#### **CHAPTER 7**

### **CONCLUSION AND POLICY IMPLICATIONS**

#### 7.1 Conclusion

This study is concerned with estimating the impact of regional industrialization through labor mobility and income changes on national poverty between 1988 and 1996, and between 1996 and 2000. In order to achieve the objectives of this study, regional industrialization policies launched by the National Economic and Social Development Board (NESDB) and the industrial investment promotion under the Board of Investment (BOI) were investigated. The government policies have been essential determinant in regional industrialization development, particularly the expansion of industrialization in regional areas.

This study covers 3 areas: 1) Bangkok Metropolitan Region (BMR) including Bangkok and five surrounding provinces, 2) Eastern Seaboard Region including Chonburi, Rayong, and Chachoengsao, and 3) other regions encompassed with the North, the Central Region, the Northeast, and the South. The Head-Count Ratio (HCR) index is used in this study. It measures the proportion of poor people in total population based on the 1988, 1996, and 2000 Household Socio-economic Survey data (SES) conducted by the National Statistical Office (NSO). Impacts of the regional industrialization policy on the national poverty changes are explained by the decomposition analysis of the national poverty changes. The analysis consists of two effects, the productivity effect and the resource allocation effect. The productivity effect explains the contribution of income changes to the national poverty

changes. The resource allocation effect explains the contribution of the mobility of labor to the national poverty changes.

Results of this study indicate that changes in national poverty incidence throughout the 1988-1996 and 1996-2000 periods, were predominantly caused by the contribution of the productivity effect in the agricultural sector in the other regions (the areas outside the BMR and outside the ESB). This could be indirectly induced by the industrialization policies. The policies would stimulate the mobility of low-income labor from relatively low to relatively high-wage areas or sectors of production (which provide most of the employment opportunities to the poor). This will lead to an increase in income in a low-wage sector and overall poverty reduction.

This study demonstrates that the regional industrialization policy would affect the national poverty changes when explained by the contribution of the productivity effect and the resource allocation effect. Findings show that the contribution of the productivity effect had much more effect on the national poverty changes than that of the resource allocation effect. Between 1988 and 1996, the contribution of the labor income changes and labor mobility to the national poverty changes; move in line with the aims of industrial development plans and the investment promotion policy, in alleviating the poverty level. An actual decrease in the national poverty incidence by around 17.9 percent of total population between 1988 and 1996, was caused by the productivity effect by 94 percent of the actual decrease. The remaining 6 percent was caused by the resource allocation effect. However, changes in the national poverty level could be explained by factors other than the regional industrialization policy. The liberalization of the financial system in Thailand, between 1988 and 1996 led to greater efficiency

and growth in the economic system. Increases in the capital inflow could also reduce the national poverty level.

Between 1996 and 2000, the contribution of the labor income changes and the mobility of labor to the national poverty, worked against the aims of the industrial development plans and the industrial promotion policy in alleviating poverty. In this period, the overall incidence of poverty increased by 2.2 percent of total population between 1996 and 2000. The productivity effect had potential to increase the national poverty by 109 percent of the actual increase. The situation could have been worse than this had there been no mobility of labor across regions and sectors of production. Results indicated that the resource allocation effect which was contributed by the inter-group population mobility, helped to decrease the potential increase in the overall poverty by 9 percent.

There were many factors other than the regional industrialization that might contribute to the reverse trend of poverty incidence. Changes in the prices of agricultural products and the exchanges rate depreciation between 1996 and 2000 is one of many important factors affected the agricultural labor income reduction and the overall poverty increase. The competitive pressure from China could also have a negative effect on Thailand's light manufacturing exports and employment opportunities. This could contribute to the increase in the national poverty incidence between 1996 and 2000 via the decrease in labor income and labor mobility, especially those in low-income classes.

#### 7.2 Policy Implications

The government in the past has heavily concentrated on investment in regional manufacturing during the period of industrialization. Regional industrialization might hold the key to additional employment, which may then, in turn contribute to the economic growth of the country and poverty alleviation. Findings in this study show that the national poverty changes were predominantly caused by the contribution of agricultural income changes, especially in the regions outside BMR and ESB. This could be indirectly induced by the industrialization policies. The policies would stimulate the mobility of low-income labor from relatively low to relatively high-wage areas or sectors of production.

As discussed in many previous studies, one of many factors caused the mobility of agricultural labor and income changes is a relatively low agricultural productivity in the other regions, especially in the North and the Northeast. Therefore, the government should adopt the policies to boost agricultural labor productivity and to ensure that low-income earners who move out from the agricultural sector will be employed at higher wage rates in the manufacturing, services and other sectors:

# 1) To place special attention to linkages between agriculture and manufacturing industries, rather than simply industrialization or agricultural development.

An increase in the national poverty incidence in the period of economic downturn that took place in Thailand in 1997, send a strong signal that accumulated weakness within the economic system and the inefficiency

of industrialization. Harmonizing agricultural and industrial sector will be key for poverty alleviation and regional industrialization success, especially in terms of improving productivity and decreasing risk. Manufacturing that have strong linkages with agricultural production includes food processing, textiles, wood products, and rubber products. These industries are helpful in employment creation, have high local-raw material content in their production and are easy to be located in provincial areas. Furthermore, investment in the agricultural sector should be the production of raw materials or simple processing of agricultural products to support manufacturing firms in nearby areas.

# 2) To promote additional skill training and education program for the poor, who are predominantly falling into the category of unskilled-labor in the non-agricultural sector.

Alternatively, Instead of just giving tax holidays for investors in preferred industrial zones, the BOI may additionally provide more incentives or assistance to companies and workers for training and education programs to be more productive. Even if investors decide to relocate their plants in the future, Thailand would still benefit from the higher quality of the workers left behind.

3) To promote public investment in agricultural research and development (R&D), development of an adequate infrastructure, specifically transportation and means of communicating market signals quickly.

The government should enable agricultural labor to increase their knowledge and skills, as well as to be supportive of developmental change.

These involve educating and training of agricultural labor and technicians on new technologies and practices.

Moreover, the government should provide policies to assist labor in the agricultural sector to be self-reliance. Self-employed activities and household industries would also be promoted for additional income in the dry season, or when agricultural product prices and farmer's economics status have deteriorated.

## 7.3 Limitations and Suggestions for Further Studies

- 1) The study is based on the framework of the poverty incidence analysis. The results therefore rely upon the model itself and quality of data employed in the analysis. The analysis used only one of many poverty indices to explain the poverty changes. This is the Head-Count Ratio (HCR) index, which does not pinpoint the intensity of the poor. To improve this, other absolute poverty indices such as the poverty gap and the Foster, Greer and Thorbecke (FGT) index should also be employed.
- 2) The results could not specifically identify that all changes in the national poverty level were affected by only the regional industrialization policy. Changes in the national poverty level can be explained by factors other than the regional industrialization policy. However, the empirical model used in this study does at least explain the contribution of labor income changes and labor mobility to the overall poverty changes, which might be influenced by the regional industrialization policies. It is hoped that this study

can serve as a starting point for a more complicated analysis of poverty alleviation and national development.

3) Findings show that the flows of the agricultural labor into the services and the other sectors of production play an important role in national poverty changes. These are employment in activities related to transportation, communication, wholesale and retail trade, banking, insurance and real estate, including mining and construction. An analysis of employment, and poverty changes in these sectors would make an interesting subject for further studies.