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SOCIO-ECONOMIC ASPECTS OF POVERTY IN THAILAND

A Summary Report

of

The Workshop on "Raising Agricultural Income and Productivity
of Poor Farmers"

February 8-10, 1980

Chiang Mai, Thailand

by

Benchaphun Shinawatra

and

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I. Introduction

This is the second workshop in a series of three workshops on Poverty Problems and Policies in Thailand (Annex I) to be organized by the Thai University Research Association (TURA) under financial support from USAID/Thailand. It was held at the Faculty of Agriculture, Chiang Mai University, Chiang Mai on February 8-10, 1980 (Annex II). Fourteen participants were invited to attend the workshop (Annex III) where three papers were presented and discussed over the three-day periods.

The main objective of this workshop is to provide an opportunity for scholars of various disciplines (but mainly in economics and agricultural economics) who are interested in the problems of poverty to present results of their studies on major aspects of how to raise agricultural income and productivity of poor farmers in Thailand. And from the presentation and discussion among participants in this workshop, we hope to be able to gain better knowledge and understanding of the production and income of poor farmers, and perhaps suggest some pertinent ways of increasing those poor farmers' productivity and income.

The three papers to be presented at the workshop are as follows: (1) Problems of Water Availability, Control and Management, and Their Effects on Rural Poverty by Jarachone Sriswasdilek of Faculty of Economics and Business Administration, Kasetsart University; (2) Problems of Land Utilization, Control and Management and Their Effects on Rural Poverty by Manu Seetisarn, Dean of the Faculty of Agriculture, Chiang Mai University; and (3) Structure of Income of Poor Farmers: Significance and Farm Versus Off-Farm Income by Yongyuth Chalaemwong and Tongroj Onchan, both of the Faculty of Economics and Business Administration, Kasetsart University.

II. Problems of Water Availability, Control and Management, and Their Effects on Rural Poverty.

The author of this paper (Jerachone Sriswasdilek) viewed irrigation as one of the most effective means to increase productivity in the agricultural sector. He believed that the problem of water availability was a dominant factor contributing to rural poverty. Therefore, good water control and management would help raise agricultural income and productivity of poor farmers.

The author divided his paper into three parts. The first part was concerned with general effects of irrigation on farm productivity and income; the second part emphasized on specific effects of water control and management on farm production; and the final part discussed irrigation policies which could be adopted to relieve rural poverty.

Effects of Irrigation on Productivity and Income

In making his point that irrigation helped improve agricultural productivity and, thus, income of farmers, the author highlighted the simple relationship between the ratio of irrigated farm area to total farm area on the one hand and between the outputs per rai of different crops on the other. The outputs per rai of rice, maize, cassava and sugar cane during 1973/74 and 1977/78 were highest in the Central Region and the Northern Region of Thailand. The Central region possessed vast

area under irrigation and the percentage of irrigated farmland to total farmland (34.8%) was the highest among all regions of Thailand in 1977. As for the Northern Region, it was characterized by extensive private irrigation systems. The reported ratio of .113, according to the author, underestimated the extent of irrigation in the Northern Region in 1977. The actual effects of irrigation in the North, therefore, showed high productivity of important crops in comparison to the South and the Northeast of Thailand where the ratios of irrigated farm areas to total farm areas were merely .086 and .035 respectively in 1977. The Northeast with its low ratio of irrigated farm area to total farm area lagged behind in its outputs and productivity. And it was in this region that poverty problems were most acute.

The author admitted that the above relationship was a rough measure of the effects of irrigation. There were also other factors influencing outputs per rai in different regions, for example the amount of rainfall, soil fertility, and existence of plant diseases and insects. Yet in comparing the outputs of rice per rai within a region between the irrigated area and the non-irrigated area, it was clear, still, that the outputs per rai in the irrigated area were higher than those in the non-irrigated area. The outputs of rice per rai in the non-irrigated area in 1967/77 were only 88, 65, 47 and 75 percent of the outputs per rai obtained in the irrigated area in the North, Northeast, Central Plain and South of Thailand respectively. These effects of irrigation on increased productivity of crops was called the direct effects of irrigation.

There were also the indirect effects of irrigation on productivity of crops. These were the effects of irrigation on the adoption of high yielding varieties and on the use of fertilizers. It was shown that in 1976, in Don Chedi, Suphan Buri, the adoption of HYV and the use of fertilizers were greater in the area under full irrigation than in the partially irrigated or unirrigated areas. The author concluded this section by asserting the interdependence between the income of farmers, outputs per rai, and irrigation.

Effects of Water Control and Management on Productivity

In this section, the author attempted to show the significance of water control and management which enabled farmers to gain reliable access to water during the normal farm period as well as to cultivate multiple crops throughout the year. Good water management includes efficient delivery of water, avoidance of wastage, development and maintenance of existing irrigation system. It was contended that well-managed irrigation service was an important strategy to combat poverty.

Results of the survey in the Nam Pong irrigation areas during the dry season of 1978 had shown that in the area where land consolidation was attempted, 93 percent of sampled farms were fully cultivated. In contrast, only 75 percent of farms surveyed in the area where irrigation systems received some structural improvements, and 44 percent of those in the area where the irrigation systems were not improved at all, were fully cultivated. Furthermore, farmers in the area where irrigation

system was not improved reported the limitation on water availability and management as the main reason obstructing dry-season farming. Farmers in the area where irrigation system was structurally improved also cited insufficient labour, poor seeds and soil infertility as principal reasons obstructing dry-season farming. In general, farmers in the area where irrigation system had been improved in some ways or another were satisfied with the irrigation system more than those in the area where irrigation system had not been improved.

Lastly, the author showed that in 1977, income of farmers was greatest both in the rainy season and in the dry season in the area where land consolidation was conducted and smallest in the area where irrigation system was not improved. The income of farmers was 749,928, and 1084 baht per rai in the rainy season and was 781, 902, and 1085 baht per rai in the dry season for the area classified as "unimproved," "structurally improved" and "land consolidation" respectively.

Policies on Irrigation to Alleviate Rural Poverty

The author suggested 4 policies that should be adopted to help improve the position of poor farmers as far as irrigation is concerned. They were

i) Expansion of irrigated area

This should especially be done for farmers who were the poorest among the group. It was suggested that more irrigation services

should be provided in the Northeastern region and should be conducted through various small-scale irrigation projects.

ii) Improvement of existing irrigation system

By improving the existing irrigation system, the government would economize its budget on building new system as well as would utilize the existing system more efficiently so as to benefit poor farmers.

iii) Supply of irrigation water by rotational system

From a study in the Philippines it was found that to supply irrigation water once a week did not harm outputs of rice cultivation. By this rotational water supply system, 30-50% of water was expected to be saved.

iv) Collection of irrigation water fees

The benefits accrued to farmers in terms of higher outputs and/or higher land prices should be charged on a fair basis. The collection of irrigation water fees not only would encourage efficient use of water but also would provide revenues for the government to spend on maintenance of various irrigation projects.

In the comments following the presentation of the paper, it was pointed out by one participant that, although the control and management of water was an important strategy to help alleviate rural

poverty, the other point which was not mentioned but should not be overlooked was the amount of water available in the system. Without adequate attention on the issue, the existing irrigation system may find little water to be controlled or manipulated.

Another participant criticized the use of statistics based on different periods which gave rise to dubious results. She also raised the objection in the use of output and income figures unadjusted for other influencing variables such as techniques of production marketing system and transportation facilities. She emphasized that irrigation was only one among many factors important to agricultural development. Socio-economic aspects of farmers' life were especially significant in this context.

At this point, the discussions seemed to focus around environmental conditions of water usage. It was alleged that public irrigation systems were often inappropriate to the needs of the community. Moreover, they, at times, disrupted the existing private water control systems which were already at work in the community. Therefore, studies must be done on social aspects as well as other local problems and needs before any irrigation system was to be imposed on any community.

All in all, most participants seemed to agree with the importance of good water control and management along the line recommended by the author especially the collection of irrigation water fee.

III. Problems of Land Utilization, Control, Management and their Effects on Rural Poverty.

The main theme of this paper actually was not a discussion of problems of land utilization, control and management, nor was it a discussion of their effects on rural poverty. The paper treats the manner and the extent of land utilization as a resultant event responding to system change. Land control and management is seen as one of the factors conducive to system change. While the effects of land utilization, control and management on rural poverty are not brought out more explicitly in the paper, they were implied in the context of low productivity of farmers.

The author (Manu Seetisarn) began his paper by stressing the location-specific characteristic of any agricultural system. It was argued that there were numerous factors influencing agricultural production and agricultural productivity e.g. environmental, social and technical factors. To consider problems of land utilization, it was necessary to consider some other interrelated variables active in the particular agricultural system. Specifically, there were 5 components in an agricultural system influencing production and productivity.

They were:

- 1) Natural, physical environment
- 2) Social, economic and political conditions
- 3) Resources available to farmers
- 4) Agricultural technology, and

5) The farmers themselves.

Agricultural production is a process by which the farmer uses existing agricultural technology to grow or produce agricultural products within the constraints of natural environments, economic, social and political conditions, as well as available resources. As such, agricultural production or productivity does not depend on any one of these factors alone, but on all of the factors together.

Examples were then given to show the interrelation of the above 5 components. The physical environment of the Northern Region was different from that in the Northeastern region, enabling farmers in the North to develop their own irrigation system and to benefit from reliable water supply. But the same system was not possible for farmers in the Northeast. However, infrastructural change in terms of roads and highways in the Northeast had made possible for the farmers to make use of relatively arid land to grow cassava in large quantity. In the North, swidden agriculture seemed, at one time, to be a stable practice among the hill people due to sufficient time left for the soil to regain its lost nutrients before a return for replanting. Today, population pressure and shrinking land areas disrupt the old stable pattern of shifting cultivation, making it an improper agricultural practice.

The author then took up different land issues for discussion.

The issues were

- Present land use
- Tenancy
- Farm size
- Use of fertilizer, insecticide, pesticide
- Land management, and
- Land utilization

Present land use

The point the author made in this section was that according to a physical study of land and soil, 195.8 million rais of land in Thailand could be brought into use. This, when compared with the 116.2 million rais in use in 1975/76, meant that a large area of land was not effectively utilized. He thought then that the scarcity of farmland was not a real problem in Thailand. Rather, there were other limiting factors such as the lack of appropriate technology which prohibited full use of land.

Tenancy

Although the author realized that farmers who were tenants might lack incentives to produce outputs and to make more investment in their farms, he still believed that the actual prohibiting factor to higher productivity on the part of farmers was the rent system rather than the land tenure. With proper rent system for each community so as to suit their socio-economic conditions, production and investment would

be satisfactorily stimulated. In the author's opinion, moreover, the extent of the tenancy problem was as yet not significant as he speculated that only 14% of total farm households were tenants. He admitted, however, that he had not obtained statistics on this subject.

Farm size

Until 1968, farms had been decreasing in size from an average of 25.62 rais per farm in 1953, to 21.68 rais in 1963 and to 16.01 rais in 1968. It was believed that farms would be smaller in size in the future until it was difficult for farmers to secure sufficient outputs and income for their families.

However, the author reported that despite the above belief, average farms were not smaller in size at least in 1978 compared to those in 1963. The author used the statistics from the National Statistical Office to show that the total farm area was 96.9 million rais with 4.3 million farm households in 1978 giving an average farm size of 22.09 rais. Moreover, the percentage of households holding less than 15 rais per farm in total farm households decreased from 48 in 1963 to 30 in 1972. Yet, he pointed to the dubious figures concerning total farm area which, according to the NSO was only 96.9 m. rais in 1978 whereas it was already 116.2 m. rais in 1975, according to the Office of Agricultural Economics.

In his opinion, the author thought that farm size was not a significant issue because one could use modern technology to increase

production in small-sized farms. What was important then was the development of appropriate technology to increase production and productivity, especially the development of technology for the rain-fed farms which outnumbered the irrigated farms.

Use of fertilizers, insecticide and pesticide

These were important elements in modern agricultural technology. Their usage had been increasing even though the actual level was still low compared to that used in other countries. The author was certain that there was great potential in agriculture as far as the use of these modern inputs was concerned. Two factors were important in determining the extent of the use of these inputs. They were their prices and the level of risk involved in using them. Among the two factors, the author thought the latter was more important than the former. He cited the Taiwanese case in which the fertilizer price to the output price ratio was as high as that in Thailand during her first stage of development. Yet, the fertilizer utilization in Taiwan remained extensive. The case in Thailand also showed the relative unimportance of fertilizer prices. Fertilizer utilization was high in the irrigated farms and low in the rain-fed farms. It was concluded that the level of risk involved significantly determined the extent of fertilizer, insecticide and pesticide usage.

Land Management

It was argued that the government was not interested in solving

long-term problems concerning land. Granting land titles to landless farmers was slow and ineffective. Forest and soil destruction was not efficiently controlled. Alternative uses of land were not examined. Rent control and land reform was done on an artificial level. Land management was geared only to solving the physical and engineering problems. It was suggested that attention should be paid to solving long-term problems as well as to the social aspects of the problems.

Land Utilization

It was emphasized here that technology to be introduced in any local community should be appropriate to the local conditions. Costs in terms of implicit labour, social, and capital costs should be borne in mind. Systematic linkages between farms, animals and farmers must be realized. In the past, too much fragmentary research and extension activities were conducted with no awareness of the existing interactive system.

It was lastly summarized that in his view, the lack of appropriate technology for the farmers obstructed efficient land use more than the mere tenancy problem.

Apart from the comments concerning the relevance of the paper to the topic assigned and the lack of policy implication which the author hardly touched upon, there were a few other comments by the participants. An objection was made in the use of Taiwanese case as comparable to the situation in Thailand in the context of fertilizer

usage. This point was supported by another participant who thought the comparison of rice farming in the wet season and in the dry season to see the level of fertilizers used not an acceptable exercise since technological constraints were different. Doubts were also raised in the use of conflicting statistics of the NSO and that of the Office of Agricultural Economics which gave the conclusion that average farm size in Thailand did not decrease.

In replying to the above objections, the another accepted the weaknesses pointed out and agreed that statistics he used was dubious. He, however, still thought in the absence of completely controlled situations, comparison of two situations to see the effects of risk and/or prices of inputs on the use of inputs was a fair attempt.

A participant who came from the Office of Land Reform suggested that, from his knowledge on tenancy matter as an official in the Office, tenant households numbered about 1 million out of the total households of 5 million at present. The author accepted that he underestimated the extent of tenancy problem. On this issue, a comment was made by another participant that tenancy problem bore a long-term significance to agricultural development. With the tenancy problem resolved, there might well be a parallel case of that in India where the benefits of agrarian reform accrued mainly to rich farmers and landlords. She thought the author overlooked or gave too little attention to the problems of land utilization as far as tenancy, farm size and availability of farmland were concerned. It was argued that regarding population pressure

and the clearing of forests to open new cultivated land as the author had already mentioned in his paper, it was rather inconceivable to believe that farm land was not scarce and there was still some 70-80 m. rais available for Thai farmers.

Another participant believed that the reason why the author did not give any policy guidelines as far as land management was concerned was that he was suspicious of the intervention from outside especially from government officials to the original, balanced and stable agricultural system. For fear that intervention disrupted the system he naturally suggested no policy guidelines.

To this point, the author agreed that he was rather suspicious of public interventions. However, he did not rule out public intervention as long as one knew the system and improved it in the right way. System understanding was the key to success in agricultural development.

IV. Structure of Income of Poor Farmers: Significance of Farm Versus Off-farm Income

The authors (Thongroj Ouchan and Yongyud Chalaerwong) started the paper by pointing to the growth taken place in the agricultural sector. They asserted that although the growth of the agricultural sector, which was about 5 per cent per annum during 1960 and 1977, was not as high as that in the industrial sector, average income of farmers had been increasing during the period. In absolute terms, income of farmers tripled since 1962/63, and according to the World Bank, population under poverty line decreased from 52 per cent in 1962/63 to 25 per cent in 1975/76.

The main problem, however, lay in the relatively unequal distribution of development benefits. Cash income of farmers averaged only 5,288 baht in 1975, while cash income of other owner operators and property owners averaged 42,100 baht, and cash income of salary and wage earners was 21,531 baht on average in the same year. Income of the rural people generally declined compared with that of the urban people in every region of Thailand with an exception in the Northeastern region where income of the rural population as a percentage of that of the urban population increased from 23 per cent in 1962/63 to 39% in 1975/76.

A comparison of income between regions showed a disparity between income in the central region and in the South on the one hand

and that in the North and the Northeast on the other both for the rural population and the urban population. The income of the rural population in the North and in the Northeast was only 58 per cent of the income of the rural population in the central region in 1962/63 and increased to only 64 per cent in 1975/76. The distribution of income was more unequal within the rural population of different regions than within the urban population.

The wider gap between the rich and the poor was clearly shown in the income share of the richest 10 per cent and the poorest 40 per cent during the period 1962/63 and 1971/72. In 1962/63, the poorest 40 per cent received 16.6 per cent of total national income compared to 12.7 per cent in 1971/72. The richest 10 per cent received 34.3 per cent of the total income in 1962/63 and their share increased to 40.5 per cent in 1971/72. The worsening situation for the poorest 40 per cent was especially acute in the North and the Northeast and the better-off position for the richest 10 per cent was especially marked in the North. For the whole country, the Gini coefficient increased from 0.414 in 1962/63 to 0.499 in 1971/72.

The authors then continued to outline the income situation for different sized of farm and different status of farmers as far as ownership was concerned. They attempted to draw the relationships between income and sizes of farm and between income and land ownership. They found inconclusive relationships but could roughly stated that income per rai of small farms was higher than income per rai of large

farms. This was because small farmers earned more off-farm income than big farmers. As for the relationship between income and land ownership, they found that tenants had lower income than land owners in the Central Plain but in the Northeast the opposite was true. They were of the opinion that tenancy problem was serious only in the Central Plain where income of tenants was about half that of land owners.

The next section of the paper dealt with the structure of farm and off-farm income. It was shown that the average off-farm income of all farmers was 55.4 per cent of total income of the farmers. In every region except the South, the proportion of off-farm income to total income increased through the years. The increase in this proportion was greatest in the poorest region i.e. the Northeast.

The authors claimed that economists and development planners too hastily neglected the significance of off-farm employment as an alternative strategy to solve problems of underemployment, poverty and skewed distribution pertinent in the rural areas. In their opinion, more attention should be directed to this area of promoting off-farm employment for several reasons. Firstly, former strategies such as land reform, green revolution and industrialization proved to be inadequate to solve the problems. Secondly, the agricultural sector had such special characteristics as seasonality, labour intensiveness and underemployment in small-sized farms which were favourable to off-farm employment. Thirdly, in principle, off farm employment should help towards

- a) full employment of labour force
- b) opportunity of farm work for unskilled labour and of skilled off-farm work for skilled labour
- c) stability of farmers' income throughout the year
- d) cash liquidity for farmers' spending in order that they be self-financed in their expenditure on consumption and investment goods.
- e) a reduction in farmers' desire to migrate to the urban areas, thus, a potential reduction in urban crowdedness and poverty
- f) promotion of on-the-job training
- g) a conceived reduction in birth rates due to the increase in the off-farm employment of males and female.

The experience in Taiwan and Japan indicated the success of off-farm employment in promoting more hours of work and thus more income, for small farmers. The authors believed that it was promising for Thailand to rely on off-farm employment as a strategy to overcome poverty and distribution problems in the agricultural sector.

They outlined the structure of off-farm income as follows.

- i) In 1975/76, it was shown that 24 per cent of total off-farm income of farmers came from wage employment outside the farm sector, 16 per cent from salary earning employment and wage employment in the farm sector, 7 per cent from sale of goods, 5 per cent from sale of animals,

and 22 per cent from trade and other activities. In some locations, handicraft products were important sources of off-farm income. In others, wage employment was important.

ii) Off-farm labour utilization was higher for small farms than for large farms. Small farms spent 64 per cent of their work hours in off-farm work whereas large farms spent only 55 per cent of the work hours in the off-farm work in 1979.

iii) Off-farm income helped stabilize monthly income of farmers throughout the year. It helped raise farmers' income which otherwise would be negative in some of the months.

iv) Small farms had their off-farm income in a greater proportion of the total income than in large farms. For example, in 1970 it was found that for farms smaller than 5.9 rais, their off-farm income was 51 per cent of their total income compared to 41, 28, 27 and 15 per cent in farms of bigger sizes (6-14.9, 15-29.9, 30-59.9 and greater than 60 rais) respectively.

v) Full tenants were shown to have a greater proportion of their total income from off-farm employment than part tenants and land owners. In 1971/72, tenants in Lopburi were reported to have 22.2 per cent of their income from off-farm work compared with 13.8 per cent for part tenants and 3.2 per cent for land owners.

vi) Farmers in lower income brackets were found to have a greater proportion of their income from off-farm work. In 1969/70,

farmers who had income per annum lower than 1,200 baht in Khon Kaen earned 99 per cent of their income from off-farm work while in Chiangmai, they earned 57.9 per cent of their income from off-farm work. This proportion decreased for groups with higher income. In Khon Kaen, farmers who received an income around 30,000 baht had, on the average, only 18.4 per cent of their income from off-farm employment. In Chiangmai, farmers with annual income lower than 2,000, 3,000, 10,000, 20,000 and 30,000 baht had 74.6, 64.7, 40.2, 36.8 and 16.3 per cent of their income from off-farm sources, respectively.

The authors summarized the above findings by stating that off-farm employment was important income source for poor farmers, tenants and small farmers. Attention should, therefore, be focused in this direction. Past policies had failed in solving problems for the poorest farmers and had not improved, if not worsened, the disparity of income between the rich and the poor. They were certain that off-farm employment could contribute to the solution more easily than direct agricultural development policies because farmers might lack their own capital funds to invest in the agricultural development process. They suggested 2 broad policies to promote off-farm employment i.e. a policy to increase the demand for off-farm labour and a policy to increase the supply of off-farm labour. Farm mechanization was conceived to be an alternative to release farm labour in peak periods for off-farm employment. They ended their paper by recommending more research in this area.

In the comments following the presentation of the paper, it was criticized that the paper was not consistent when referring to (a) the period of time used for comparison or trend analysis (b) the types of years used (whether A.D. or B.E.) (c) the definition of income used and (d) the definition of rural and urban area used. The lack of consistency in the above items and the linking together of their 24 tables obtained from various studies would make a number of the conclusions and arguments not as clear as they appeared to be. This participant, however, agreed with the off-farm employment as a strategy to provide alternatives to poor farmers.

Another participant cast doubts as to the suggested idea that off-farm employment was an alternative to poor farmers. When they sought to work in the off-farm sector, it might not be because they chose to do it but it might be because they had to do it in order to survive. In this respect, off-farm work was not an alternative of off-farm work, but it actually was a poverty indicator. Observing the characteristics of off-farm work, it was shown to be precarious in nature and yielded lower income than the farm sector. The idea that all off-farm work gave an alternative for poor farmers to stabilize their income and that the government should promote off-farm work on a broad basis ought to be taken with caution. In her opinion, off-farm employment should be promoted only as a specific policy measure when deemed viable and appropriate in the area.

She continued her point by stressing that the marketing of off-farm products could also pose a problem. Off-farm products required reliable local demand as well as producers' skills. They were highly income elastic goods. Besides, any larger scale rural industry would face a problem of labour shortage during the farming season. Without enough knowledge of the local labour situation, it was not really possible to promote any long-term off-farm employment. Different kinds of off-farm work were needed in the village where there was permanent labour underutilization compared with the village where there was seasonal labour underutilization.

She asked for a systematic look at the poverty problem. In the desire to help the poor, one neglected to look beyond the agricultural sector to see the resource flow into the industrial sector. Thailand's total incentive system regarding taxes, tariffs and expenditure, worked against the agricultural sector. No matter how much one wanted to help the poor, without correcting the total incentive system, one was certain to fail. She claimed that to promote off-farm employment on a broad basis was a second-best policy attempt when, perhaps, land reform should be the first-best policy about which no one seemed to mention.

Lastly, she questioned the income figures in various tables which admittedly showed odd pictures. She wondered whether the income figures used had been adjusted for different qualities such as average

family size, cost of living index and general inflation index in different regions. She ended her comments by questioning the definition of the authors' poverty line as well as the definition of off-farm versus non-farm income used in the paper.

One of the author (Tongroj Onchan) accepted the mistakes and inconsistency in the use of data. He promised to revise the paper taking account of all comments made. Part of the inconsistency arose from the use of various studies by different researchers. The definition of poverty line and the adjustment of income to different qualities could be rechecked in the study of Dr. Oey Leesook in 1979 (World Bank Staff Working Paper No. 364).

As for the query that off-farm work was an indicator of poverty, the author accepted that there ought to be further studies on this topic since our knowledge concerning the nature off-farm employment was meagre. As yet, he did not have the answer to the query raised.

The session ended as one participant pointed to the theme of the workshop so far, that is the interrelationship of numerous factors and a necessity for a system look of the problem. Economic, social, political, technical and environmental conditions were all important considerations in the solving of the poverty and distribution problem. A neglect in any area of concern might lead to the failure of policy implementation. Specific policy guidelines were, therefore, not recommended in this workshop.

V. Farmers' Groups and Rural Poverty

On the last session of the workshop, we heard the presentation of a special paper by Dr. Narujohn Iddhichiracharas an anthropologist who studied socio-economic characteristics of farmers groups in Fang and Mae Eye areas. At first, he recognized that poverty was an ethnic identity which varied from society to society, culture to culture. As for the areas under study, the poor were identified by asking general opinions of people in a village which were often likely to be landless farmers and farm labourers. There were some interesting features from his survey such as the majority of farm income was received from secondary crops such as vegetable; land ownership was smaller than reported elsewhere (For example, 61 percent as compared to 74 percent given by Dr. Manu); the distribution of income within the farmers groups was quite unequal as more than half (54 percent) of households in the areas under study had income less than the mean income.

This last point, to a certain extent, reflects inequity in social organization. Many members of the group still believed that they did not benefit from being members of the group as, for example, cheap fertilizers were available, only to those who own their own land, or the group leaders exploited their positions for personal gains. The author believed that farmers' organization of this type did not help solve poverty problems as members are mainly those who had large land holdings who were not poor. Moreover, new technology could not reach

poor farmers, neither could farm credits or cheap production inputs. Farmers groups were organized in order to receive help from the government rather than formed to help themselves.

In order that farmers' groups would be effective toward poverty alleviation, the author suggested several recommendations, such as, the improvement as to the organization must be specific, instruction must be detailed enough, and patron-client relationship must be broken. To do this may need the service of someone who is neither a member of the group nor a public official but who can work with and for the group.

The author ended his presentation by commenting on the call for charging fees for water services. He was afraid that such a system could be harmful instead of helpful to poor farmers as they would normally have low cash-in-hand, thus unable to pay water fees.

In the comments which followed, many participants raised several issues concerning farmers grouping. For example, it was observed that homogeneous groups would be more effective in reaching group's objective than heterogeneous group; grouping among highly educated persons would be more difficult than less highly educated persons; however, the poor who had little education would be less inclined to form their own group. The meeting seemed to agree that beneficial grouping must start from persons with the same common interest and needs, and members must be willing to enforce obedience to rules among

themselves without too much intervention from the government. One participant also clarified the point raised by Dr. Narujohn on the effect of water charges on the poor by saying that the water charges may have different rates for different water users; the actual collection may be done after harvest so that if there is crop failure, parts or all of the fees may be exempted. Overall, water-users grouping appeared to be a good beginning as it could be expanded to cover other activities easily.

In conclusion, the authors of each paper were asked to state their positions after three days of discussion. On water policies that should help rural poverty, the author reiterated increase in new, mainly small-scale, irrigation systems; improve existing irrigation projects; adopt rotational method of water supply; and collection of water fees. However, one must also consider related aspects of irrigation services such as availability of water to be irrigated, the use of underground water, and difficulties in collecting water fees.

On land policies, the first and foremost emphasis was placed on the five main factors and the interdependence among them in influencing changes in any agricultural system. No specific land policies were offered, but concern was pointed to the development of agriculture in the rainfed areas; and perhaps information-gathering at the lower level was also implied so as to facilitate policies applicable to the whole system.

On off-farm employment and income significance of off-farm component of farmer's income was demonstrated beyond any doubt. Moreover, negative correlation between off-farm income and size of land holding or size of farm and size of total farm income was also clearly demonstrated. In order to enhance the chance of poor farmers to earn more off-farm income, the author suggested the increase in demand for off-farm employment through establishment of small and medium-scale industries in rural areas, and the increase in supply of off-farm labour through training and farm mechanization.

Annex I

Workshops on Poverty Problems and Policies in Thailand

Between November, 1979 and March, 1980, Thai University Research Association (TURA) are under contract with the USAID to organize a series of three workshops relating to the problems of poverty in Thailand, especially rural poverty. The general purpose of these workshops is to produce workshop results that ---- "Will bridge the gap between programmatic directions and specific project identification." In other words, it is expected that these workshops will succeed in identifying poverty problems which would lead to concrete proposals for programmatic policy actions.

In each workshop, three research papers will be prepared and presented within a group of (at least) eight workshop participants (including authors of the three papers). As the problems of poverty may take many forms and can be subject to various means of analyses, these three workshops only represent what this workshop organizer believed to be significant, relevant, and capable of being transformed into immediate assistance or action programmes. The three workshops and nine suggested topics for papers and discussion are as follows:

I. Socioeconomic Aspects of Poverty in Thailand

I.1 Concept of Poverty and Practical Problems of Poverty Identification.

Defining poverty is not so easy as one may be led to believe, especially if such definition will be used for policy purpose. This paper discusses various measures of poverty line or index, brings out

various problems associated with poverty measurements, and suggest practical ways in which the poor can be identified in Thailand. References will also be made to other developing countries where poverty policies have been attempted or implemented on how problems of poverty identification are encountered and solved.

I.2 Educational Background and Technological Adaptability of Poor Farmers, and the Role of Extension workers as Agents of Change in Rural Society.

How or how much educational background or training of heads of households contribute to the rural families being poor or not poor? How much has rural poverty to do with the rigidities (or resistance of inability or uncertainty) on the part of poor farmers to adapt to changes in technology and new situations. Or could the faults lie with the supply, and not the demand side of this production - innovation nexus. That is to say, it is the imperfections of the extension service systems that help explain the prolonged existence of poverty in rural Thailand.

I.3 Health, Nutrition, Size of Family and the Rural Poor

Like poor education, ill-health, malnutrition and large families may be important factors causing poverty in rural areas. This paper will examine the relationship between these health and demographic sets of variables and rural poverty in Thailand (especially in the Northeast), and recommend practical ways in which these seemingly long-term problems of rural poverty could be tackled now.

II. Raising Agricultural Income and Productivity of Poor Farmers

II.1 Structure of Income of Poor Farmers: Significance of Farm Versus Off-farm Income.

This paper analyzes the composition of income of poor household in the rural areas in comparison to that of the non-poor. It is expected that the importance of off-farm income relative to farm income will be much more pronounced for the poor than the non-poor. As such, attention may be shifted to how to help raise farm income through off-farm employment and other non-farm sources in addition to regular farm income.

II.2 Problems of Land Utilization, Control and Management and Their Effects of Rural Poverty.

Perhaps, raising the agricultural productivity of poor farmers could be considered the most important precondition that will eventually lift poor farmers from poverty. But agricultural productivity must first involve land, where many problems still exist, for example, tenancy problems, quality problems, management problems and so on. This paper will look at these problems of land utilization management and control in wider perspective and will identify problems that will need immediate attention for policy action with the aim to reduce or remove rural poverty.

II.3 Problems of Water Availability, Control and Management, and Their Effects on Rural Poverty.

Ancillary to the problems of land utilization and control as factors contributing to rural poverty are the problems of water availability,

control and management. As a matter of fact, according to some agricultural economists, the lack of controllable water for farm use is the single most important factor for the low agricultural productivity of the Northeast relative to other regions. What should be the water policies to help rural poor? After analysing the existing water situation and its impact on rural poverty, this paper should offer some suggestions as to what types of water policies that are most effective in helping the poor.

III. Central Government's Policies on Rural Poverty

III.1 The Impact of Farm-Price Guarantee and Crop Insurance Policies on Poor Farmers.

Among other things, a farmer may be poor because he cannot produce or receives low price for his product. And this is where the central government could help. If the production failure is due to natural calamities which are beyond the farmer's control, then some systems of crop insurance can be instituted which cushion the poor farmer against deeper hardship. A farm-price support policy may serve the same purpose but at the end of the production stage. This paper will examine the impact of crop insurance program and farm-price guarantee policies on poor farm households and suggest some proper schemes of insuring crops and setting up minimum prices in Thailand.

III.2 Savings Behaviour, Indebtedness, and the Need for Credits of Poor Farmers and the Role of Central Government.

This paper explores saving (or dis-saving) behaviour of

poor households in rural areas. Consumption patterns are of course, implied but the emphasis is placed on poor farmers' ability to save and invest. It will also investigate the changing situations of chronic farm indebtedness and its relations to farm poverty. This point is then linked to the need for agricultural credits either for the improvement of farm production or for debt relief. What are the appropriate role of central government on these issues?

III.3 Appropriate Public Work Policies for the Alleviation of Rural Poverty.

The quickest way to reduce poverty is to give money to the poor directly, but there are much more subtle ways of doing that by the government. Creation of public works seems to be an important measure that will help militate against poverty. In the last several years, many public work programs have been attempted in Thailand and their general economic effects have been well analyzed. But what specifically are the effects of these public work policies on the poor? How much have they been helped relative to the non-poor? What then are public work policies that are most appropriate at helping the poor in the rural areas? This paper will attempt to discuss these and other related questions.

Two points are worth mentioning in regard to the above topics, (a) the emphasis of each topic is placed on the analysis of the poor, or similarities and contrasts between the poor and non-poor, taking into consideration that they are of policy relevance or could lead to

effective anti-poverty programmes and (b) poverty is a multi-disciplinary phenomenon. As such, the authors are free to cross over to other subjects while analyzing specific poverty problems.

Each paper is to be written in Thai with an English abstract, and each paper should be about 30 pages in length, not including appendices. An honorarium for each paper will be paid to the authors. Additionally, per diem and travel expenses will be borne by TURA.

The dates for each workshop are as follows:

Workshop No. 1: January 4-6, 1980 at Khon Khaen.

Workshop No. 2: February 1-3, 1980 at Chiang Mai.

Workshop No. 3: March 7-9, 1980 at Bangkok or Pattaya.

Medhi Krongkaew

Workshop Organizer

November 16, 1979.

Annex II

PROGRAMME

Workshop on Raising Agricultural Income and Productivity of Poor Farmers.

Organized by Thai University Research Association (TURA)

February 3 - 10, 1980

Faculty of Agricultural

Chiang Mai University

Chiang Mai, Thailand

Friday, February 8, 1980

- 9.00 - 12.00 Workshop preparation by the organizers.
- 12.00 - 13.00 Lunch
- 13.00 - 13.30 Opening ceremony
- Session I
- 13.30 - 15.00 "Structure of Income of Poor Farmers : Significance of Farm Versus Off-farm Income". by Dr. Jerachone Sriswasdilek.
- Comments by : Suwaphot Lakawathana
- Rapeepun Jaisaard
- Phrek Gypmantisiri
- 15.00 - 15.15 Coffee break.
- 15.15 - 16.30 Discussions by participants

Saturday, February 9, 1980

Session II

- 9.00 - 10.30 "Problems of Land Utilization, Control and Management
and Their Effects of Rural Poverty" by Dr. Manu
Seetisarn
Comments by : Suthiporn Chirapanda
Benchaphun Shinawatra
Chavalit Chalothorn
- 10.30 - 10.45 Coffee break
- 10.45 - 12.00 Discussions by participants
- 12.00 - 13.30 Lunch

Session III

- 13.30 - 15.00 "Problems of Water Availability, Control and Management,
and Their Effects on Rural Poverty" by Tongroj Onchan
Comments by : Luechai Chulasai and
Ningsarn Santikarn
- 15.00 - 15.15 Coffee break
- 15.15 - 16.30 Discussions by Participants

Sunday, February 10, 1980

Session IV

- 9.00 - 12.00 Concluding statements by three Authors General
Discussions by participants Summary of the Workshop
by Medhi Krorgkaew Chairman of Session IV :
- 12.00 - 13.00 Lunch
- 13.00 - 16.00 Preparation for Summary report of the Workshop by the
organizers and authors of the papers.

Annex III

Participant Lists

1. Ms. Benchaphun Shinawatra
Faculty of Social Sciences, Chiang Mai University
2. Dr. Chaiwat Konjing
Faculty of Economics and Business Administration, Kasetsart
University
3. Mr. Chawalit Chalothorn
Faculty of Agriculture, Chiang Mai University
4. Dr. Jerachone Sriswasdilek
Faculty of Economics and Business Administration, Kasetsart
University
5. Dr. Luechai Chulasai
Faculty of Social Sciences, Chiang Mai University
6. Dr. Manu Seetisarn
Faculty of Agricultural, Chiang Mai University
7. Dr. Medhi Krongkaew
Faculty of Economics, Thammasat University
8. Dr. Mingsarn Santikarn
Faculty of Social Sciences, Chiang Mai University
9. Dr. Narujohn Iddhichiracharas
Faculty of Social Sciences, Chiang Mai University

10. Mr. Phrek Gypmantasiri
Faculty of Agriculture, Chiang Mai University.
11. Dr. Rapeepun Jaisaard
Faculty of Agriculture, Chiang Mai University
12. Dr. Suthiporn Chirapanda
Technical and Planning Division, Agricultural Land Reform Office
13. Mr. Suwaphet Lakawathana
Faculty of Agriculture, Chiang Mai University
14. Dr. Tongroj Onchan
Faculty of Economics and Business Administration