GROWTH AND EQUITY IN AGRICULTURAL DEVELOPMENT

PROCEEDINGS

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1983

Gower
INTRODUCTION

One major difference between the present Thai Government under General Prem Tinsulanonda and previous governments is that Prem’s Government has made a very conscious and concrete effort to promote rural development through reduction in rural poverty and improvement in rural income distribution. The larger amounts of central government’s budget in Thai history have so far been spent on public works programmes primarily to help the rural population; a special rural poverty plan has been set up and appended to the Fifth National Economic and Social Development Plan; and several areas throughout the country have been designated poverty areas so that the government can concentrate their efforts in helping them. One of the reasons that prompted the present Government to take these measures could be the growing realization that the outcome of past development efforts in the last two decades, though satisfactory in terms of overall rate of growth, has not been equally distributed among various sectors of the population, with the farm sector which is the largest sector probably enjoying the least benefits. Certainly it could be accepted that the number of poor families has declined even in absolute terms in the last decade or so, but it is still doubtful to say that the extent or magnitude of income disparities within the rural areas or between rural and urban areas has also declined. Whatever the case may be, there is still much to be done in the rural areas of Thailand regarding the issues of poverty eradication and improvement in income inequality.

It is the intention of this short paper, therefore, to focus on one specific measure which the present Government has initiated to combat rural poverty and income disparities: the Rural Job Creation Project (RJCP). First, the paper will discuss the current state of poverty and income inequality in rural Thailand. Then it will proceed to describe the nature and operation of the RJCP. And finally, the impact of the RJCP on rural poverty and income distribution will be assessed and policy recommendations offered.
POVERTY AND INCOME DISTRIBUTION IN RURAL THAILAND

The main purpose of this section is to paint a broad picture of the poverty and income distribution situations in the rural areas of Thailand, without engaging in a detailed discussion of the causes and characteristics of such situations, in order that the readers will be able to see a rationale behind the launching of the national public works programme of the present government.

As for the poverty situations in rural Thailand various studies have been conducted to find out who the poor are and whether they have changed their positions through time. Various techniques were used to determine the poverty lines or poverty band, but it seems that the technique used by Oey Astra Meesook (1979) for the World Bank has gained the most acceptance among researchers in this field. This is the technique where the poverty or cut-off income is derived, first, from the amount of money needed to satisfy minimum food requirements of an average person, then other non-food expenses are computed and added into it. Based on this poverty income, the incidence of poverty in rural Thailand, that is the percentage of the total population which is under the poverty line, can be estimated. This is shown in Table 1 for 1962/63, 1968/69, 1975/76 for all regions, and 1979/80 for the Northeastern region only.

It can be seen from Table 1 that, according to the estimates by Meesook, the incidence of poverty in rural Thailand secularly declined from 1962/63

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>66</td>
<td>37</td>
<td>36</td>
<td>-</td>
</tr>
<tr>
<td>Northeast</td>
<td>77</td>
<td>67</td>
<td>48</td>
<td>67(^b)</td>
</tr>
<tr>
<td>Centre</td>
<td>40</td>
<td>16</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>South</td>
<td>46</td>
<td>40</td>
<td>35</td>
<td>-</td>
</tr>
<tr>
<td>Whole Kingdom</td>
<td>61</td>
<td>43</td>
<td>37</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: For 1962/63, 1968/69 and 1975/76, the data were adapted from Oey Astra Meesook (1979, p. 52). For 1979/80, the figure was obtained from the preliminary result of the Socio-economic Survey of the Northeastern Region, 1978/80 conducted by the National Statistical Office.

Notes: \(^a\) The rural areas for this year include both the villages and sanitary districts, whereas in 1962/63 and 1975/76 only villages were included. The percentages shown in 1968/69, therefore, slightly understate the true poverty situation in rural areas for that year.

\(^b\) The same cut-off or poverty income as in Meesook was used here, that is 1981 baht per person per year, adjusted by the price index of 138.1 for 1979/80 (1975/76 = 100.0).
to 1975/76 in all regions of the country. Some researchers may argue against the use of price indices in adjusting the poverty income upward which understate the true price situation in rural areas, making the incidence of poverty in later years lower than it should be. But there should be little doubt that the poverty situation has substantially improved between 1962/63 and 1975/76. However, the most recent estimate by the National Statistical Office, for the Northeastern region for 1979/80 only, shows the incidence of poverty at 67 per cent, an increase more or less to the level of 1968/69. Although this latest estimate only shows the poverty proportion in one region, and the situation could be different elsewhere, it has served to dampen the enthusiasm that one could draw from the decline in the rural poverty trend as shown from 1962/69 to 1975/76.

**TABLE 2**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Money Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North</td>
<td>0.2566</td>
<td>0.4008</td>
<td>0.4945</td>
<td>0.2020</td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>0.3370</td>
<td>0.5249</td>
<td>0.4747</td>
<td>0.3184</td>
<td></td>
</tr>
<tr>
<td>Centre</td>
<td>0.3360</td>
<td>0.4380</td>
<td>0.5334</td>
<td>0.1859</td>
<td></td>
</tr>
<tr>
<td>South</td>
<td>0.2921</td>
<td>0.3654</td>
<td>0.5293</td>
<td>0.2293</td>
<td></td>
</tr>
<tr>
<td>Total Incomea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North</td>
<td>0.3080</td>
<td>0.3450</td>
<td>0.5590</td>
<td>0.2780</td>
<td>-</td>
</tr>
<tr>
<td>Northeast</td>
<td>0.2640</td>
<td>0.3473</td>
<td>0.3780</td>
<td>0.2500</td>
<td>0.3863b</td>
</tr>
<tr>
<td>Centre</td>
<td>0.3750</td>
<td>0.3917</td>
<td>0.4130</td>
<td>0.2610</td>
<td>-</td>
</tr>
<tr>
<td>South</td>
<td>0.3700</td>
<td>0.3249</td>
<td>0.4140</td>
<td>0.2970</td>
<td>-</td>
</tr>
</tbody>
</table>

*Sources:* Adapted from Krongkaew (1980); Meesook (1975b) and Wattanavitukul (1978). All these estimates were based on the results of the Household Expenditure Survey of 1962/63 and the Socio-economic Surveys of 1968/69, 1971/73, 1975/76 and 1979/80 (for the Northeast only).

*Notes:* aTotal income includes money income, in kind or non-money income and imputed rent.

Whereas absolute poverty may have declined between 1962/63 and 1975/76, the relative poverty or inequality in income distribution in rural areas has not performed equally well. In fact, the inequality has worsened. As can be seen from Table 2, the extent of income inequality, as shown by Gini coefficients, increased steadily between 1962/63 and 1971/73 both for money income and total income of rural households. But this worsening trend in rural income distribution seemed to have been arrested in 1975/76 when the Gini coefficients for that year showed a remarkable reduction in income disparities. The improvement in income equality for 1975/76 was
so large and so sudden as to create a sense of doubt regarding the survey
data and/or the addition of income components. Another unusual point is
that normally the distribution of total income would show greater equality
than the distribution of money income, because those households in the
lower (poorer) end of the income distribution would derive most of their
incomes from non-money sources thus improving income equality. But the
estimates for 1975/76 show lower Gini coefficients for money income than
total income for households in all regions except in the Northeast. This
sense of doubt for 1975/76 was reinforced by the latest estimate for the
Northeast which shows a Gini coefficient of 0.3863 which is much higher
than in 1975/76. Indeed, this coefficient of income inequality is highest of
all the estimates from 1962/63.

All in all, it could be concluded that the poverty and income distribution
in rural Thailand is still unsatisfactory and a matter of much concern. The
average income of rural households may increase steadily throughout the
latter part of the 1960s and the 1970s so that the number of households
falling under the poverty line also steadily declined. But this trend may have
already stopped, slowed down, or even reversed. And throughout these
periods income inequality within the rural areas themselves may have
increased all the time. This, apparently, must be the rural scenario which
was taken by the present government and that which prompted them to
launch the first rural Job Creation Programme in 1980.

THE 1980 RURAL JOB CREATION PROGRAMME

This national public works programme was established on 1 May, 1980,
soon after Prem became Prime Minister in early March of the same year
and was to go on for 4 months until the end of August. The 1980 RJCP was
not the first major public works programme in modern Thai economic
history. Indeed the first large-scale public works programme covering the
whole country was instituted 5 years earlier under M.R. Kukrit Pramote's
Government (known as the Tambon Development Programme I) where 2.5
billion baht was spent for the entire project by all Tambons in the Kingdom.
The programme had proven to be very politically popular, so it was
repeated in the following year under a new government and a larger budget
(3.5 billion baht and known as the Tambon Development Programme II).
Yet another rural public works programme costing 1.6 billion baht was
created in 1978 under another new government (the Rural Economic
Rehabilitation Programme). The 1980 RJCP was the first rural public works
programme under the present government, to be followed by two more
RJCPs in 1981 and 1982. The budgets for these three programmes for
1980, 1981 and 1982 were, respectively, 3.5 billion baht, 3.5 billion baht
and 1.8 billion baht. 4

The purposes of the 1980 RJCP can be stated as follows:

(a) to help augment the incomes of farmers in the rural areas across the
country who suffered from drought in the previous year, by creating jobs during the slack season in which those farmers could come to work; (b) to stop or slow down the migration of the rural population to cities or urban centres; (c) to enable the rural population to increase their infrastructural assets, such as irrigation ditches, water reservoirs, roads and so on, for their farm production and livelihood; (d) to promote development planning at the lowest level of public administration and stimulate greater local grass-root participation in self-government.

It is quite evident that the primary intention of the government was the income augmentation of the rural population; the other objectives were subsidiary or by-products of this aim, and rural jobs or employment were the means to achieve these ends. The hardship experienced by farmers in most provinces as a result of general drought conditions in 1979 tied in very well with the general ill-being of the rural households, as pointed out in the earlier section, to give an added weight to the appropriateness and timeliness of this rural public works programme.

All 71 provinces except Bangkok Metropolitan Areas were covered by this programme. There were 2 types of projects to be supported under this RJCP: (a) Project Type I was the construction and/or improvement of water resources for farm or household uses which included digging ponds, water wells, water canals, drainage ditches; construction of irrigation dams and spillways; repair of embankments; and the like. (b) Project Type II was the construction and/or repair of other public works, mainly roads and bridges. Because water resources were more important, the central government has specified that no less than 70 per cent of all projects must be of Type I. And because the primary emphasis of this programme was rural employment, one important condition governing all types of projects was that the cost of labour must constitute at least 70 per cent of the total cost.

The money was allocated to each province according to the following formula:

\[
M_i = \frac{P_i / H_i}{\Sigma (P_i H_i)} x K
\]

and \(H_i = 0.25 \left( \frac{R_i}{\bar{R}_i} \right) + 0.75 \left( \frac{Y_i}{Y_{wk}} \right)\)

where \(M_i\) = money allocated to province \(i\)

\(K\) = total RJCP budget

\(P_i\) = rural population of province \(i\)

\(H_i\) = index of hardship in province \(i\)

\(R_i\) = amount of rainfall in province \(i\) in 1979

\(\bar{R}_i\) = mean rainfall for province \(i\)

\(Y_i\) = income per caput of province \(i\)

\(Y_{wk}\) = income per caput of the country
Once the province had received its allocated money, it would then further allocate the money to the districts and villages under its jurisdiction under the general guideline recommended by the central government. The provincial authorities also screened and selected projects submitted by the Tambon or Village councils within the allotted budget.

**TABLE 3  Physical results of the 1980 RJCP and the numbers of rural labour employed.**

<table>
<thead>
<tr>
<th>Project Type I</th>
<th>North</th>
<th>Northeast</th>
<th>Centre</th>
<th>South</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of projects</td>
<td>10,986</td>
<td>18,653</td>
<td>12,043</td>
<td>4,948</td>
<td>46,630</td>
</tr>
<tr>
<td>(a) Water wells (units)</td>
<td>4,993</td>
<td>3,824</td>
<td>1,796</td>
<td>1,617</td>
<td>12,230</td>
</tr>
<tr>
<td>(b) Ponds (units)</td>
<td>2,144</td>
<td>11,932</td>
<td>2,738</td>
<td>509</td>
<td>17,323</td>
</tr>
<tr>
<td>(c) Water reservoirs, dams, embankments (units)</td>
<td>1,379</td>
<td>3,627</td>
<td>391</td>
<td>439</td>
<td>5,836</td>
</tr>
<tr>
<td>(d) ditches, canals (km.)</td>
<td>10,791</td>
<td>2,096</td>
<td>7,993</td>
<td>5,040</td>
<td>25,918</td>
</tr>
<tr>
<td>(e) other(^a) (units)</td>
<td>125</td>
<td>138</td>
<td>125</td>
<td>153</td>
<td>540</td>
</tr>
</tbody>
</table>

| Project Type II | | | | | |
| Number of projects | 1,666 | 5,066 | 913 | 1,048 | 8,693 |
| (a) bridges (units) | 183 | 135 | 75 | 78 | 471 |
| (b) roads (km.) | 2,361 | 5,610 | 824 | 1,416 | 10,212 |
| (c) other\(^b\) (units) | 169 | 271 | 131 | 74 | 645 |

**Number of Workers Employed**

| Type I Projects | 786,305 | 1,535,975 | 588,159 | 202,351 | 3,112,790 |
| Type II Projects | 126,933 | 412,787 | 55,264 | 46,465 | 641,449 |
| **Total** | 917,233 | 1,948,762 | 643,423 | 248,816 | 3,754,239 |

**Actual Expenditures**

| (million baht) | 665.3 | 1,284.3 | 488.9 | 323.8 | 2,762.3 |

*Source:* Krongkaew et al., 1981.

*Notes:*  
\(^a\)water tanks, drainage pipes, etc.  
\(^b\)school buildings, youth centres, community halls, etc.

Table 3 summarizes the overall results of the RJCP at end of the programme. The overwhelming majority of projects involved earthworks, so the method of wage payment in most regions was by piece rate, that is the amount of earth or soil removed (in cubic metres), except in the North where the more prevalent method of payment was a daily wage rate. The
hiring practices by the Tambon councils were usually 'come all, hire all'.
Altogether, more than 3.7 million workers were employed in the Pro-
gramme throughout the country between 1 May and 31 August, 1980.

IMPACT OF THE 1980 RJCP

In order to find out about the impact of this RJCP on income, employment
and other socioeconomic variables, an evaluation subcommittee was set up
to take a sample survey of the workers, non-workers and various admin-
istrators in the programme. The evaluation subcommittee randomly
selected 6,793 workers to be interviewed from 276 villages in 70 districts in
21 provinces throughout the country. Another 562 non-workers were also
selected randomly to be interviewed, as well as all the village headmen,
district officers and governors of the sampled areas.

The results of the survey showed that the actual number of people who
worked in the RJCP was less than that reported by the government. This
was because many workers had worked in more than one project. Taking
this into consideration, the number of workers in the RJCP for the whole
country was estimated at 2.875 million divided into 0.913, 1.949, 0.643
and 0.249 million for the North, Northeast, Centre and South, respectively.
As the rural labour force in 1980 was estimated at around 14.3 million,
those who found work in the RJCP amounted to more than 20 per cent of the
rural labour force during May to August that year. As the average number
of days worked was about 13 days, the total number of man/days created by
the RJCP was about 37.4 million.5

On the question as to whether the RJCP had really helped provide jobs
for the rural unemployed during the slack season, the survey results showed
that it had. When asked to give reasons for working in the RJCP, the majority
of workers answered that they did not have work to do at that period. (35.6,
26.0, 53.6 and 24.0 per cent of all the reasons for North, Northeast, Centre
and South, respectively.) Not only that, it was also found that about 44,000
workers who worked in the RJCP had worked in Bangkok and other urban
centres just before they joined the RJCP. This could be interpreted as the
reverse migration effect of the RJCP.

On the income effects of the RJCP, the survey results showed that the
average cash income received by workers in the Programme was about 877
baht for the whole country, or 706 baht for the North, 775 baht for the
Northeast, 1,125 baht for the Centre and 1,170 baht for the South. This cash
income represented about 10 per cent of the normal average earnings of an
average farmer for the whole year. Although this amount of cash income
should reasonably augment the total income of poor households who
worked with the RJCP, it seemed, from looking at the distribution of
average earnings by size class of gross income, that the richer workers
tended to have received more income from work in the RJCP. A simple
regression of average earnings on size class of family's gross income
confirmed the above suspicion as the following estimates show (figures in
parentheses are t-values):
The rural public works programme in rural Thailand

1. \( CY_N = 452.4 + 0.0118 \text{GY}_N \)  \( R^2 = 0.4419, N = 24 \)
\[
(4.236) \quad (4.089)
\]

2. \( CY_{NE} = 789.5 - 0.0008 \text{GY}_{NE} \)  \( R^2 = 0.0181, N = 24 \)
\[
(15.387) \quad (-0.268)
\]

3. \( CY_C = 1019.7 + 0.0021 \text{GY}_C \)  \( R^2 = 0.0426, N = 24 \)
\[
(12.455) \quad (1.125)
\]

4. \( CY_S = 1014.3 + 0.0038 \text{GY}_S \)  \( R^2 = 0.0762, N = 24 \)
\[
(9.478) \quad (1.349)
\]

5. \( CY_{WK} = 751.1 + 0.0052 \text{GY}_{WK} \)  \( R^2 = 0.5631, N = 24 \)
\[
(20.400) \quad (5.486)
\]

where \( CY = \text{cash income received from RJCP} \); \( GY = \text{gross income of worker in question} \); and subscripts \( N, NE, C, S, \) and \( WK \) represent North, Northeast, Centre, South and Whole Kingdom, respectively.

It can be seen that for the majority of cases the coefficients of gross income variable all have plus signs except in the Northeast. But then, in the Northeast, the magnitude of the gross income parameter was very small and insignificant. The \( R^2 \) for the Northeast was also the smallest. So it is probably safe to argue that, for any individual worker, the RJCP tended to benefit the richer worker more than the poorer worker. To test this belief again the evaluation team used the amount of land holding as the independent variable to explain the size of earning in the Programme, and the results of the estimation (shown below) were reasonably significant, thus confirming the first estimates:

1. \( CY^*_N = 600.9 + 8.8541 \text{L}_N \)  \( R^2 = 0.4142, N = 14 \)
\[
(2.944) \quad (4.763)
\]

2. \( CY^*_{NE} = 698.5 + 1.9589 \text{L}_{NE} \)  \( R^2 = 0.1290, N = 14 \)
\[
(11.357) \quad (1.333)
\]

3. \( CY^*_C = 1005.1 + 4.4131 \text{L}_C \)  \( R^2 = 0.1885, N = 14 \)
\[
(9.095) \quad (1.670)
\]

4. \( CY^*_S = 1036.5 + 3.3030 \text{L}_S \)  \( R^2 = 0.0343, N = 14 \)
\[
(6.741) \quad (0.653)
\]

5. \( CY^*_WK = 750.4 + 4.2953 \text{L}_{WK} \)  \( R^2 = 0.4747, N = 14 \)
\[
(13.723) \quad (3.293)
\]

where \( CY^* = \text{cash income received by workers who had different sizes of land holding} \); \( L = \text{size of land holding (in rais)} \); subscripts \( N, NE, C, S, \) and \( WK \) represent North, Northeast, Centre, South, and Whole Kingdom, respectively. The results show that the coefficients of the independent variable all have positive signs and are statistically significant at least at the
10 per cent level, except only for the South. The $R^2$ may be small on the regional estimates, but for the overall national estimate, it was not too unsatisfactory.\(^6\)

One important question which may be asked in a similar context is: considering the Programme as a whole, has it improved the rural income distribution? By adding the cash income into each worker’s total gross income and comparing the ‘before’ and ‘after’ distributions, one can perhaps draw some conclusion about the income redistributitional effect of the 1980 RJCP. The results of this are shown in Table 4.

It is quite clear from Table 4 that, as a result of the RJCP, the income distribution of households in the rural areas in most regions of Thailand improved, as indicated by smaller Gini coefficients. It was only in the North where the distribution of income after the RJCP had become more unequal than before the RJCP. This perhaps could be explained by the fact that the prevalent payment practice in the North was to pay daily wages to workers in the programme instead of paying piece rates. Therefore, poorer workers who would like to work harder to earn more wages were not able to do so. Moreover, the daily wage system was more conducive to abuse by well-to-do or influential persons who would get their names listed in the work force but did not do much work.

**CONCLUSION**

It could be concluded, therefore, that although the 1980 RJCP tended to benefit a richer representative worker more than a poor representative worker considered as an individual, since the majority of the workers were from the lower income scale, they, as a group, benefited more from the programme relative to the richer workers as a group. In all regions, except the North, the income distribution within the rural areas improved as a result of the RJCP. In this sense the 1980 RJCP was successful in meeting the major objectives of rural income augmentation and improvement in rural income distribution. Other subsidiary objectives were also fairly successfully met: rural unemployment during the slack season was ostensibly relieved; some unwanted migration was checked; the rural population became more experienced in making their own development planning and its execution.

Nevertheless, the RJCP was not without its defects. One cannot say that the allocative efficiency of this programme was satisfactory, as most of the works done were earth works which had been planned and executed with little technical know-how and were not sufficiently durable. The programme was launched near the end of the slack season, so the job opportunities were not enjoyed for very long before the next planting season began. The wage payment was extremely slow in many areas causing hardship to those very poor workers who had to depend on these wages for their daily food expenses.

Despite all these shortcomings, however, the RJCP can be judged
<table>
<thead>
<tr>
<th>Gross Income Class baht '000</th>
<th>North</th>
<th>Centre</th>
<th>Northeast</th>
<th>South</th>
<th>Whole Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Households</td>
<td>Income Before</td>
<td>Income After</td>
<td>Households</td>
<td>Income Before</td>
</tr>
<tr>
<td>No income</td>
<td>0.9</td>
<td>0.0</td>
<td>0.0</td>
<td>1.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Below 2.5</td>
<td>6.7</td>
<td>0.5</td>
<td>0.6</td>
<td>3.9</td>
<td>0.2</td>
</tr>
<tr>
<td>2.5-4.9</td>
<td>12.1</td>
<td>2.6</td>
<td>2.9</td>
<td>9.5</td>
<td>1.6</td>
</tr>
<tr>
<td>5.0-7.4</td>
<td>12.2</td>
<td>4.3</td>
<td>4.3</td>
<td>9.9</td>
<td>2.7</td>
</tr>
<tr>
<td>7.5-9.9</td>
<td>9.5</td>
<td>4.7</td>
<td>4.6</td>
<td>10.2</td>
<td>3.9</td>
</tr>
<tr>
<td>10.0-12.4</td>
<td>8.3</td>
<td>5.2</td>
<td>5.1</td>
<td>6.6</td>
<td>3.2</td>
</tr>
<tr>
<td>12.5-14.9</td>
<td>7.1</td>
<td>5.5</td>
<td>5.4</td>
<td>7.4</td>
<td>4.4</td>
</tr>
<tr>
<td>15.0-17.4</td>
<td>6.2</td>
<td>5.7</td>
<td>5.4</td>
<td>4.2</td>
<td>3.0</td>
</tr>
<tr>
<td>17.5-19.9</td>
<td>5.8</td>
<td>6.1</td>
<td>6.0</td>
<td>4.6</td>
<td>3.7</td>
</tr>
<tr>
<td>20.0-22.4</td>
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<td>6.2</td>
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| Total                       | 100.0  | 100.0  | 100.0     | 100.0  | 100.0         | 100.0         | 100.0      | 100.0         | 100.0         | 100.0      | 100.0         | 100.0         | 100.0      | 100.0         | 100.0         |
| Gini Coefficient            | 0.4687 | 0.4734 | 0.4797    | 0.4632 | 0.4377         | 0.4193         | 0.4393     | 0.4255         | 0.4690         | 0.4349     |

TABLE 4 Pre-RJCP and post-RJCP income distributions in rural Thailand
satisfactory as a short-run measure to alleviate rural poverty and income inequality. In order to improve on the performance of a future RJCP it is recommended that the programme should start earlier, that is as soon as a slack season begins; that the poorer workers be given a better chance to be employed and work for a longer period; that the programme need not always be a nation-wide programme, but concentrate on specific serious poverty areas in order to better utilize limited funds; and that the government makes more conscious effort to increase the technical and administrative capability of rural planners and administrators.

NOTES

1 As asserted by Meesook (1979) and the World Bank (1980).
2 By the end of June, 1982, three RJCPs would have been completed under the present Prem Government. But only the 1980 (first) RJCP will be analysed here as it is the only programme where a detailed evaluation report is available.
3 See for example, Krongkaew (1981); Meesook (1979); World Bank (1980).
4 Although evaluation of each programme was carried out at the end of the project period, only the evaluations for the 1976 Programme and the 1980 Programme were adequate for serious use. See Poot (1979) for evaluation of 1976 Programme and Krongkaew et al. (1981) for evaluation of 1980 Programme.
5 The number here was smaller than the corresponding number reported in Poot (1979) for the 1976 Programme. In 1976, the man/days of work created were reported at 56.7 million, involving between 3.8 and 5.6 million people employed. These figures were probably too large, due to bias in the selection and size of samples.
6 Luechai et al. (1982) made a similar estimation for the 1981 RJCP for the Northern Region only, and the results were more or less the same as in 1980. Their corresponding estimates are:

\[ CY_N = 435.7 + 0.0028 GY_N, \quad R^2 = 0.01, \quad N = 605 \]

(2.333)

\[ CY_N^* = 346.4 + 15.06 L_N, \quad R^2 = 0.07, \quad N = 605 \]

(6.580)

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Chulasai, Luechai, et al., ‘Migration and Rural Job Creation Programme: A Northern Thailand Study’, Faculty of Social Science, Chiang Mai University, 1982.
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Meesook, Oey Astra, 'Income Distribution in Thailand', Discussion Paper No. 50, Faculty of Economics, Thammasat University, Bangkok, 1975b.

DISCUSSION OPENING – BAMBANG ISMAWAN

I should like to congratulate Dr Medhi Krongkaew for his interesting paper. In it he tries to measure and present some empirical results on a government programme to promote rural development through reduction in rural poverty and improvement in rural income distribution by means of the ‘Rural Job Creation Programme’.

It was very encouraging to learn that the Rural Job Creation Programme (RJCP) results show it to be a successful project in meeting the major objectives of rural income augmentation and improvement in rural income distribution. This programme has also helped provide jobs for the rural unemployed and therefore reduced the migration of workers from rural to urban areas. The project also makes the rural population become more experienced in their own development planning of such structures as dams, irrigation facilities and other items of agricultural infrastructure. I have only a small comment on Dr Medhi’s paper.

In relation to the theme of this Conference several participants have talked on how to alleviate rural poverty and income inequality. Agrawal has mentioned at least three important factors, namely:

- land ownership and land operation in the rural area;
- equal access to the use of resources in the production process;
- guaranteed marketing of agricultural products.

In several areas land ownership has been the main problem as a source of poverty. Several rural populations are landless but their life depends on the availability of employment in the rural sector.

In his paper Dr Medhi neglected these three factors. It is important to define land ownership and the terms, worker and non-worker, before implementing the Rural Job Creation Programme. If it happens that in the rural area many farmers are landless the RJCP will be only a short-term measure and a temporary tool to alleviate rural poverty and income inequality. Farmers who are landless will be unemployed again when the project is done. If the project builds infrastructural complements to the agricultural production process, as mentioned by Dr Medhi in his paper, landowners, and in particular the larger landowners, will be the ones to
benefit. The landless farmer will still suffer and will still be a farm worker. Income inequality becomes wider and wider and poverty will not be alleviated.

If all rural people own land the RJCP will be of benefit to the farmer in the longer run as such infrastructural improvement to agriculture becomes available. With better irrigation and other facilities farming can occupy more than one growing season a year, and, therefore, this will both reduce the labour peak and seasonal unemployment and maybe reduce migration. Therefore a RJCP should be directed towards building infrastructures for a better agronomic condition such as to increase land intensity. RJCP has to be directed first to the area where the project is really needed. I have observed some examples in the Thai experience. Many farmers are landless and most farm land is owned by rich people in urban areas, such as in Bangkok. The farm operator is only a worker and does not own land. This phenomenon will result in a wider gap of income between the poor landless farmer and the rich capitalist owner. The problem may be alleviated through a land reform programme.

Another different example is the small-scale ownership and the lack of farm organization. These farmers are subject to very low prices of agricultural produce during the peak harvest season.

The rich capitalist owner in the city usually is able to buy the product at a very low price. This will cause an even greater income gap between the small farmers and the merchants in the city. One way to eliminate this problem is to introduce co-operation in the marketing of agricultural products.

On the RJCP in particular, I wish to comment that it has been a complaint that some projects (for example dam building) were not done in the time allocated. The reason may be because there was inadequate labour supply due to misinformation on the unemployment figures or because the project was started late and, therefore, it could not be finished before the farmers has to go back to their land. I also wonder whether, given that the scope of the paper is income distribution, the formulae towards the end of the paper are appropriate. It would be more appropriate to compare farm income after and before the project as shown in Table 4. I think there is no reason to regress CY on GY because GY is dependent on CY, even though this will give a similar coefficient. But \( GY = CY + \text{Income from Non RJCP} \). This is an identification not a function.

GENERAL DISCUSSION*—RAPPORTEUR: P. VON BLANCKENBURG

Question and comments from the floor related to agricultural policy aspects in both countries under review: Mexico and Thailand, to methodological aspects of the analyses and to the rural public works programme in Thailand.

In both countries emphasis on rural development in general and

*Papers by Reyes and Krongkaew.
development approaches within the agricultural sector have changed in the periods under observation. It was asked how far these changes were related to changing conditions on world markets and, if government activity had been more consistently balanced, whether this would have influenced income distribution positively in the case of Mexico. Other questions were on the interregional patterns of investment and consumption in Mexico and on the role of migration of workers to the United States.

The speakers agreed that changing emphasis in policies has influenced the course of agricultural growth and also the equity issue considerably. The labour migration to the United States will continue, but it cannot be expected that it will contribute to a decrease in income disparities between families in the places of origin of the migrants. A question as to whether agricultural research, and particularly the research work of CIMMYT in Mexico, had contributed or not to development in Mexico was answered more or less in the negative. The level of adoption of new varieties among peasant farmers seems to be small.

Another question relating to the consistency of the statistical analysis in the Thailand case led to a satisfactory explanation by the author – he denied that inconsistencies existed.

Particular interest from the floor was shown regarding details of the rural job creation project in Thailand. The author admitted that it was difficult to include the poorest rural groups in the programme. The need for emphasis on technologies suited to rain-fed farming under high risk was pointed out in this connection. Although the short-term effect of alleviation of poverty was considerable, the programme may not have a major long-term impact, if methods are not changed. A question whether the programme had spill-over effects, such as increase in food production or non-agricultural activities, was answered in the negative. It was mentioned that not enough money was available for further maintenance of the works completed.