CHAPTER 2

REVIEW OF RELATED LITERATURES

This chapter presents a review of related literatures and previous studies underlying the framework of this study. Related literature review will be separated into 3 groups: 1) trends and factors related to poverty in Thailand, 2) studies on regional industrialization and poverty incidence, 3) labor mobility and factors relating to poverty incidence changes.

2.1 Trends and Factors Related to Poverty in Thailand

The poverty incidence statistic in Thailand has been available since 1962 when the NSO started to collect data about household income and consumption expenditure. There were many previous studies focusing on absolute poverty. The estimation of poverty incidence was based on the Socio-Economic Survey data (SES). Most of these studies implemented Head-Count Ratio as poverty index.[1]

Trends of poverty in this section could be divided into 2 trends; poverty trend before the 1990s, and poverty trend in the 1990s.

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[1]The Head-Count Ratio Index (HCR) is the percentage of the poor in total population.

2.1.1 Poverty incidence before the 1990s

Many previous studies found that the poverty incidence before the 1990s had gradually reduced (table 2.1). The study of Meesook (1979) was the first study that found a reduction of poverty between 1962/63, 1968/69, and 1975/76. Meesook used SES data for estimate the poverty incidence and Head-Count Ratio (HCR) as poverty index. Two absolute poverty lines were used to calculate the poverty incidence because the different concepts for urban and rural areas. The poverty line is defined in terms of household total income. Consumer price indices were used to adjust price differences between the period concerned and the based year.[2]

Result of the study shows that the poverty incidence had declined overtime. The poverty incidence declined from 57 percent in 1962/63 to 39 percent in 1968/69. The overall poverty incidence continually declined to 31 percent in 1975/76. The distribution of poor population shows that most of the poor were farm households in the Northeast and the North. Meesook suggested that an improvement of the agricultural productivity and the crop prices were important factors in enhancing farm household income. Moreover, the study found that the role of government was also important in poverty alleviation. The study stated that there was a bias in the availability of public services in favor of the urban population. The resources available have not been used in such a way as to contribute to a reduction in income disparities in the living standards across population groups.

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[2] In 1975/76, urban poverty line was 2,961 baht/person/year and rural poverty line was 1,981 baht/person/year.

Table 2.1 Percentage of Poor People in Total Population before the 1990s

Previous Studies	1962/63	1968/69	1975/76	1980/81	1985/86	1988
Meesook (1979)	57.0	39.0	31.0			
Hutaserani and Jitsuchon (1988)			30.0	23.0	29.5	
Hutaserani and Tabwong (1990)			30.0	23.0	29.5	23.7

Source: From Meesook (1979): table 3.1, Hutaserani and Jitsuchon (1988): table 2.15 and Hutaserani and Tabwong (1990): table 5.3.

Hutaserani and Jitsuchon (1988) and Hutaserani and Tabwong (1990) further analyzed the poverty trend during 1975/76 and 1985/86. All used Meesook's urban and rural poverty lines. Three poverty indices including Head-Count Ratio, Relative Income Shortfall and Sen index were used in the studies. Both of the two studies found that the poverty declined to 23 percent in 1980/81 from 30 percent in 1975/76 and rose again to 29.5 percent in 1985/86. The increases of poverty incidence between 1980/81 and 1985/86 resulted from the second oil shock and a fall in agricultural price. The study of Hutaserani and Tabwong (1990) analyzed the poverty trend between 1975/76 and1988/89. The 1988/89 SES for the whole country and within each region was the data source used in the study to calculate variables and measurements for analyzes compared with the past trend. Results showed that the proportion of households living under the poverty lines declined steadily to 23 percent in 1980/81 from 39 percent in 1968/69 when measured by

Head-Count Ratio index. The overall poverty incidence increased substantially to 29.5 percent in 1985/86 from 23 percent in 1980/81. This reversed trend is caused by major crop prices and farmers' economic status deteriorating. The overall poverty during the late 1980s has improved over the mid 1980s level, reducing to 23.7 percent in 1988/89 from 29.5 percent in 1985/86. The reverse trend was caused by an export boom. Moreover, poverty incidence classified by region and sector of production showed that most of the poor were in the Northeastern region and the highest poverty incidence was in agricultural sector (table 2.2), as in many previous studies.

Table 2.2 Distribution of the Poor People in Total Population during 1975/76 and 1988/89

	1975/76	1980/81	1985/86	1988/89
Region				
North	33.18	21.5	25.54	23.23
Northeast	44.92	35.93	48.17	33.45
Central	12.99	13.55	15.63	15.97
South	30.71	20.37	27.17	21.49
BMR	7.75	3.89	3.54	3.41
City Core	6.9	3.7	3.11	3.26
Sector of production				
inactive	1.85	2.82	3.53	4.7
agriculture	82.96	82.52	80.95	76.4
non-agriculture	15.19	14.66	15.52	18.8

Source: Hutaserani and Tabwong (1990): table 5.5 and 5.7

2.1.2 Poverty trend in the 1990s.

Many previous studies showed that poverty trend had reduced continually in the pre-crisis period of the 1990s. The economic crisis that began in 1997, reversed the trend of poverty reduction (table 2.3).

The National Economic and Social Development Board (NESDB), 1999 provided an analysis of impact of economic crisis on poverty in Thailand. The study used average NESDB poverty lines. The analysis was based on the Socio-economic Survey (SES) during the years 1988, 1990, 1992, 1994, 1996 and 1998. There were three measures of poverty incidence; Head-Count Ratio, poverty gap, and severity of poverty index, which moved in exactly the same direction overtime.

The study pointed out only Head-Count Ratio index for poverty analysis. The data revealed a very remarkable decline in poverty incidence from 1988 up to 1996, a moderate increase to 1998 and larger increase over the following years (table 2.3). This showed that the economic crisis contributed to an increase in the number of poor people.

Sarntisart (2000) confirmed the result of NESDB (1999). The study analyzed the impacts of the 1997 crisis on poverty over the 1996-1998 and 1998-1999. The Head-Count Ratio index (HCR) and Foster, Greer and Thorbecke index (FGT^{α})[3] were used to measure the impact of the crisis on poverty. The analysis is also based on the two different concepts of poverty lines: the old (World Bank) poverty lines and Kakwani 's or the official

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[3] if $\alpha = 0$, the FGT becomes the Head-Count Ratio and if $\alpha = 1$, the FGT measure becomes the poverty gap index.

Table 2.3 Percentage of Poor People in Total Population in the 1990s.

Previous Studies	1988	1990	1992	1994	1996	1998	1999	2000
NESDB (1999)	32.6	27.2	23.2	16.3	11.4	12.9		
Samtisart (2000)					11.4	13.4	16.5	
Samtisart and Wiboonchutikula (2003)	36.5	31.6	27.1	20.3	14.3	15.5		17.8

Source: Table 3 in NESDB (1999), table 8 in Samtisart (2000), and table 14 in Samtisart and Wiboonchutikula (2003).

poverty lines. Samtisart did a decomposition analysis of poverty by dividing the effect of changes in poverty between 1996 and 1998, and between 1998 and 1999. They are population mobility impact regardless a changes in subgroup poverty and the impact on subgroup poverty regardless a changes in population share. The study found that the trend of poverty reduction between 1990 and 1996 appeared in both urban and rural areas, and in almost every region. After the onset of the 1997 crisis, an increase in poverty in the Northeast and the South was the most severe. The study showed that the population mobility impact and the impact on subgroup poverty changes had a direct effect on overall poverty changes. There were many factors contributed to the population mobility impact and the impacts on subgroup poverty changes. The high crop price was a main factor, which helped a number of poor in agricultural sector to reduce. In 1999, the incidence of poverty increased dramatically in the Northeast and the North. This was because of low commodity prices. The analysis of the changes in poverty can be

concluded that the Northeast, the North, and the South are the three poorest regions. People in the upper income class who live in Bangkok and its vicinity, and Central Thailand benefited from non-agricultural activities in the regions.

Sarntisart and Wiboonchutikula (2003) also recalculated the incidence of poverty between 1988 and 2000 based on the average NESDB poverty lines. The study included some discussion on the average NESDB poverty lines, which higher than Meesook's poverty lines. The study stated that the proportions of food expenditure in the official poverty lines are higher than the actual level. Thus, at the time of baht depreciation during the 1997 economic crisis, the poverty line is too high and the incidence of poverty was over-estimated.[4] This was a weakness of the NESDB or the official poverty lines in the 1990s period.

Results of poverty trend showed a reduction in poverty incidence in the pre-crisis period as the same as the previous studies. The Head-Count Ratio was around 32 percent in 1990 and dropped to 27, 20 and 14 percent in 1992, 1994, and 1996, respectively. The economic crisis commencing in 1997 reversed the trend of poverty. The incidence of poverty increased to 15.5 percent in 1998 from around 14 percent in 1996, and rose to 17.8 percent in 2000.

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[4] This is well discussed in Sarntisart (1998) and Nathan (2001)

2.2 Regional Industrialization and Poverty Incidence

The government has attempted to reduce the number of poor by promoting regional industrialization. All of these studies focused on the government policies and its impacts. The studies of Krongkaew (1987), Tinakorn (1995) and Jitsuchon (1989) have focused on the trend of poverty incidence in Thailand from 1960, when country started to implement the First National Development Plan. The plan focused more on the supportive roles in private investment promotion.

Krongkaew (1987) studied the employment situation and the general welfare of the Thai population during periods of modern economic development between 1960s and 1980s. The study examined the poverty conditions depending on the aspects of economic transformations such as the structural changes in the industrial production. Household income was used as an instrument of benchmark to identify the poor and the poverty lines specified by Meesook (1975/76) and the World Bank (1978). The result showed that the proportion of the poor fell to 24 percent in 1981 from 57 percent in 1962/63. The trend in poverty reduction was equally impressive across the regions. The poverty incidence in Bangkok fell sharply to 4 percent from 28 percent between 1962 and 1981. The calculation of the poor distribution classified by region and area during this period showed that the Northeast was the poorest region and Bangkok maintained its most prosperous region status.

The study showed the distributive impact of two government policies related to industrialization and poverty reduction in the period of 1974-1978: manufacturing protection policies and minimum wage policies. The study

stated that the effect of protection policies had the impact on the rural economy. The World Bank argued that the heavy industry protection has harmed the rural economy in several aspects. Firstly, a high taxation on consumers was implemented to protect the high-income groups who own factories. Secondly, there was a protection bias on industries, which heavily based on imported raw materials, and against resources and agro-based industries. Those industries were encouraged to use more products from the rural economy. Thirdly, the tax barrier measure favored the capital-intensive industries rather than the labor-intensive manufactures. This helps the domestic manufactures to compete with other industries in the word market.

For the minimum wage policy, the study stated that the minimum wage in Thailand did not have much effect on unskilled-labor employment because of the inelastic demand for unskilled or low-skilled labor in industries. The minimum wage could lead to a raise in the basic income of unskilled-labor only. On the other hand, the wage share of industrial output has been quite low.

The trend of poverty incidence in 1975/76 to 1988 was reexamined by Tinakorn (1995). The data in 1975/76, 1981 and 1986 was from Hutaserani and Jitsuchon (1988), and those for 1988 are from Krongkaew and Tinakorn (1991). Tinakorn concluded that most of poor (about 89 percent in 1988) live in rural areas. They were mainly farm laborers who depended very much on the agricultural products to generate the household income. The study also made some qualitative conclusion about the path of industrial development contributed to poverty changes in Thailand in the 1960s.

The present situation of poverty is not only the result of industrial policies. There may be some aspects of industrialization that tend to

accentuate it. Firstly, the investment promotion has tended to favor large-scale, capital-intensive firm and fiscal intensive industries. Consequently, the imported capital and minimum wage law has made the relative price of capital lower than it has to be. This led to low employment in the industrial sector and agricultural sector, which still require most of labor force. Secondly, industrial activities were concentrated in Bangkok and the Central region because infrastructure has been inadequate in the other regions. Thirdly, only large investors could benefit from the BOI investment incentives. On the other hand, small investors bear the import tariffs. These aspects revealed an unbalanced past industrial development policy affecting poverty incidence.

The investigation of rural poverty alleviation related to macro-type policies namely, industrial policies in Krongkaew (1987) and Tinakorn (1995) were also appeared in Jitsuchon (1989). This study also investigated the exchanges rate policies, and tax policies. For industrial policies-especially those manipulated through BOI were criticized their bias against small industries. Big industries were favored to the agro-processing industries, which are usually small or medium size industries. The promoted firms tend to concentrate within Bangkok and its surrounding provinces. Thus, the residents in this area benefit both forward and backward economic linkages.

The implementation of industrial policies could significantly influence on rural poverty incidence. The exchanges rate policies could help to maintain the overvalued official rate of the baht during most of the period before 1981. This meant that a substantial amount of domestic resource was necessary to supply this overvaluation. Normally, the resource had been drawn from the agricultural sector, whose export earning were used to finance

a cheap foreign exchanges policy. The real depreciation of the exchange rate has taken place since the late 1970s. It offered a structural remedy.

Since then, the export sectors has paid less tax or even gained subsidies. The advantage of this currency exchanges depreciation was not only for the agricultural sector, but the manufacturing sector as well. For tax policies, although the share of direct tax revenues (income and corporate income tax) continuously had increased over the last three decades to 20 percent from about 10 percent of the total government revenue. It has still been much lower than the indirect tax share. The indirect tax was blamed for its regressive nature: more tax (proportionately) was imposed on the poor than on the rich. On the other hand, direct tax structure was usually progressive. Consequently, any government relying heavily on income from indirect taxes were alleged to worsen the inequality of the income distribution.

The analysis about poverty changes and the economic growth in Thailand in the period of 1962-1999 were provided by NESDB/ADB (2001). The study separated the economic growth into 2 terms: aggregate growth and sectoral growth. For the relationship of poverty reduction as dependent variable, aggregate growth, and inflation as independent variable. The study used OLS method to estimate this relationship.

The estimated relationship predicted the observed changes in poverty incidence reasonably well. The rate of growth of GDP was negatively related to the changes in poverty incidence. Higher growth means lower poverty and the rate of inflation was positively related to changes in poverty-higher inflation means higher poverty (the estimated coefficient relating poverty reduction to the rate of growth of real GDP was significantly greater than zero

at 99 percent. The corresponding coefficient on inflation was significant at 95 percent).

The study also investigated the relationship of poverty reduction and sectoral growth. The sectoral composition of growth given by the level of real GDP, which was the sum of value added in agriculture, industry and services. This study showed that the growth of agriculture significantly related to poverty reduction but not the growth of industry. The strongest relationship between sectoral growth and poverty reduction occurred in services sector. The reason was the service sector's growth spurred a demand of unskilled labor more than any other sectors.

The analysis on structural changes and poverty changes also appeared in the study of Sarntisart and Wiboonchutikula (2003). The study concluded that regional industrialization has been very effective for poverty reduction in the pre-1990 period. While the Northeast was recorded as the poorest region of the country, Bangkok and its vicinity have been well insulated from poverty deterioration. This was because of the larger size of rural sector, poor land quality, the small percentage of irrigated land in the Northeastern region. The increase in the incidence of poverty after the onset the 1997 economic crisis resulted from the economic recession and the increase in protection was passed on to the poor. The study suggested that the economic openness policy to the world economy is a key to increase employment and to reduce poverty.

Focused on the poverty incidence in the Northeast of Thailand; an area of limited job opportunities, contains the poorest and least urbanized population in Thailand. Hossain (2001) touched on poverty issue from 1988 to 1998. He explained the extent of poverty incidence under the new NESDB poverty lines. He found that the incidence of poverty had progressively

declined to 11.4 percent in 1996 from 32.6 percent in 1988. While a reduction in poverty particularly marked in Bangkok and surrounding areas or in well-organized communities. The highest incidence of poverty at 19.4 percent, was in the Northeast. Poverty had increased throughout the country to 12.9 precent in 1998 from 11.4 percent in 1996 due to the Asian economic crisis. The crisis had the most severe impacts on the income of the poor as the percentage changes in this group declined to 33.4 percent between 1994 and 1996. It increased to 16.6 percent during 1996-1998.

The study also investigated some reasons behind poverty in the Northeast. Hossain described that the living condition of people in the Northeast had been neglected by the central government for many decades. Moreover, it was because they were in large-sized households' employment patterns (in agriculture, industry, or services), rural mobility, low rural productivity including lack of well-paid employment in the formal sector. Besides, the persistent problem of the spatial concentration of large industries in the Bangkok Extended Urban Region (EUR) was well known, while smaller agro-processing industries were scattered in provincial cities and rural areas of the Northeast. Most of these mills have been used as local collection points for rice exporters located in Bangkok.

The development problems and projects failure in this region led to socio-economic changes. Many people therefore, moved to Bangkok and nearby cities for seeking higher paid jobs. Hossian stated that better employment schemes and industrial linkages with villages would provide better employment opportunities for incoming rural migrants. The agro-processing industry could gradually be further developed. However, the commentator of the study suggested that the industrialization

policy in the Northeastern region effectively had addressed the poverty needs to be addressed the structure of the region industrialization.

2.3 Labor Mobility and Factors Related to Poverty Changes

In order to investigate the nature of labor mobility and its impact on poverty changes, this part reviews the previous studies on labor mobility and factors related to poverty such as wages and income changes. Chindasaeng (1979) and Sonsaneeyarat (1997) investigated pattern of labor mobility across occupations, economic sectors, and geographical area in Thailand. Chindasaeng's study focused on wage differential, which was an important factor of mobility. Sonsaneeyarat considered the skills of labor and income changes. This showed that labor mobility caused by many reasons influence income changes. As a result, poverty changes could be described by the mobility of labor and income changes.

The Chindasaeng's study examined the nature of in-mobility and non-mobility outside and inside the Bangkok Metropolitan Area and attempted to measure the relationship between the rate of mobility into Bangkok and job opportunities in the Bangkok Metropolitan Area. She also tested the Todaro paradox of more urban employment creation causing a greater urban unemployment problem, in terms of mobility and employment during 1974 and 1977, which were obtained from the National Statistical Office. The study found that most of the in-mobility were individual searching for employment during the slack agricultural season and originated from the rural agricultural sectors of Thailand, particularly the Northeast and the Central region. In addition, the empirical results showed that job or employment

opportunity in the Bangkok Metropolitan Area was one of the important factors of the mobility. Another important factor of rural-urban mobility was wage differentials between urban and rural areas. Unfortunately, a full analysis of wage differentials on decision to mobile across areas was omitted in the study according to the Todaro model's ignorance of wage differentials.

The study of labor mobility patterns in 1993 by Sonsaneeyarat (1997) focused on the difference of labor-skilled and earning. The data for the study based on round 1 (off agricultural season) and round 3 (peak agricultural season) of the 1993 Labor Force Survey which was collected and compiled by the National Statistical Office. Markov chain model was used to examine these patterns of labor mobility. The results showed that the length of employment among semi-skilled and unskilled labor was shorter than skilled and professional groups. One of many reasons was that most of semi-skilled and unskilled labor gained daily income from uncertain work status. An extra income in the industrial and service sector, which do not require high skilled labor was one of the reasons of labor mobility across economic sectors in off agricultural season. Regarding the pattern of geographical mobility, it is found that Bangkok and its vicinity and the Northeast have transferred a lot more than other regions. The reason was that Bangkok and its vicinity was the center of industry and economic activities, providing great opportunities and income for job seekers.

The study of Gibbons, Katz, Lemieux, Parent (2002) concerned the wages and allocation of workers across occupations and across industries using the model in which the worker's skills determined the worker's current wage and sector. Endogenous wage changes and sector mobility occurred as labor market participants learn about these unobserved skills. The data used

in the study was the National Longitude Survey of Youth, or NLSY from 1979 to 1996. This model can be estimated using non-linear instrumental-variables techniques. They found that high-wage sectors employed high-skilled workers and offer high returns to skilled workers. One possible explanation for this finding was that learning was important in the first few years in the labor market.

From those three previous studies on the mobility of labor, the allocations of labor particularly the outward mobility of labor from the agricultural sector into the non-agricultural sector had generated extra income. Moreover, the mobility of labor appeared in low-income groups, which were semi-skilled and unskilled-labors. The studies pointed out that the mobility of labor and income changes were the two important factors behind the poverty changes.