a carbon copy to Kanda BPN. The Kanda BPN will process the proposal and submit it to the Chairman of BPN via Kanwil BPN. The certificate will be signed by the Chairman of BPN, and by the Chairman of BPN and BPBM for the national and foreign corporations (PMA and PMDN). This certificate declares the right to build (Hak Guna Bangunan, HGB) on the piece indicated. This right is given for a maximum of 30 years and can be renewed for another 20 years. Afterward, it still can be renewed for another 30 years with recommendation from the Minister of DP.

Step 8. The industrial-estate company then has the obligation to register its HGB in Kanda BPN.

The procedure for establishing industrial estates is ended after the company has the HGB. With the HGB, the company can sell pieces of the industrial-estate land to the
industrial companies. In so doing, the company must administer this sale-business with the Public Notary (Pejabat Pembuat Akta Tanah/PPAT). Besides that, the companies have the obligation to report every transfer of land to Kanda BPN.

In regard to this procedure, the permits for releasing the land and using it for industrial-estate development are in the hands of the Chairman of BPN and BKPM at the central level. To feed these Chairmen with the information needed, Kanda and Kanwil BPN must work together with the Governor and his subordinates at the regional and local levels. Here, the regional and local governments' tasks are only to pursue and clear up the status of a parcel of land that will be used for an industrial-estate site.

PROBLEMS AND ANALYSIS

The industrial-estate development objectives and their development mechanisms in Indonesia have created the image that industrial-estate development in Indonesia is being centrally forced. This condition has three major problems that may impede the effort to increase regional and local participation in industrial-estate development. First, regional and local governments do not have the power to decide industrial-estate development or industrial development in the estates. Second, the private sector must face a complex bureaucracy for getting business permits, which may reduce their willingness to participate in the industrialization
process. Third, the status of industrial estates with regard to their ownership is not sufficiently formulated for regional or local governments to control.

Decentralization to Regional and Local Governments

Decentralization of decision-making power to the regional and local governments is the key issue in the whole process of industrial-estate development. From the previous discussion, the readers can infer that the central government has decentralized its power over regional and local institutions; however, it has done this within the vertical line of central government agencies. Besides that, the power being decentralized is an administrative power rather than a decision-making one. Rondinelli (see Chapter 2) calls this type of decentralization as deconcentration. Using the deconcentration concept as an approach for industrial-estate development may raise the issues of lack of responsibility, insufficient regional and local governments' participation, and missing the opportunity of strengthening local government capabilities.

By doing deconcentration, none of vertical institutions in the regional or local areas should be responsible for the industrial-estate development to the regional or local authorities or, in this case, to the Governor or Bupati/Walikota. For their work, they must be responsible to their superiors at the central level. They only are required to
consult about their work with the regional and local governments. In this consultation, the Bupati or Walikota may recommend the private sector proposals for conducting business in his area of jurisdiction. The approval of this proposal will be processed by the central government institutions at local and regional levels, before being submitted to the Governor and approved by the Minister of the Ministry of Industry and by the higher ranking officials at the central level (the Chairman/Head of BPN and BKPM).

The central institutions expect that by confirming to the Governor that the land within his jurisdiction is to be used for the industrial-estate activity, the subordinate of the Governor’s administration will automatically be involved in supporting or promoting the industrial-estate establishment. Yet, without giving a proper role for regional and local governments in the decision-making process, it hampers the regional and local governments’ participation. Their participation is difficult to obtain because the regional and local governments have no obligation to do so. They have no responsibility for the whole process of the industrial estate development in their jurisdictions. The failure or success of the industrial estate is fully under the responsibility of the central government and the central-government apparatus at the regional or local levels.

The Governor may reject the proposal; yet, he may confront the Minister or the higher-ranking officials at the
central level. The private sector can gain access to the industrial-estate development by pushing regional and local officials of the central government agencies to approve a proposal and then confronting the Governor with a decision. In this case, although the Governor is directly responsible to the President, administratively he is a subordinate of the Ministry of Home Affairs. He has the political power, as the leading figure of his representative area of jurisdiction (province), instead of as the continuing administrator of central government at the regional level. In his position as the administrative figure, the Governor cannot be insubordinate to his superior or the Minister of Home Affairs and other Ministers as well. This is similar to the Bupati and Walikota. He or she is the highest ruler in his or her area of jurisdiction, and administratively he or she is responsible to the Governor, yet politically to the Minister of the Ministry of Home Affairs.

According to Act No. 5, 1974 regarding the Principals for Governmental Administration in the Regions (Undang-undang No. 5 tahun 1974 tentang Pokok-pokok Pemerintahan di Daerah), the Governor has more authority than just confirming the site for industrial-estate activities. He has the power to make regulations (Governor Decree), to arrange and decide on regional development planning, programs, and projects, to supervise several subregions or districts or city municipalities, and to maintain and increase people's
security, prosperity, and welfare. This power can be used for industrial-estate development if the central government is willing to do so.

In the case of the regional and local governments' capabilities, most of these levels of government have the experience of conducting donor-assisted decentralization programs. The programs were implemented to strengthen the regional and local government's capabilities of executing development planning and projects. Yet, the industrial-estate development regulations do not emphasize these roles; the Philippines' experiences with its "friendly provinces to business" may occur. Yet, in the case of Indonesia, although a Governor with a strong influence at the central level can modify the development mechanism of industrial estates for the best of the regions, most of them will think twice before they may do so because of political reasons.

Private-Sector Participation

In developing industrial estates, the government expects that the private sector will fully participate in the

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5 Indonesia has experienced many kinds of donor-assisted decentralization programs from many countries, like the United States of America (USAID), Canada (CIDA), Australia (AIDAB), and international institutions, like the United Nations, World Bank, and Asian Development Bank. Most of these programs are executed by regional and local (districts) governments with guidance, assistance, and finance from central governments. These programs mostly have the same goal; that is, to strengthen regional and local government capacities by deciding and executing programs and projects of their own.
establishment of industrial estates. However, in regard to industrial-estate regulations, the private sector will not be easily involved with industrial-estate activity, especially those from the regional and local levels. The bureaucracy of getting business permits is too long and complex, running up and down between central, regional and local institutions. Under these circumstances, the implementation of the regulations may raise the issues of insufficient information regarding potential location for industrial-estate development, unspecified cost that must be paid in getting the permits, and less assistance for regional and local businessmen in dealing with industrial estate activity.

The company must find the best location by itself in broad heterogenous regions in Indonesia to establish an industrial estate. Without complete information concerning the spatial distribution of industrial activities, regional strengths and weaknesses, and market potentials, it is difficult for the national and foreign corporations to pursue the best location for industrial-estate development. The locational information concerning its strength and weakness for industrial development would be much easier to gather at the regional or local levels rather than at the central level. The lack of this information will give an additional cost for these investors to do a preliminary study or survey to pursue the optimal location for industrial estates.
On the other hand, regional and local private-sector participants must approach the central government to get the permission to develop industrial estates or to do business in the industrial-estates. The farther the industrial-estate's location from the central government, the longer will be the time needed to get the permit and the more disassociated the companies will be from central institutions. There will be "extra costs" that should be paid by the private sector in getting the permits back and forth to the central government. The telecommunication systems may solve this problem. Yet, the telecommunication systems are not that good in many of the provinces. Although there is an industrial estate company that is responsible for arranging the permits, it still needs time to complete the permits.

Besides that, the regional or local investors will deal with new systems, with less assistance from their more familiar counterparts in the regional or local government institutions. Also, most regional and local investors are not well-known at the central level. Under these circumstances, the industrial estate company is expected to promote these investors at the central level, or otherwise they may not have the chance to do their business at the site. At the same time, the national or foreign companies that locate their headquarters near the central government will have more access than regional and local companies in getting the permits because of being near. In this case, the regional and local
private sector become the guests in their own "homes" or areas.

Finally, although the central government offers an interesting concession, still the company must do all the site planning, implementation of the approved site plan, promotion, assisting the prospective tenants to complete their franchises (permits or licenses) for doing their businesses in the estate, and the operation and maintenance. Regional and local authorities may offer nothing to the industrial estate company. In this case, the company must sell the estate by itself.

**Status of Property Rights**

The main problem in starting the industrial-estate activities after finding an appropriate location is to arrange the rights of using the location for industrial-estate activity. Behind this arrangement, the issues that will be faced by the parties involved would be the clarification of land-status, the tendency for monopolizing land for industrial activities, and the clarification of industrial estate as part of regional and local assets. These issues can be discussed mainly from the property rights perspective, by comparing them with the industrial-estate development mechanism concerning land acquisition.

As mentioned previously, the company must approach the local and regional governments to ask their recommendation to
use that piece of land in their areas of jurisdiction for industrial-estate development. This company will face the problem of clarifying the status of the land before the land can be purchased. The company must carefully study the ownership of the designated land in solving this problem.

The Governor as the political figure can be very sensitive in recommending the land within his area of jurisdiction. The land could belong to someone who does not want to sell it for locating an industrial estate. If this person has owned the land certificate demanded by the industrial-estate company, then he or she has the right to be protected by the law. In this case, the Governor has the responsibility to enforce the law. The regulation (The Head of BPN’s Decree No. 18, 1989), however, requires that the land acquisition for the industrial-estate site must be prioritized; therefore, without a mutual understanding between the land owner and the Governor with Kanda BPN, Kanwil BPN, and the National Board of Land Affair (BPN itself) in the central government, there will be no solution to this problem except by using force.

Land ownership in Indonesia itself is regulated under the Act No. 5, 1960 about Land Reform (Undang-undang No. 5 tahun 1960 tentang Peraturan Dasar Pokok-pokok Agraria). In this Act, the possession of land is divided into several categories of rights. The land is treated as a composite bundle of rights, such as the right to use (Hak Pakai, HP), the right to
build (Hak Guna Bangunan, HGB), and the right to establish business activity (Hak Guna Usaha, HGU) on a piece of land. The right to own the land is not being given anymore, because it might create a friction in assessing the land for development purposes. One may purchase the land not on the basis of the right to own the land, but on the basis of the right to use the land for business purposes.

All of this bundle of rights conforms with Razzaz’s (1991) perception using Bentham’s concept about property in which a property right is defined as a set of expectations that ought to be enforced by the formal legal system. Razzaz himself argues that the rights to property are not absolute. He also notes that elements of the bundle of rights could be dispersed among several parties, or unified in the hands of one party. The owner of an element of the bundle has the right to exclude others from possessing and enjoying such a right by using something preoccupied by the owner with the formal-legalized right (see also Macpherson, 1978).

By having the HGB, the industrial-estate company has the right to build on the site, and it is the formal owner of the site. It may generate income from its assets (the site and its facilities). Each piece of land from the site becomes the commodity for the company. As a commodity (assuming a free-market economy), there should be no restriction for anybody who is able and willing to purchase land within the site. The company, however, has the exclusive right to choose to whom to
sell. This right can be used to discriminate among prospective tenants, for noneconomic reasons, in the use of estate facilities. In this case, the suggestion by the Young Minister (title sic.) of the Ministry of Industry to push industrial activities for doing their business in the estate may lead to even a worse situation. The industrial estate may have monopoly power in selling the land for industrial activities, and this will not be good for small and medium-scale industries, which are financially poor. In this case, the status of the industrial site must be transferred from an exclusive property into a common property where each individual (industrial investor) has the right not to be excluded from possessing something (Macpherson, 1978, pp. 4-6).

The shift of the property rights from its formal owner to the tenants, cannot formally be observed by regional or local authorities with the exception of Kanda and Kanwil BPN. Regional and local governments, however, can be involved directly with an industrial activity. Then, they become the owner of the industrial estate and take formal control over the industrial development in the regions; otherwise, the regional and local governments' involvement in industrial-estate development will only be marginal.

All of the above explanations, in general, have led to a situation where the industrial estate does not fit smoothly in the regional and local area to be regarded as the regional or
local "property" (entity). The existing strongly centralized regulation leaves no room for regional or local people, primarily the regional and local governments and business communities, to participate fully in the whole industrial estate development process. The only room left is for employment opportunities, and this might attract regional and local people to join the industrial estate, especially for doing the construction and the operation of industrial activities.

CONCLUDING REMARKS

In regard to the international industrial-estate development experiences, most countries realize that there should be an involvement of regional and local governments in developing industrial estates. The involvement of regional and local governments with industrial-estate development can be stimulated effectively by decentralizing decision-making power to them. This will encourage them to initiate and promote industrial-estate development. The United States is the obvious example of the decentralization of decision-making processes to the local communities (see Chapter 3). The local communities in the United States can initiate industrial estates by establishing zoning regulations that attract the private sector from either local or national corporations, or even foreign companies. In this way, local authorities can fully control industrial development in their areas of
jurisdiction. The Philippines also place a greater effort on decentralization by delegating substantive powers to regional offices and autonomy to the local governments, although industrialization process in the Philippines is centrally decided (see Chapter 3).

In the case of Indonesia, the central government has decision power over the whole process of industrial-estate development, while the regional and local governments have no power except to confirm a piece of land for the location of industrial estates. This centralistic decision-making process can be observed from the regulations concerning industrial-estate development, primarily the Ministerial Decree No. 291/M/SK/10/1989 of the Ministry of Industry and the Decree of the Head of National Board of Land Affairs No. 18, 1989. All these decrees are concerned with the arrangement of permits, technical standard, land reservation, and contribution of land rights for industrial-estate development. The Presidential Decree No. 53, 1989, is more likely to be a guideline than a regulation for all of the parties who are concerned with the development of industrial estates.

The governments as a whole--central, regional, and local governments--should guarantee the smooth running of an industrial estate and business activities done within the industrial-estate site. Yet, the centrally oriented regulations for industrial-estate development have made regional and local governments unable to initiate their own
industrial-estate development plan and implementing it according to their willpower. The only way for regional or local governments to control industrial-estate activity is by doing the business themselves.

The hierarchical system of government in Indonesian (central, province and district) also describes the hierarchy of power in the decision-making process. In the industrial-estate development, the central government does not delegate its power to the provincial and district governments, yet it gives its authorization to a private company to manage the industrial estate. Without delegation of decision-making power to the regional and local governments, it may hamper the regional and local governments participation in the process of developing industrial estates. The failure or success of industrial estate development will depend on the ability of industrial-estate company entrepreneurship in promoting, managing, and knowing the locality of the site. In this case, it would be helpful if regional or local institutions could initiate an effort to complete the information and promote its area as a potential site for industrial estate development (see the United States and Germany experiences in Chapter 3). Yet, it is not encouraged.

Also, the investors who will develop industrial estates will be treated differently according to from where they come. The foreign and national corporations could use their access by sending the proposal to the Governor through the Chairman
of BPN at the central level to confirm the land for industrial-estate location, while regional and local companies must submit their proposal to Kanwil BPN before it reaches the Governor. The Kanwil BPN cannot have as strong an influence on the Governor as the Chairman of BPN can. So, regional and local private sectors do not have as good an opportunity as the national and foreign companies have.

With regard to the dominant small and home/cottage industries in most of the islands outside Java, however, the priority should be given to facilitate the development of small and home/cottage industries. The development objectives that were formulated in the 1960s for industrial-estate development can be reconsidered to develop manufacturing industry outside Java. Industrial estates should be used to help and assist local investors in dealing with industrial activities. Although these objectives are not reflected in the Presidential Decree concerning industrial-estates development, it can be put in the Ministerial Decree.

To alleviate the regional disparity of industrial concentration, the government must decentralize industrial activity to other islands outside Java. In so doing, the government should refer again to the regional approach of industrial development (WPPI concept) and elaborate the use of industrial estates (Kawasan Industri) to encourage investments in manufacturing industries outside Java. The decentralization of the decision-making process has been
enforced by the central government; yet, it still is not enforced in the area of industrial-estate development.

Besides that, the industrial-estate development mechanism in Indonesia is significantly different from the international experiences in conducting the same activities. The international experiences show that there is a tendency for many countries to decentralize the authority of decision making to the regional or local level. It has been proved to be the most effective and efficient way to encourage regional and local participation in dealing with the industrial estate development. In Indonesia, the government conducts deconcentration or a handling over of an administrative task to regional and local institutions in industrial-estate development. They do not delegate the decision-making power.

There are also property-right obstacles in the implementation of the industrial estate regulation. The industrial estate will not be part of regional or local entities (properties), because of the way the regulation deals with the land ownership. Yet, it could become a regional and local asset, if the site were fully operated and managed by a local or regional government itself.
In regard to all of the previous analysis, we have determined that the hypothesis—in developing industrial estates, Indonesian government does not encourage decentralization of decision-making concerning the development of regional and local industries, especially the small and home/cottage industries—has proven to be correct. There are at least five reasons that support the hypothesis. First, although the development mechanism for industrial estates in Indonesia was conceived to facilitate establishing regional and local industries, it is too complicated to be followed. Second, the central government favors using deconcentration as opposed to decentralization in order to control the industrial-estate development. Third, the regional and local institutions now involved in the industrial-estate development include the apparatus that represent the central government institutions, but neither they, nor any other local institution, has the power to decide industrial-estate development. Fourth, autonomous governments at the regional and local levels have no involvement in the establishment of industrial estates except to provide a piece of land in their areas of jurisdiction for industrial estates to locate. Fifth, there is a lack of similarity between the industrial-
estate development mechanism in Indonesia and that of the international mechanism for conducting the same activities. Indonesia’s central government obviously does not decentralize decision-making process. This decentralization is needed for encouraging regional and local participation. International experiences show that many countries decentralize decision-making authority to the regional or local level. This kind of decentralization has proven to be effective for industrial-estate development in Germany, France, and the United States among others (see Chapter 3). Because of this lack of decentralization in Indonesia, we assert that:

1. The industrial-estate approach is unlikely to be an effective tool for promoting regional and local industrialization in Indonesia, especially that of small and home/cottage industries.

2. Regional and local governments’ initiatives will hardly emerge in the process of establishing industrial estates.

3. Confirmation of land use for industrial-estate location could become a sensitive issue if the Governor disagrees with the proposed location.

4. National and foreign corporations may have greater access to business permits for the establishment of industrial estates than that of regional or local firms. In seeking permits, regional and local private sectors will seldom
have support from unknown government officials at the central level.

5. There is less opportunity for regional and local firms to establish a scale of industrial estate, appropriate to their own level of economy before they step forward into a bigger system of production.

However, if the central government would prefer decentralization of the decision-making process in developing industrial estates, the regional and local governments may get at least five advantages of: (1) being able to promote the development of small and home/cottage industries using industrial estates as their own "action instrument." (see also Chapter 2); (2) being encouraged to increase their managerial skill in formulating industrial development plan of their own and delivering industrial-support infrastructures and facilities; (3) encouraging more regional and local entrepreneurs to create jobs because of greater chance to be supported by their well-known counterparts in the regional and local governments; (4) increasing the motivation to provide information for the promotion of industrial estates in their areas of jurisdiction; and (5) increasing the growth of the regional and local economies and their factors of production and market as a whole, because development would be more favorable under control of their own governmental system, and local needs can be nurtured properly by the local community itself (SRI, 1982).
On the other hand, the regional and local governments may confront at least four disadvantages of: (1) fewer incentives from the central government, especially financial support; (2) minor involvement of national and foreign companies in the establishment of industrial estates and the fulfillment of the estates; (3) a requirement of extra effort to promote the estates at the central level; and (4) a difficulty in shifting the industrial-development orientation in an effort to organize industrial linkages between regions and local areas.

Besides that, the centralized decision-making process for industrial-estate development is likely to be effective in attracting foreign investors to invest in industrial-estate activity in the regions in Indonesia. Indonesia's central government could be the main guarantor of these investors' capital; however, the investors should know that the industrial-estate development is beyond the regional and local governments' control. They cannot therefore expect much from these authorities except their willingness to recommend a demanded location for industrial-estate development. In this case, the success or failure of an industrial estate and the activities on its site is fully under the responsibility of the central government and the industrial-estate company itself.

Industrial estates cannot be used as a tool to make an even distribution of industrial activities among the regions. The development permits, as the keys to open and stimulate the
industrial-estate activities in the regions, are not held by the regional and local governments. The regional and local governments could control the industrial-estate development only by joining the development itself, which in itself is a venture-taking activity. Without financial assistance from the central government, they might hesitate to join the industrial-estate business because of its huge initial investment. Only rich regions, such as DKI Jakarta and East Java, can join in the activity and take control over the industrial-estate development. The East Java region, for example, shared the initial capital investment for industrial-estate development between the central, provincial, and local governments (Supanto, 1992).

Under the centralistic system of government, the administrators must find an appropriate way to shift the decision-making power for industrial-estate development to the regional and local levels. They need to make major changes, not only in the regulations for industrial-estate development, but also in the bureaucratic system. The strategy that can be undertaken, in this case, includes:

1. simplifying industrial-estate development procedures, primarily the procedures concerning land acquisition;
2. encouraging public-private sector partnership at regional and local levels;
3. distributing responsibilities regarding industrial-estate development between the central, regional, and local levels of government;
4. developing proper financial and technical assistance from central government to support the development of industrial estates; and
5. encouraging active participation from regional and local governments in promoting small and home/cottage industries.

To activate this strategy, we recommend that the BPN simplify the land-acquisition procedures for industrial-estate development. They need to clarify who should have the right to benefit from the thing possessed (industrial estates). A bundle of permits that will be given to an industrial-estate company should become a basis of expectation for regional economic agents (government or private) to benefit from the thing they possess. These economic agents need a condition of maximum efficiency in the use of a nonanimate resource (capital or land), and, for that purpose, the legal owner of the resource should be the one who decides on the use of the resource and who appropriates all the returns from its use (Milanovic, 1989).

At the regional and local level, the most strategic way to maximize an efficient use of these resources is by accommodating partnerships between regional or local governments and private or business sectors (SRI
International, 1982). This may clarify not only the efficient use of resources, but also encourage regional or local governments and the business community to participate fully in regional development as a whole. Besides that, it may determine the appropriate type and scale of industrial estates and the regional or local manufacturing activities that may fit in the industrial estates. This process, however, depends on the industrial development systems that work between the government and the businesses and, primarily, on the decision-making process for industrial development policy in the government itself.

In this case, we would encourage that more decision-making power be given to the Kanwil or Kanda BPN (the regional and local offices of BPN) than just the power to do the administrative work. Although much of the paper work for industrial-estate development has been done by the regional and local institutions, these institutions discourage expediting the process of doing the jobs because no proper decision-making power is attached to them. The World Bank (1991b) has indicated that many governments in developing countries need more efficient and effective institutions if they are to conceive, implement, and sustain productive economic policies and projects. To be effective and efficient, regional and local government institutions should have the decision-making power to conceive, implement, and
sustain their own development programs and projects (see Chapter 2 and 3).

The government also needs to deal with the issue of land disputes that may occur if the owner of the land does not want to give up the land. The plan to buy the land should be changed to renting the land. In so doing, both the owner and the prospective buyers will get mutual benefits. The owner will not have lost his or her property except that the physical characteristics of the land will be changed because of industrial development. Yet, the planners will need to take extra care in designing a site plan, especially in the urban areas. They will need to encourage land replacement to accommodate land owners who are moved because of the industrial-estate development.

To change the bureaucratic system, on the other hand, will not be easy, although it is not impossible. The outcome should promote the distribution of responsibilities between the central, regional and local governments of controlling the development of industrial estates. In this case, the central government will need to provide financial and technical assistance to establish industrial estates. The provinces (regional governments) could play the role of mediator between local governments and the central government, which has access to the national and foreign corporations. This will include the role of monitoring and evaluating the progress of industrial-estate development, in case assistance is needed.
from the central government. The local governments should prepare zoning regulations (as in the United States) concerning industrial-estate development. Included in this regulation are performance standards of industrial activities (appropriate to local environment), site plan standard and approval, and amendment, termination, sanction, and extension of industrial-estate activities.

The government has the authority to pursue this path from the National Act No. 5, 1974 about autonomous governments at the regional and local levels. By enforcing this law, the central government can strengthen the regional and local governments in organizing industrial-estate development in their jurisdiction. The deconcentration apparatus at the regional and local levels will not be needed and decision authority is better attached to the regional and local governments. Therefore, the regional and local governments can fully control not only the paper work regarding the permits for industrial-estate development, but also the industrial-estate development planning. This kind of change needs courage and sometimes is very risky for political reasons. The Indonesian bureaucratic system itself has been established for some time and has proven functional in handling the development.¹

¹ Under the New Order bureaucratic system, many national development objectives have been achieved following the implementation of a series of Repelitas (World Bank, 1991a; EIU, 1991; Poot, 1990; Hall, 1989).
The decision makers at the central level, however, cannot directly control the industrial estate, because the industrial estate company physically possesses the estate. Any problem that might occur in developing industrial estates in the regions cannot be solved directly by the decision makers at the central level, without assistance from their counterparts at the regional and local levels (central government officers at the regional and local levels). Yet, these officers must consult about their work with the regional and local governments. The regional and local governments themselves hardly regard the industrial estates as part of their controllable assets. A mutual understanding of every party that is involved with industrial-estate activities becomes a precondition in making the industrial-estate development a success.²

To make this industrial-estate development a success, we would recommend to the Ministry of Industry (DP), which initiated the idea of industrial-estate development, to consider the importance of decentralizing the decision-making process concerning industrial-estate development. We expect that the DP would give more authority than it does now to the regional and local autonomous governments in promoting industrial-estate development. The attachment of the National

² A mutual understanding, in the case of Indonesia, has a slightly negative connotation in regard to the hierarchy of power between central, regional and local governments. Here, the mutual understanding is achieved under the influence of the strongest power of those who will make the decision.
Act No. 5, 1974 to the existing regulations might improve the situation from the lack of participation and responsibility from regional and local government into a strong feeling of ownership. The central idea is to make industrial estates part of the local and regional assets. Under these circumstances, the creation of industrial estates can be used properly according to the regional and local interests in industrialization process, primarily in promoting small and home/cottage industries.

There is a threat to decentralizing the decision-making process, however. This relates to unifying the industrial development schemes under the heterogenous capabilities of regional and local governments in Indonesia. This decentralization requires both the downscaling of central government involvement with the regional and local affairs and the strengthening of regional and local government institutions. The regional or local public decision makers must have the abilities and responsibilities to guide the industrialization process within their areas of jurisdiction. Without these capabilities, decentralization of the decision-making process will restrain industrial-estate development efforts. Yet, in return for this decentralization, there will be more room for regional and local communities to initiate efforts, primarily for broadening and deepening the regional and local participation in the growth of manufactured exports,
using industrial estates as an action instrument for development.


