

CHAPTER 5



THAILAND REGIONAL INDUSTRIALIZATION POLICIES

The purpose of this section is to critically examine the impacts of the government policies, which have been adopted to foster industrial growth in Thailand. This has also resulted in larger scale investment and employment. In the area of the reliance of regional industrialization on market mechanisms, the study will focus on two important policies.

Industrialization policies encompassed with a regional industrialization policy launched by the National Economic and Social Development Board (NESDB) and the investment promotion policy designed by the Board of Investment (BOI). The policies had an influence on national poverty incidence through labor mobility and labor income changes.

There are details in the following paragraphs;

5.1 Overview of Regional Industrialization Policies

The industrialization of the Thai economy is taking place in the context of ASEAN's development. Since the 1960s, the manufacturing sector has been a most dynamic sector in the Thai economy. Manufacturing expansion is supported and influenced by industrial policies, with regard to output growth.

In the specific area of poverty changes, an interesting aspect of this is the impact of regional industrialization policies on labor mobility and labor income changes. This study focuses on the role of government policies that provided policies to stimulate an industrial expansion in the regions through the implementation of industrial development plans. The scope of the study (1988, 1996, and 2000) covers 3 plans; the Sixth National Economic and Social Development Plan (1987-1991), the Seventh National Economic and Social Development Plan (1992-1996), and the Eighth National Economic and Social Development Plan (1997-2001).

The investment promotion policy designed by the Board of Investment (BOI) should also be highlighted because this is the government agency, which has played a significant role in promoting the industrialization on a regional basis in Thailand.

5.1.1 Industrial development plans

Regional industrial development was a major focus of the previous National Economic and Social Development Plans. Entering into the Sixth Plan, the main objectives of the regional industrialization policy were to reduce unemployment and to allocate resources to small-scale industries in regional areas out of the BMR. The plan aimed to reduce the income disparities among regions and aimed to enhance the income of labor in low-income class.

With regard to the Seventh Plan (1992-1996), the main objective of this plan was to focus on environmental conservation to support economic growth. In the area of regional industrialization, the Seventh Plan focused on

decentralizing industries to generate greater employment and income for rural people. It also focused on supporting the potential of different provinces and encouraged local entrepreneurs to expand their businesses. It also designated industrial development centers in various provinces in each region, including Chiang Mai, Phisanulok, Nakhon Sawan, Khon Kaen, Nakhon Ratchasima, Saraburi, Surat Thani, and Songkhla. The plan also guided the development of industries in the new economic zones, such as the Southern Seaboard and the Upper Central Region by using a similar pattern of development to that of the Eastern Seaboard development.

The objective of the Eighth Plan (1997-2001), was to improve the quality of life of the people. A new vision was introduced in this plan focusing on economic growth and stable resource use and environmental conservation as well as a balance of global economic and social factors. Hence, human resource development became the fundamental objective in the Eighth Plan. In the area of regional industrialization, the Eighth Plan aimed to generate wider employment opportunities to ensure all Thai people obtained an equal share of prosperity; this was through the development of guidelines for the decentralization of industries and related activities to all regions.

The policies of the Sixth, the Seventh, and the Eighth Plan, aimed to slow down future expansion of industrialization in the Bangkok Metropolitan Region (BMR). The region has been the main driver of economic activities throughout the years of industrialization. The plans have introduced several projects for the other regional urban growth centers and sub-regional development such as the Eastern Seaboard (ESB) in order to disperse industrial activities away from BMR. The industrialization policies and

related activities in the BMR, ESB, and other regions also impacted on the income and well-being of low-income people.

From the Sixth Plan period up to now, the industrial development plans in BMR have focused more on the development of infrastructure in the industrial areas. The plans have also stimulated factories that are starting up or expanding their businesses to locate in the industrial real estate zones. This is considered as the ways to enhance the value of agricultural land leading to industrial based development. The government policies have also promoted housing construction for low-income people and factory workers. According to the National Economic and Social Development Plans, the Eastern Seaboard (ESB) will serve as the country's major industrial based and a new gateway of decentralize industrial activities from BMR to the other regional areas. The ESB is a region richly endowed with resources including opportunities to develop deep-sea port facilities. It is planned to house in the ESB, the basic feedstock industries reliant based on natural gas piped ashore from the Gulf of Thailand.

The Eastern Seaboard covers a large area in the East including Chonburi province, a small urban industrial base; Laem Chabang, for light industry, export processing and a port for transshipment and services in Sattahip; Map Ta Phut in Rayong, for petrochemicals and heavy industry and Chachoengsao for agro-processing activities. The policy guidelines for government investment are to support primary development of basic infrastructure including commercial ports, road networks, railways, telecommunications, and water pipelines. This is to provide jobs and facilities that will enable urban development. These are aimed at ensuring sufficient primary supplies to satisfy the needs of potentially successful industries.

In other regions including the North, the Northeast, the Central Region (excludes BMR), and the South; the policy focused on the development of the economic and industrial base in the regional centers, investment promotion for small and medium-scale entities and credit extension to industries in these regions which support the economic infrastructure.

In the North, Chiang Mai was considered to be the regional center in the Sixth Plan. In the Seventh Plan and the Eighth Plan, Chiang Mai, Lampang and Chiang Rai have been developed to be the center of industrialization in the Upper North. Phitsanulok and Nakhon Sawan were promoted to be the centers of industrialization in the Lower North. The plans have also promoted small-scale industries such as ceramics, handicrafts, ready-made clothing, and agricultural products in response to the demand of the export markets.

In the Northeastern Region, the three plans have promoted the development of the industrial estates to serve as a major economic base of the region. Khon Kaen and Nakhon Ratchasima provinces have been developed as industrial centers. The plans have also promoted the use of local raw materials to supply industrial production.

In the Central Region, the Seventh Plan aimed to accelerate the development of Saraburi as the main industrial base. This province has been promoted as a center of trade, technical services, education, training, and labor skill development. Kaeng Koi district of the province has become a center for the cement and construction industries as well as other industries, which have been relocated from BMR, and Tha Rua/Tha Luang district as an agro-processing center for exports. The plans also promoted Ratchaburi province as an industrial zone for agro-industries and machinery industries, particularly the agricultural machinery and automobile assembly industries.

In the Southern Region, the area of Songkhla and Surat Thani have become major economic centers. Infrastructure and industrial estate development were promoted in response to the industrial demand, particularly the agro-industries, such as rubber, palm oil and seafood.

The plans were set as guidelines in preparation for the development of the Southern Seaboard development (SSB)¹ as one of the international shipping routes. This is because Thailand is competitive in terms of land and labor.

In addition to the three development plans, the government has tried to promote not only the manufacturing sector but also the trade and services sector to support regional industrial growth and urban centers in the region. In order to promote sustainable development, the agricultural sector has been supported for industrial purpose. Moreover, the promotion of small-scale industries using local raw material has been one of the most significant factors in terms of the development of regional industrialization.

Investment in infrastructure in BMR, ESB, and other regional urban centers, has been a key to support regional industrialization. This is not only to attract new investors, but also to attract an excess supply of labor from other regions into these areas.

¹Development of the Southern Seaboard will increase the country's capacity for sea transportation, using the geo-economic advantage of the Southern region to develop an economic land-bridge, an efficient transportation system connecting the Andaman Sea and the Gulf of Thailand.

5.1.2 Investment promotion policy

The Board of Investment (BOI) was established in 1959 as an independent Thai government agency under the Office of the Prime Minister. The organization is regulated under the Investment Promotion Act (1979). It was set up to stimulate investment in Thailand. The BOI has been provided with considerable discretionary authority to determine the criteria to select the investment projects that are eligible to receive promotion privileges; to set conditions for these projects; and to determine the extent and the length of duration of the promotion privileges. The objectives of investment promotion have included supporting export oriented, technology transfer projects and technological development. It is also promoting investment in industrial estates, particularly Foreign Direct Investment (FDI). The BOI supports investments, which lead to an improvement in infrastructure, such as ports, freight yards, industrial estates and waterworks. The BOI policy also encourages small to medium-sized manufacturers and manufacturing employment.

The BOI tended to favor the manufacturing sector in order to maintain sustainable growth rate in all regions. This is because the policies encourage reducing the relative price of capital and improving higher productivity in this sector of production. The government policy is to promote industrial development in areas out of BMR, and has designated three zones for granting tax privileges to investors and promoted projects. Zone 1: Bangkok and the surrounding areas with a high density of industries-this area receives the fewest benefits for new investors; zone 2: central areas including Chonburi and Chachoengsao in ESB – these are less developed and are provided with

greater promotional privileges than zone 1; zone 3: the remainder of Thailand, including Laem-Chabang and Mab Ta Phut², is provided with the most favorable incentives for prospective investors. Tax exemption and duty privileges in regional areas designed by the BOI (table 5.1) shows that other regions, classified as zone 3 were provided with the higher tax privileges on corporate income tax and import duty exemptions than zone 1 and zone 2. There were no exemptions on corporate income taxes or import duties for promoted projects that were located in BMR, while the corporate income taxes or import duties for the promoted projects that located in ESB and the other regions were exempted. The privileges granted by the BOI were expected to promote industrial activities and employment creation in the areas out of BMR. This shows that the investment promotion policy moved in the same direction with the aim of the industrial development plans in industrial decentralization and enhancing employment opportunities.

Data in table 5.2 shows that the industrial promotion policy played an important role in manufacturing investment and employment creation over the period of 1988-1996 and 1996-2000. The total number of start-up operation projects increased from 224 projects in 1988 to 611 projects in 1996 and continually increased to 625 projects in 2000. It also led to the increase in investment values and employment.

In 1996 and 2000, most of the start-up projects were located in the other regions which were classified as zone 3. It was partly induced by the highest benefits, which provided for operation projects in zone 3. However, it should be noted that zone 3 covered a larger area and larger size of labor force

²In 2000, Laem- Chabang and Mab Ta Phut were combined into zone 2.

than zone 1 and zone 2. Therefore, the industrial promotion should favor the improvement in labor income in the low-income areas out of BMR and ESB.

The main points in the industrialization policies designed by the National Economic and Social Development Board (NESDB) and the Board of Investment (BOI) can be summarized as follows:

- 1) During the Sixth Plan, the Seventh Plan, and the Eighth Plan, the policies relied heavily on the dispersion of small to medium scale industrial activities away from BMR. The main objective was to slow down a very high density of industrialization in BMR in order to reduce income inequality and poverty incidence.
- 2) The Eastern Seaboard (ESB) has become the main region for industrial and employment opportunities outside the BMR.
- 3) The BOI zoning policy provides less privileges to BMR than ESB and the other areas in order to promote regional industrialization.

These policies could influence on the poverty alleviation in several aspects via the promotion of industrial activities in the areas out of the BMR, which was considered as the low-income areas. One of these aspects is the policy impact on sectoral and regional labor mobility and income changes.

The aspect for relating national poverty incidence changes to the regional industrialization policies will be revealed in the following section. However, it should be noted that the policies designed by the NESDB and the BOI did not ensure the well-being of low-income people in the regional areas, but it has focused more on the country competition in the world economy, with regard to the output growth.

Table 5.1 Tax Privileges provided by the BOI for the Promoted Projects in Regional Areas during 1988 and 2000

Region	Corporate Income Tax Exemption Scheme	Import Duty Exemption Scheme	
		On Machinery	On Raw or Essential Materials
BMR	No exemption ^{1/}	No exemption or reduction ^{2/}	Exemption of import duty on raw or essential materials used in export products for a period of one year.
ESB	3 years exemption for projects that are located in industrial estates or promoted industrial zones.	50% reduction	Exemption of import duty on raw or essential materials used in export products for a period of one year.
Other Regions	8 years exemption + 50% reduction of corporate income tax for 5 years after the exemption period	Import duty exemption on machinery	Exemption of import duty on raw or essential materials used in export products for a period of 5 years.

Note: ^{1/} In 2000, projects located in BMR were exempted for corporate income tax for 3 years.

^{2/} In 2000, projects located in BMR were granted with a reduction on machinery tax for 50%.

(According to the criteria for granting tax and duty privileges for promoted projects, effective from August, 2000)

Source: Office of the Board of Investment, 1988, 1996, and 2000

Table 5.2 Distribution and Structure of Start-up Operation Projects Supported by the BOI in 1988, 1996, and 2000 ^{1/}

Structure	<i>BMR</i> <i>(Zone 1)</i>	<i>ESB</i> ^{2/} <i>(Zone 2)</i>	<i>Other Regions</i> <i>(Zone 3)</i>	<i>Total</i>
1988				
Projects	151	19	54	224
Investment(million baht)	11,201	1,916	4,814	17,930
Employment (Thai labor)	31,900	4,357	9,941	46,198
1996				
Projects	159	143	309	611
Investment(million baht)	44,593	94,446	141,101	280,140
Employment (Thai labor)	48,746	37,615	85,350	171,711
2000				
Projects	165	163	297	625
Investment(million baht)	81,513	107,614	115,729	304,856
Employment (Thai labor)	47,113	29,776	64,187	141,076

Note: ^{1/} includes agricultural products, minerals and ceramics, light industries, metal products and machinery, electric and electronic products, chemicals, paper and plastic, service and public utilities.

^{2/} ESB cover 3 provinces; Chon Buri, Chachoengsao, and Rayong

Source: Statistics of Investment Promotion, the Board of Investment (BOI).

5.2 Regional Industrialization Policy Analysis and Implications on Poverty

Regional industrialization policy has a direct effect on the labor market, especially on labor mobility and labor income changes. Difference in labor income and wages between the agricultural and non-agricultural sector could lead to an upward mobility of low-income labor across different production sectors and regions (according to the theory of Lewis's dual model). At the same time, if most of the low-income labor were paid with a higher income in non-agricultural sector, poverty incidence tended to decline.

The labor income changes and the mobility of labor across regions and sectors can contribute to the changes in the national poverty level. This can be examined by an estimated value of the contribution of the productivity effect and the resource allocation effect to the national poverty changes in the following chapter.

This section analyzes the regional industrialization policy and its implications on the national poverty incidence changes. One of the ways in which policies influence on poverty is via their effects on output, as measured by Gross Regional Product. The rate of growth of GRP was negatively related to the changes in poverty incidence. Higher growth means lower poverty (NESDB/ADB, 2001). The sectoral and regional Gross Regional Product (GRP) differed over the periods of the study.

Between 1988 and 1996, a greater manufacturing output originated from areas outside BMR might possibly reflect the decline in national poverty level as aimed by the NESDB and the BOI. The output of manufacturing in the regional areas has been considered as one consequence of the government

policy implementation in industrial development. Data in table 5.3 shows that the share of manufacturing output moved in line with the aim of industrial development plans in slowing down a high degree of industrialization in BMR and promoting ESB to be the second most important region for industrial development outside the BMR. The share of manufacturing in the BMR's GRP decreased from 40.03 percent in 1988 to 37.61 percent in 1996. At the same time, the share of manufacturing in ESB's GRP sharply increased from 31.52 percent in 1988 to 59.50 percent in 1996.

In this period, the percentage share of manufacturing in GRP in the other regional areas outside the BMR and ESB also increased as aimed by industrial development plans. The share of manufacturing in GRP in the other regions increased from only 9.04 percent in 1988 to 17.01 percent in 1996.

Changes in the manufacturing output could contribute to the national poverty changes via the productivity and resource allocation effects. If there was no either outward or inward mobility of labor in the manufacturing sector, the increase in manufacturing output in ESB and the other regions might possibly decrease the number of poor people through an increase in labor income. On the other hand, if the overall poverty incidence is assumed to be constant, the unbalance mobility of the poor and the non-poor might also reflect the changes in the level of poverty incidence in the manufacturing sector.

According to the promotion of the investment in services and trading to support manufacturing development, a high percentage of GRP in BMR and the other regions were dominated by the services sector (table 5.3). Through this means the alleviating in national poverty was not depended only on the manufacturing output but also the output of services.

Table 5.3 Percentage of Gross Regional Product (GRP) by Region and Sector of Production

Year	GRP Share			GRP Share Changes	
	1988 (1)	1996 (2)	2000 (3)	(2)-(1)	(3)-(2)
<i>BMR</i>					
Agriculture	2.72	1.86	2.22	-0.86	0.36
Manufacturing	40.03	37.61	41.76	-2.42	4.15
Services	50.46	52.71	51.10	2.25	-1.61
Others	6.60	7.82	4.92	1.22	-2.90
Total(%)	100.00	100.00	100.00	0.00	0.00
<i>ESB</i>					
Agriculture	15.51	5.27	4.32	-10.24	-0.95
Manufacturing	31.52	59.50	61.96	27.98	2.46
Services	37.69	21.67	18.55	-16.02	-3.12
Others	15.28	13.56	15.17	-1.72	1.61
Total(%)	100.00	100.00	100.00	0.00	0.00
<i>Other Regions</i>					
Agriculture	31.35	22.76	24.53	-8.59	1.77
Manufacturing	9.04	17.01	18.70	7.97	1.69
Services	49.53	46.71	47.63	-2.82	0.92
Others	10.08	13.51	9.15	3.43	-4.36

Source: Calculated from figures supplied by the National Economic and Social Development Board.

The way in which policy influence poverty in this study can be explained by the contribution of the productivity effect and resource allocation effect to the national poverty changes to see the link between the regional industrialization, labor mobility, and poverty changes. However, the national poverty change is not in itself the effect of government policies but also that of external forces and the way market mechanism respond to them. In the period of economic boom (1988-1996), there has been a gradual liberalization of the financial sector in Thailand. It fueled a domestic investment boom, particularly the boom on demand for non-traded assets (i.e. stocks, real estate and property development). The investment boom should raise the employment opportunities and wages in the services and the construction. (Sarntisart, 2000). Therefore, the financial liberalization could also be considered as one of many important factors influenced on the national poverty reduction between 1988 and 1996.

Between 1996 and 2000, the regional industrialization policies continually aimed to slow down a high degree of industrialization in BMR and encourage industrialization in the ESB and the other regions. However, the BMR remained its most prosperous region status for industrial activities. The evidence in table 5.3 shows that the share of manufacturing in BMR's GRP increased from 37.61 percent in 1996 to 41.76 percent in 2000. The share of manufacturing in ESB's GRP and the other regions's GRP also increased as aimed by the regional industrialization policies designed by the NESDB and the BOI. However, the increase in the share of manufacturing in GRP in ESB and the other regions in this period was lower than the increase in the period of 1988 - 1996. It might be partly induced by the onset of the 1997 economic crisis. The economic downturn could reflect the decline in the economic

outcome and employment. Thus, the regional industrialization in this period might adversely affect the poverty alleviation via the contribution of productivity and resource allocation effects.

However, the national poverty changes in the period after the 1997 economic crisis was not depended only on the government policies. It would also be affected by other factors. The agricultural prices that deteriorated during this period might also adversely affect the poverty alleviation as suggested by many previous studies on poverty in Thailand. Moreover, the effect of the manufacturing investment boom in China would also be considered as one of the important factors that might reverse the trend of poverty reduction in Thailand. The competitive pressure of China can contribute to a lowering in Thailand's manufacturing exports. Consequently, manufacturing output and employment in Thailand tend to decline and might possibly decrease income of workers in low-income brackets.