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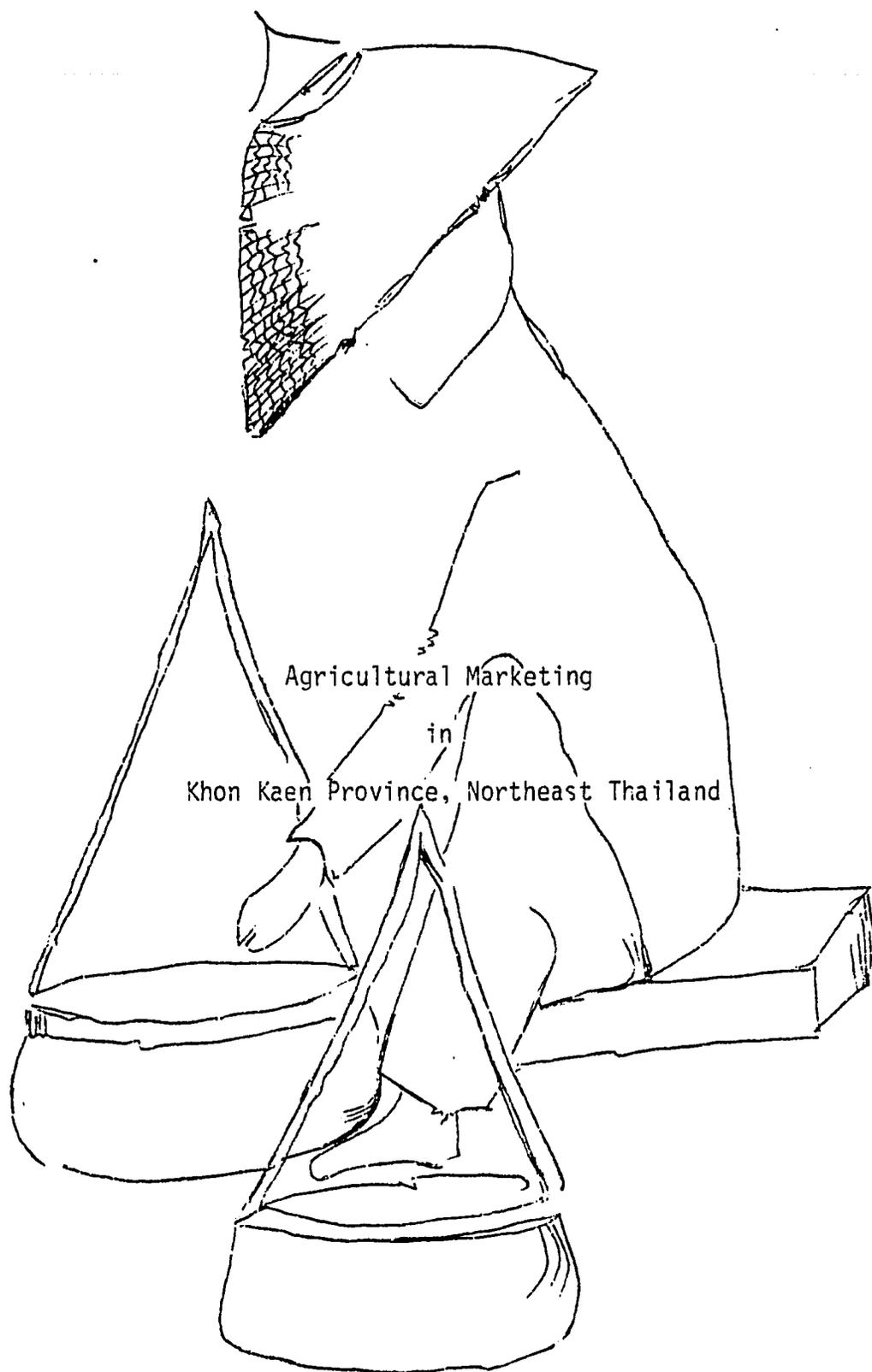
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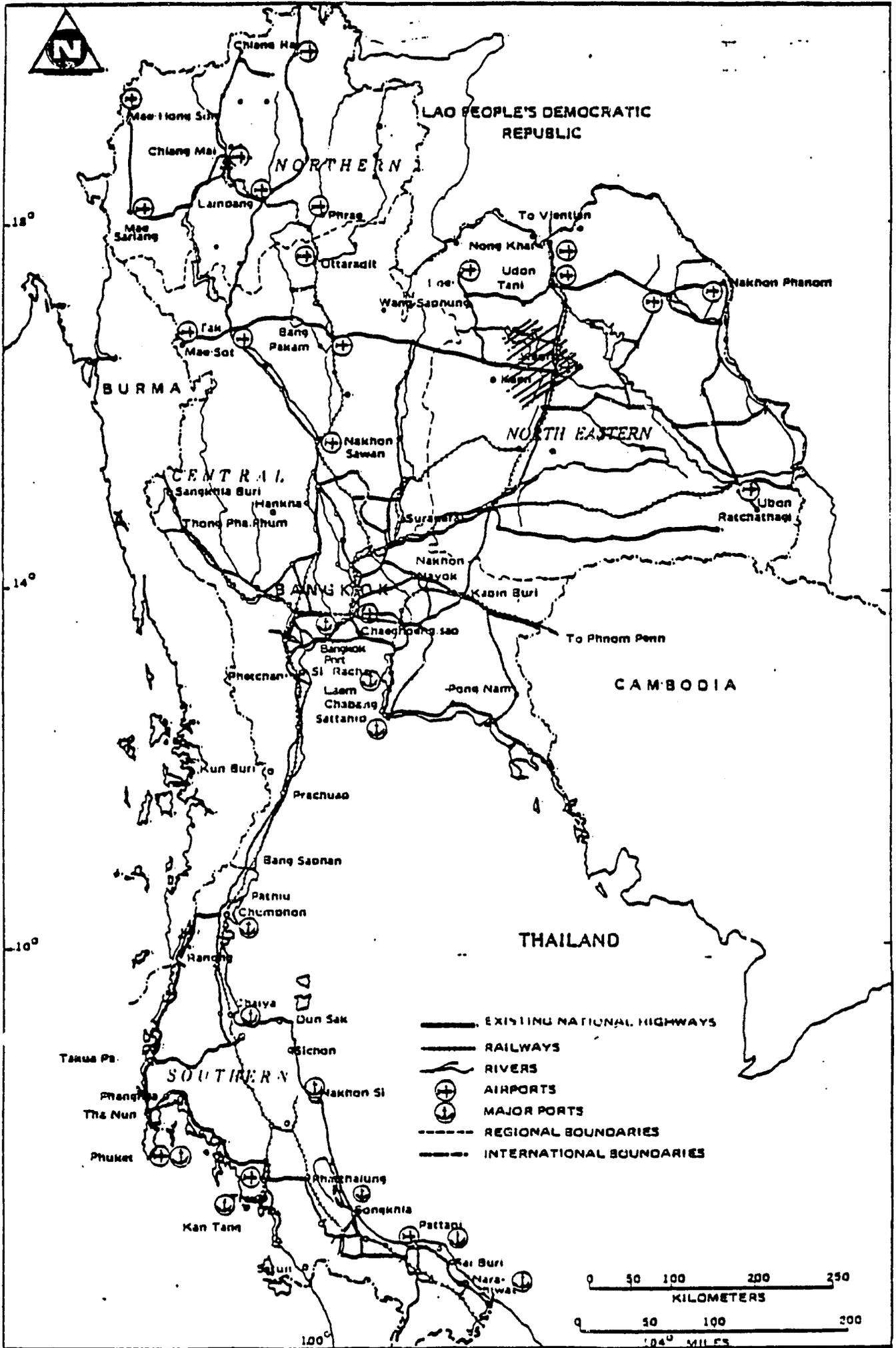
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PREFACE

In the ongoing debate on development strategies, a great deal of attention is paid to the need to increase the flow of capital from developed to developing countries. On the other hand, relatively little attention is being given to the problem of meeting the challenge posed by the need to strengthen internal agricultural and food marketing systems in developing countries which, have as a major objective, the creation of conditions where self sustained development is possible. Since the internal marketing system occupies such a strategic position in agricultural and economic development it is important to identify the nature of the problems and the constraints faced by internal markets for agricultural products and to examine the scope that exists for removing the bottlenecks that are impeding development.

This project on rural markets is an attempt to obtain insights into the role of food and agricultural marketing in economic development. The project thus focuses on one part of market development only, emphasis is on the rural development approach and on market problems of the small farmers in Northeast Thailand.

Research was carried out by an inter-disciplinary team of anthropologists, sociologists, economists and agricultural economists from the Chulalongkorn University Social Science Research Institute and from Kasetsart University. All the principal members have had experience studying Southeast Asian traditional marketing systems and are certainly well informed of the Thai case. Furthermore, only field enumerators with graduate degrees and knowledge of

the north-eastern Isan dialect and culture were chosen.

Although the field work itself took only three and a half months, the work schedule was organized into three phases. Phase I of two weeks involved setting up the enumerators in their respective villages and having them become familiar with the people and environment in which they were going to live for three months. At the same time each of the enumerators was expected to draw village maps and write brief reports on the social, historical, geographical and economic settings of each village. They had to touch on such issues as population size and structure, size of land holding and pattern of land tenancy; pattern of agricultural production and non-farm enterprises; nature of village trade and commerce and, the relationship between village and market town.

Phase I also included a street enumeration of the market town, Bau Phai. Working only within the sanitary district - which is defined by the National Statistics office as the locale of local government - the street enumeration was limited to a frequency count of enterprises, both service and commercial, found in the commercial zone as demarcated in the map provided by the District Office.

On completion of Phase I a workshop was held in Ban Phai, the objective being to review the data collected thus far by the enumerators. They were then oriented to the questionnaires to be used in the next phase of the research. At this workshop too, equipped with relevant information on each of the selected villages, a farm sample of fifty, for each village, was decided upon. Each of these samples represented about thirty percent of the farm population in each

village. The samples were both purposive and random. They were purposive in so far as they included farms of different sizes, different types of land ownership, different types of crops, grown, etc. The samples were random in that the farms to be interviewed were selected randomly from a list of village households provided by each head man.

Phase II of the research involved issuing two sets of questionnaires, one to the villages and the other, to traders in Ban Phai. At the same time the sociology of market and commercial relationships was observed. This involved talking to traders, in the marketplace and in the enterprises outside the marketplace, to try to identify for instance, the type and nature of articulation between the different roles involved in the marketing system, etc. The economists were left with the task of tracing commodity flows and the resulting cost margins of selected commodities-rice, cassava, livestock, silk and, vegetables - which are most commonly produced in the Northeast of Thailand.

Phase III was time set aside for coding and computerizing the data gathered in the previous phase. As the data was being processed those areas which lacked sufficient information were identified. The researchers had thus to return to the sites to collect that data which was lacking or to check on certain other data which appeared doubtful.

Due to severe constraints on time, the case study was carried out for a very short period of time. The argument questioning the validity of "quick and dirty" research no doubt holds truth. Never-

theless, a survey of this kind has been necessary so as to be able to better understand the marketing problems faced by small farmers in a selected developing country. Only then can we even begin to conceptualize and strategize for the development of equitable and operational marketing systems.

We hope that this case study will provide the foundation for the development of a set of useful generalizations about social and economic trade-offs inherent in alternate marketing systems in Thailand in particular and in developing countries in general.

Vasanth M. Narendran

Washington, D. C.

January, 1980

CHAPTER 1

INTRODUCTION

1-1. The Problem

Markets are an integral part of the economics of developing countries: the marketplace is the heart of the community providing the local families with many of their daily necessities, a place to sell their produce, and a means of livelihood for the surplus labor which keeps filtering in at a steady pace from the production sphere as it constricts in size with seasonal changes in the agricultural cycle, changes in the patterns of land tenancy, decline in soil fertility and a whole host of other related variables. In short then, the rural market is a focal point for the rural poor where income is received, expenditure made and additionally, where ideas are exchanged and generated for expanding agricultural production. An agricultural and food marketing system acts as a major dynamic and coordinating force in rural development, particularly in the mobilization of small farmers and especially so once the necessary support and technical assistance, to develop the system to its full potential, are provided.

Unfortunately, in spite of the vital importance rural markets can play in small farmer development, not enough attention has been given to utilizing the opportunities these markets offer for improving the lot of the small peasant farmer. This report has therefore been designed to facilitate decision making in agricultural marketing in Thailand in particular and developing countries in general. It focuses on that part of the issue - market development - which has

been, until recently, a neglected area in development planning.

A specific effort is required for marketing to fulfill its role in helping small farmers. In the first instance, they are not attractive clients for the trading community. Their production tends to be oriented towards meeting household subsistence needs; decision making is household centered; risk minimizing behavior is characteristic; their marketable surplus is small and unstable and, seasonally they lack cash. Assurance of a market outlet is vital in inducing farmers to increase production beyond their household needs. If they can obtain at least a guaranteed minimum price, the risk involved will be lessened and they will be encouraged to make decisions about marketing and, what more, about producing for sale.

In general, the deficiencies of marketing systems in developing countries may be summarized as follows:

A. Lack of physical marketing infrastructure. The paucity of communications of roads, including feeder roads, of storage, transport and market (wholesale and retail) facilities are known constraints which contribute to higher marketing costs and to greater physical losses, particularly for perishable food. Although more investments in physical infrastructure are required, much more attention has to be given to the need to mobilize local, underutilized resources - in particular, of manpower and capital - in order to build up the required infrastructure.

Private and cooperative groups need greater incentives to encourage the accumulation of capital and its investment in storage,

processing, transport and market facilities. The continuous but often unjustified, criticism of the "expliciting" middleman (who is more often than not the person who acquires and invests capital) hinders more than helps to encourage investment.

B. Inadequate marketing facilities. A marketing system, whether organized on a competitive liberal basis or on a mixed private/government system or as a government controlled system requires basic marketing facilities such as marketing research, accurate and up to date market information, marketing regulation, standards and credit for marketing enterprises. Governments have, as yet, been unable to develop these marketing support services effectively. This is the principal reason why government marketing policies are deficient or ineffective; it also accounts for the existence of inefficient marketing systems. Inadequate knowledge of the factors that determine the supply and demand for agricultural products, of prices and price differences is at present a major reason why governments are unable to formulate and implement effective market prices.

C. Improper pricing and marketing information policies. The level of agricultural prices has been maintained at too low a level in many countries, during the last decade, in the interest of urban consumers, but at the expense of providing adequate incentives for agricultural producers. This has become particularly important with the high rate of inflation. Furthermore, the nature of government market intervention and the fixing of country wide prices without adequate attention being given to formulating price differentials, which take account of quality, seasonality and region, has discouraged

both farmers' cooperatives and private entrepreneurs from making the necessary investments required in providing for market facilities and in storing and processing sufficient quantities to satisfy the market. Market pricing and intervention policies have therefore to be subjected to continuous reviews with the object of providing the framework for an effective implementation of government policies and, to increase to a maximum, the incentives which allow for the use of these local resources readily available to cooperatives and private enterprises.

The mobilization and development of small and "poor" farmers can be considerably improved if existing deficiencies of the marketing systems - as partly outlined above - can be removed or, at least, substantially corrected. This requires policy changes particularly in the form of measures to strengthen government market facilitating services aimed at achieving a stronger vertical and horizontal integration of marketing channels and, price stabilization of basic commodities coupled with measures designed to absorb the small farmers into a marketing system. Active participation of the small-scale farmer in a marketing development project is thus essential for the successful implementation of marketing improvement schemes in developing countries.

1-2. Objective

The question of small farmer's access to markets is the principal focus of this investigation, forcing analysis to relate to all questions of market structure, price policy, cost effectiveness, etc.,

directly to the condition of the small farmer. As such, what is desired is a shift away from pure market efficiency questions to questions of equity from the point of view of the disadvantaged small farmer. This shift should not however be taken to mean that efficient markets are not necessarily desirable as a mechanism for improving the socio-economic condition of the small farmer. Indeed, an effective market system is highly dependent on the extent to which it is operationally efficient. On the other hand, when the sole objective of a rural market program is to improve its efficiency, the very small farmer is left out because he does not have the resources nor the means to gain access to the markets. For example, efficiency criteria usually dictates a minimum lot size far exceeding the capacity of the smallest farmer; it also dictates minimizing the number of points of sale. In contrast an effective marketing system that serves the needs of the small farmer may require a larger number of traders, each dealing in very small amounts, and a greater than minimum number of transactions. To be sure then, the argument can be made that certain efficient market structures actually decrease the small farmers' access relative to other, less efficient market forms.

The objective of the four-month case study, which provides quantitative, if not qualitative support for the statements in this document, was to collect detailed information on the actual operational features of a selected rural marketing system in the north-eastern part of Thailand. The case study thus attempts a two-fold purpose it provides basic data on (i) existing marketing patterns and its

resultant problems in rural Thailand, (ii) pattern of marketing of specific crops; (iii) market dynamics, including the sociology of trade and commerce (iv) existing market policies in Thailand and; (v) critical bottlenecks in small farmer access to markets. Secondly, it relates this information to structural variables characterizing the small farm population in Khon Kaen province. While analysis is geared forwards the small farmer, we attempt at constructing the entire marketing system which, as is typified in all developing countries, is extremely vibrant, colorful and full of vitality. The marketing system extends far beyond the realms of economic articulation; the social dynamics governing a marketing system can be crucial for understanding the complexities of plural societies like Thailand. In such societies ethnicity and economics are so intricately mixed to the extent that the social system is best seen as an agreement of multiple levels in which people circulate between the different levels and sectors of the economy which while complementing one another fulfill differentiated roles and contribute to a division of labor necessary for exchange to take place. The function of the market then is to articulate between social groups which vary in their productive roles, in their differential accesses to wealth, capital, social status and ethnicity: the market inter-connects all segments of the economy (which in plural societies tend to be dominated by different ethnic groups) into a single economic process and regularized socio-economic activity.

1-3. Definitions

The small farmer, we shall define as producing mainly for sub-

sistence with the marketable surplus being small and unstable. If there is cash crop cultivation it is usually limited in acreage and the decision to cultivate such is made only if the basic subsistence is assured, production capital is modest and the level of technology fairly low.

The market is the transactional area where the forces of supply and demand converge and are manifested in trading behavior. The market area is the way station in the flow of products between producers and consumers in different socio-economic levels. The marketing system, on the other hand, results in material flows propelled by a series of acts of communication and decision making, people and commodities move between different sites and different socio-economic groups in the area in measurable quantities but not in patterned ways; it is generated through a series of multiple buyer-seller transactions occurring in marketplaces and resulting in distribution in various marketplaces.

If marketing is the major focal point of regularized social activity for large segments of the rural population of developing nations, then it is an indispensable mechanism for social articulation. It serves as an arena for interaction between members of various ethnic groups and classes (Mintz 1959). The marketplace is not purely a mechanism for distribution. It is important enough an institution to reveal the form in which people make products available and acquire products for consumption. Finally, a marketing system embodies the economic organization of each district and locality.

As a result of our respective experiences in working with marketing systems in Southeast Asia, we shall insist that a marketing system be regarded as a primary mechanism for coordinating production, distribution and, consumption activities. When viewed in this manner, marketing would include exchange activities associated with the transfer of property rights to commodities, the physical handling of products and the institutionalized arrangement for facilitating these activities. Hence, marketing is part of a set of activities coordinating various stages in a production-distribution channel.

The definitions that have been proposed thus far are only general definitions. Defining our concepts has been necessary for conceptualizing the problem of market development. But, whether or not the case of Thailand fits our definitions will depend solely on the field data gathered. In the case where it does not fit, then we shall be faced with the task of explaining as to why Thailand in general and its northwestern region in particular differ from the way in which we have conceptualized small farmer access to markets; we also need to refine our concepts. Be that as it may, to reiterate, these definitions are purely conceptual tools and guidelines which provide us with the framework to structure our study such that it was systematic, if not, meaningful.

In the light of the above definitions, we shall suggest that in strategizing for market development we must concern ourselves with the micro-behavior of participants in agricultural production-distribution systems and the more macro consequences that occur over time

and space and which affect the well-being of various participant groups such as consumers, retailers, wholesalers, processors, assemblers and farmers. We are not suggesting that the performance of agricultural marketing systems is more important than the performance of many other aspects of the economic system. In fact it is our belief that a substantial complementarity exists within the economy: poor performance in one sub-system of the economy limits the potential performance of another. Thus, the interrelationships among the sub-systems of the economy becomes very important and, meaningful analysis for planning is not easily bounded.

The research and the ensuing case study aims at isolating and then analyzing different kinds of trade and commercial ties, in terms of the kinds of goods moving in and out of the market and the hinterland of a Thai rural town. We have thus had to ascertain the extent and nature of transactions by which goods move through the marketing system from the point of production to the point of consumption. We have thus identified the people who participate in the system: their varied roles as producers, intermediaries, vendors and consumers. At the same time, it has been necessary to describe the various locations of marketing activities.

The resultant picture that would hopefully emerge at the end of this report is a description of the general marketing system, of a rural town in northeast Thailand, with analysis geared towards small farmer participation in this marketing system.

1-4. Methodology

A marketing system constitutes the articulation between production and distribution; it provides the organizational framework necessary to coordinate production and distribution. The field research, then, included profiling the farm situation in each of the three villages which were the foci of our attention. The information thus gathered puts into context the marketing system by shedding light on (a) size of landholdings and nature of tenancy, (b) type and availability of water regimes (rain-fed or irrigated) for crop cultivation; (c) types of crops grown; (d) type and use of farm labor; (e) availability of capital and credit facilities for production purposes; (f) household income and expenditure. Such information will undoubtedly help us assess the demand potential of production opportunities in the study area; it will also help us identify the technological or marketing bottlenecks to the realization of this potential.

To identify the structure and performance of the marketing system under study we had to investigate (a) the distribution channels through which commodities flow-local social network, local marketplaces, local cooperatives, large merchants, government marketing boards, etc., (b) the locational mapping of the different marketplaces within the system and how they affect commodity flows; (c) the allocation of categories of producers, merchants, government services and infrastructure; (d) pricing policy - how are agricultural prices set and how are these affected by government price levels; are prices fixed at each stage of the marketing system;

are there price controls to the movement of agricultural products across local areas; (e) market information - what is the nature of market information available at the different levels of market decision making.

Having identified our research needs, the area of methodology requiring attention in the analysis of the kind we undertake in this report combines quantitative data with a qualitative description of the socio-economic environment of the marketing system. This has allowed us to attempt an interdisciplinary approach. We have indeed tried to be rigorous in this approach by insisting that the different disciplines represented in the team - anthropology, sociology, economics - study the same problems. Undoubtedly, studying various problems of the same issue, using different disciplinary techniques and tools of analysis, is useful, if not beneficial because a wider spectrum of the phenomena is covered. But, in the case of studies on marketing, the literature already abounds with such multi-disciplinary approaches. With the dire need for stimulating a well organized and equitable marketing system, it is now time to force a schematic approach which combines the different methodologies into a single yet dynamic framework providing the tools for creating an action oriented program, not an academic exercise.

Our interdisciplinary approach also stresses the simultaneous presentation of data; the social scientists provide qualitative verification for the quantitative information collected by the economists. We started the process by conceptualizing the problem area

and laying out an analytical description of the purpose and output of the project, i.e., (a) to identify research needs that will provide information for improving rural foods distribution in terms of promoting and facilitating the production and distribution of agricultural products, (b) to identify the deficiencies of the present marketing system in rural Thailand and, (c) to identify what can be said and done to stimulate this system.

By emphasizing certain problem areas and overlooking others we realize the lack of a rigorous scientific method in the research. On the other hand, the decision to study only certain of the marketing problems - market information, infrastructure, insecure market outlets, lack of management capacity, pricing policy, private sector participation, government intervention, etc. - had been arrived at only after a very thorough examination of the literature on marketing systems with particular reference to Thailand.

Along with the interdisciplinary approach and task force, our research probed the marketing process at different levels - the small farmer, the market institution and its structure, private and public sector participation.

1-5. Research Site

Unlike other reports we have left the discussion of our research sites till the end of the chapter. Hopefully, this will enable us to show the closeness in fit between our research objectives and the choice of sites.

The research was carried out in three different villages, in

separate districts but all within the province of Khon Kaen, a north-eastern Changwat whose geography has been conducive to poverty and isolation. More than forty percent of the agricultural households in Thailand are located in the northeast and the region itself covers nearly one-third of the kingdom. Apart from the higher ground along the borders and in the upper northeast, most of the region is gently undulating plateau with areas suitable for paddy and areas suitable for upland crops. The rainy season lasts from April to October and average annual rainfall for the region as a whole is 1,250 mm, but provinces in the more northerly areas can expect at least 30% more rainfall than the rest of the region. The rainfall pattern is, however, very erratic and substantial variations occur from year to year.

For purposes of profiling the situation the northeast can be divided into three areas, the upper northeast, the mid northeast and, the lower northeast. This project concerns the mid-northeast and that too only three districts (Nam Phong, Chon-a-but, and Ban Pai) in Khon Kaen province.

The mid-northeast was selected for our purposes because, in these areas, agricultural diversification has been very significant, well over half the farmers now grow upland cash crops. In addition to the cash crops, the typical farmer still grows enough rice for his household's own consumption and indeed will continue to forgo other employment and income opportunities in order to plant and harvest this crop. With subsistence assured, the farmer is prepared to enter the non-rice cash economy if the opportunities and incentives are there.

Although the farmers of the northeast have begun to diversify, they face a somewhat uncertain future. The provision of government services, particularly roads, and activities of the private sector have enabled these farmers to double their income since 1960. At present they have some unutilized land that could also be put under crops but, by 1990 this advantage will be partly off-set by an overall decline in holding size. Moreover, because of the increased conservation problems and the danger that continued cultivation of the land with cassava will lead to declining soil fertility, the farmers' real income will probably increase little over the period unless higher yielding varieties are available and the government assists him in better land utilization.

Economic growth is balanced not only on increased production; an improved distribution system is, without question, vital. The northeast is yet to be developed, both in terms of increased production and better marketing systems which benefit all farmers, big and small. Thus, our decision to locate the research site in an area where there is immediate need for a development strategy to raise productivity and to introduce an efficient, yet equitable marketing system to distribute the returns of increased productivity.

We shall leave further description of the research sites for the following chapter which details out the geographical and social settings of the area understudy. In conclusion then, we reiterate that the objective of this research in northeast Thailand is to analyse the role of a dynamic marketing system, in accelerating the development of small farmers and to formulate strategies for market improvement, supported by quantitative information and experience.

MICRO CONSEQUENCES

CHAPTER II
ECONOMIC PROFILE OF PROJECT AREA

2-1. General Setting.

Khon Kaen province, the more developed of the northeastern provinces - although it is only fourth largest in size in the region - was established in 1796 during the reign of King Rama I of Bangkok. Khon Kaen covers 13,404 square kilometers; is located on the Korat plateau at an elevation of 4,796 feet above sea level and; rice farms form a continuous vista. Recently there has been a conscious attempt at crop diversification and the cultivation of cash crops - cassava, kenaf, sugar cane, to mention a few - are not an uncommon sight on hilly forest land which, because of the lack of irrigation facilities, is most unsuited for rice, the staple grain.

A natural water regime is provided by the Nam Phong and Nam Chee rivers along which about 2.9 million rai of land is under cultivation. The remaining 1.1 million rai of cultivable land in the province is located along the low mountain ranges on the western and northwestern borders of Khon Kaen. In general however, most of the farm land is located in the northern areas of the province where a fairly reliable water supply is available and the fertility of the soil, even if not of a superior quality, is at least sufficient.

The southern half of the province is made up of drier and low-soil-fertility land. Agricultural production in this part of the province is severely hindered by the lack of irrigation facilities; at the same time, the drainage system is poor to the extent that the monsoon rains tend to cause severe flooding resulting in crop

damage. In 1978 such a high percentage of the rice crop in the entire province was damaged by the rains that the staple grain had to be brought into the area, an area which is normally more than self sufficient in its rice requirements.

Khon Kaen city is the provincial capital and the administrative center for the entire northeast region of 9 provinces - Nong Khai, Loei, Udon Thani, Sakon Nakhon, Nakhon Phanom Roiet, Mahasarakam, Kalasin and Khon Kaen - and a population of 1,264,990 (1977 census). Between 1970 and 1977 the number of administrative units within the region increased. Despite this however, the 1975/76 census, indicates a population decrease of 1.10%. During this period the northeast suffered from a severe drought, farming was very unlucrative and out-migration into the greater metropolitan area of Bangkok went up to 4.1%. Thus the average population growth between 1973 and 1978 (at 1.5% per annum) was rather low. The low population growth and high out-migration has been to the advantage of the entire region because the proportion of tillable land actually being cultivated is very high and there is little land that remains unclaimed. This state of affairs coupled with soil erosion and very minimal industrial activity to provide for off-farm employment has retained the region at its present level of low growth in output and income. The northeast of Thailand can generate the problem but it cannot produce the answer.

About 82% of the population in the northeast is in agriculture and at least 3 million rai of the farmland is under glutinous rice cultivation; only 0.17 million rai is used for the non glutinous

variety. In general however rice production has been on the decline. Around Khon Kaen province however agricultural diversification has been very significant and well over half the farmers now grow a cash crop, the preference being for cassava which is exported to Europe as livestock feed and is fetching fairly high prices in the international market. With subsistence assured the farmer in Khon Kaen is willing to enter the non-rice cash economy if the opportunities and incentives are there. The result has been a net income of B12,300, 45% higher than the corresponding income of a typical farmer in any of the other northeastern provinces.

Agricultural diversification has helped increase farm incomes but, the move into upland crops is not without its problems. Without an appropriate cropping technology, cassava yields will undoubtedly decline from their present level of 2-3 ton per rai and without suitable conservation practices the soil structure will deteriorate under permanent cultivation. Furthermore, since the upland plot is often in an area officially designated as forest land, the farmer has no title and is therefore reluctant to take the necessary measures of land conservation and such like.

Kenaf is another upland crop which is however decreasing in production levels: villagers complain of a drop in the price of the fiber; another problem is the lack of a reliable water supply for soaking and wetting the Kenaf. A number of the Kenaf mills have ceased operations because unlike the processing of other crops (rice and cassava, for instance) Kenaf processing is capital intensive.

Furthermore, prices in the international market have been fluctuating (as much as 45% from year to year) since the fiber meets with serious competition from South Asian, superior quality jute.

In small pockets scattered around the region some corn is grown but production levels lag behind cassava. Tobacco and sugar cane have been recently introduced but, once again, production levels have not picked up as yet. It has to be remembered that the farmers of the Northeast are predominately rice growers and will diversify agricultural production only if their subsistence is assured. Even in the case of rice varieties grown, although regular rice fetches 17% more in price, in a risk aversion posture the northeasterner will grow glutinous rice, despite the price differential, because he will still have his preferred food to eat if the crop is small.

Agricultural production is supplemented by livestock rearing, especially cattle and buffalo, the former for meat and the latter predominantly for draft animal since farm mechanization has yet to be widespread in the northeast. Generally, however, livestock production has been on the decline. Some of the problems involved in the marketing of pork has contributed to the decline in hog production. The price of pork, however, is high. In the case of chicken, while national production is on the increase, local production is declining. Previously all chicken consumed were raised and sold locally. Now at least 50% of the local chicken consumption is supplied by the one company which has complete and national monopoly over the entire chicken industry.

Normally however, it is not uncommon to find poultry scuttering

around each farm homestead with a pig pen below the house and a couple of buffaloes tied to a peg near-by. But such is only for home consumption and if there is any sale, it is between neighbours.

In addition to farming other occupations bring in small amounts of income. These include seri culture and silk weaving, itinerant trade, fishing, etc. Ordinarily the household is involved in a couple of these activities, the husband for example being engaged in fishing and the wife taking care of the silk worms, spinning and weaving. Further, with relatively few opportunities for paid employment in the area, the northeast - and Khon Kaen is no exception - has a long tradition of seasonal migration, and at least one member of the household is likely to be away in the off-season, most probably in Bangkok. At the same time the tendency for permanent migration is common among the youth and although farming families complain about shortages of family farm labour, the remittances which the migrants send back home contribute heavily towards family incomes.

Most of the manufacturing and primary processing of the northeast is focused in Khon Kaen province which enjoys a fairly good and reliable transportation system. Also, since the regional capital is Khon Kaen City, it is hardly surprising that most of the local capital is concentrated in this province as are most of the development projects. Rice mills, as is to be expected are predominant. Most of them are small and diesel powered and do custom grinding. In the irrigated parts of the province where rice is grown for the market larger mills are fairly common. Most of these larger mills do not only provide custom grinding but are local collection

points for rice exporters located in Bangkok. The charge for the service by the small rice mills is the by-products which they keep. Such by-products - the rice bran actually - are used for animal feed and constitute about 10% of the volume of the padi before it is milled; it has a reported value of \$4 to \$7 per bag. At the median capacity utilization of 70%, a rice mill would gross about \$8 a day in the value of retained by-products. Some of the mills sell the bran in the local markets, but most of them raise livestock-brood sows and poultry.

Cassava milling is another important processing industry. The mills slice and dry the cassava before making the feed pellets. The farmer is thus not burdened with storage and post harvest crop preparation.

There is a whole range of other secondary, light industries and commercial establishments which provide employment opportunities and which contribute towards the local economy, an economy, which as we have portrayed above, which does not represent the optimum level of income and productivity.

2-2. Sample Districts: Ban Phai, Chan-a-but, Nam Phong.

Since there are eighteen districts in Khon Kaen province and since the research was severely constrained by time, only three of the eighteen districts were selected. The selection was random although every effort was made to construct a research sample which displayed at least ecological and agricultural diversity. We decided not to study the central market in Khon Kaen city, the

provincial capital, because then we would be involved more with analyzing trade and commerce rather than with identifying the problems faced by small farmers on the question of market access.

The three districts selected for the research were: (i) Ban Phai which is next in importance to Khon Kaen city and which handles a substantial amount of the provincial if not regional marketing, (ii) Chon-a-but which is well known for its sericulture and silk weaving industry which provides important employment for the women folk and, (iii) Nam Phong which is one of the very few areas in the entire region benefiting from an irrigation facility which enables a double cropping of rice, and some market gardening.

2-2a. Ban Phai is located approximately forty kilometers to the south of Khon Kaen city and is strategically located on the Friendship Highway which runs from Bangkok through Khon Kaen to the provinces further up in the region. The district is also served by a rail system and this together with the highway has made Ban Phai very accessible. The importance of Ban Phai is reflected by the proportionately large number of service enterprises in the district town which also boasts of a number of rice and cassava mills located on the peripheries. In addition, there is a daily market which is not only supported by locally grown produce but which sells produce brought in from all over Thailand. Although in terms of market activity and commercial specialization, this market is not as large as the central market in Khon Kaen city, it does service smaller market places and village stores of neighbouring districts. At the

same time, cash crops from Ban Phai and its surrounding hinterland are sent directly to Bangkok without being channeled to the provincial capital first. All in all then Ban Phai is an important commercial center, although it is very much a rural town and administrative activity is minimal.

2-2b. Chon-a-but, a small district of sixty-two villages, is approximately ten kilometers west of Ban Phai. It is an administrative unit but heavily dependent on Ban Phai for its economy. It is however known throughout the Northeast for its silk, a cottage industry enterprise which provides important supplementary earnings for the farming family. It also provides employment for girls, as young as 6 or 7 years old, who can earn as much as a dollar a day. There is a daily market in the district center but because of the closeness of a larger market in Ban Phai and since transportation fares are relatively low, the market in Chan-a-but plays only a very marginal role in the trade and commerce of the district. Furthermore most of the traders in the marketplace tend to sell only semi-perishable non perishable produce. When there are no storage and refrigeration facilities and the turnover in sales is limited, the market vendor will usually sell only produce which cannot decay easily. This often means that nutritious food which tends to be highly prone to quick rotting is not easily available because market vendors do not want to take the risk. The market in Chon-a-but is therefore much more a center for socializing and information exchange.

2-2c. Nam Phong district is slightly bigger than Ban Phai and is forty kilometers to the north of Khon Kaen city. It is accessible by road but is not located in any synapse of transportation. As a market center it services a very localized area. But, unlike the other two sample districts, Nam Phong enjoys a water supply, all year round, provided by the Nam Chee irrigation project. This has enabled many of the farmers to double crop and to indeed cultivate rice for the market. In areas, of double cropping then since no upland crops are grown, there is no crop diversity. Those sections of Nam Phong not reached by irrigation grow one crop of rice and one other upland crop. At present, sugar cane is becoming popular as a cash crop. A few miles outside of the Nam Phong district center there is a sugar refinery which has attracted immigrants, in search of employment.

The maintenance of the irrigation canal also provides occasional employment to villagers. There is hardly any cottage industry activity although most farm families weave their own cotton cloth (the yarn is store bought) and pandanus floor mats.

In some of the villages with irrigation facilities duck raising is important: after the rice has been harvested, the swampy ponds are converted into duck ponds which usually abound with natural feed for the birds.

A daily market with a fair amount of activity is located in Nam Phong district center. At dawn there is an open market (on the basketball court which adjoins the marketplace) where farmers from nearby villagers sell vegetable and other food items which they cultivate or produce themselves. Much of the transactions in this

early morning market are on a wholesale basis between farmers and market vendors. Each market vendor has a clientele of farmers each of whom supplies him/her on a prearranged day. This assures the vendor of a daily supply of produce. Such produce, however, is only of limited quantity; the vendor has to depend on supplies brought in from Khon Kaen city too. Livestock is slaughtered locally and all meat sold in the market has to be channeled by the district livestock cooperative which regulates the number of animals slaughtered per day. Since there are far less animals slaughtered, per day, than there are butchers in the market, a rotation has been worked out to enable different butchers to sell meat on different days of the week.

Other than the sugar refinery and a few scattered cassava mills, rice mills are a common enough sight in Nam Phong. A number of these mills are fairly large and have direct dealings with rice exporters in Bangkok.

In profiling the economic environment of the project area, we have moved from a description of the region and the province to a description of the selected districts. We now want to continue this chapter with a brief explanation of each of the villages (where our field enumerators were located). Only then will this chapter, having laid out the details for our following analysis on the farmers' profile, be complete.

Source Of Income	All Households	Farm Owners	Farm Renters	Farm Workers	Production Workers	General Workers
Percent of Households	100	70.0	6.6	2.1	2.3	2.2
Av. Household Size	6.0	6.1	5.6	5.8	5.6	5.7
Total Monthly Income	1,303	1,153	1,217	2,938	1,557	1,388
Total Current Income	1,289	1,137	1,202	2,910	1,555	1,884
Money Income	661	446	573	2,370	1,506	990
Earnings	606	421	559	2,273	1,135	952
Wages & Salaries	213	71	85	2,002	981	854
Profits, Non-Farm	120	25	102	89	44	47
Profits, Farming	273	325	372	182	110	51
Non-Money Income	628	691	629	540	405	394
Home Produced	512	584	528	303	232	278

Source: NSO: Report on Socio-Economic Survey 1975-1976.

Table 1 Average Monthly Income per Household by Source and Socio-Economic Class, Villages in the North-east, 1975-1976

Characteristics	Total	Municipality	Sanitary District	Village
Farming	81.7	6.8	52.5	89.9
Rice, Primarily	74.0	3.7	42.7	82.1
Other Field Crops	6.4	0.3	7.9	6.6
Fruits and Vegetables	0.5	1.1	1.2	0.4
Livestock & Poultry	0.8	1.7	0.7	0.8
Forestry & Fishing	3.9	0.3	2.4	4.3
Manufacturing	1.8	6.8	5.5	1.0
Food Products	0.4	0.8	1.4	0.3
Textile Products	0.4	3.7	1.7	0.1
Other Products	0.7	2.3	0.7	0.6
Construction	0.3	1.1	0.5	0.2
Trades	8.7	61.2	30.3	2.9
Wholesale	0.2	1.7	0.7	0.1
General Merchandise	2.0	9.6	7.6	0.9
Food, Beverages & Tobacco	4.7	35.7	15.5	1.5
Textiles & Apparel	0.6	3.1	2.2	0.2
Other Merchandise	1.2	11.1	4.3	0.2
Services	1.4	10.5	5.9	0.3
Repair Shops	0.4	2.8	1.4	0.1
Transportation	2.2	13.3	2.9	1.4
Taxi & Samlor	2.0	12.7	2.4	1.3
Other Transport	0.2	0.6	0.5	0.1
Source: NSO Socio-Economic Survey 1975-1976.				

Table 2 Percentage distribution of Selected Household Characteristics in the Northeast 1975-1976.

TABLE 3 AVERAGE AGE AND AVERAGE CASH EARNINGS PER MONTH OF HOUSEHOLD MEMBERS, FOR SELECTED OCCUPATIONS, BY SEX

Occupation and Employment Status	Female				Male							
	Municipal Areas		Sanitary Districts		Villages		Municipal Areas		Sanitary Districts		Villages	
	Av. Age	Average Earnings	Av. Age	Average Earnings	Av. Age	Average Earnings	Av. Age	Average Earnings	Av. Age	Average Earnings	Av. Age	Average Earnings
Sales Workers, Own-Account												
Working Proprietors ¹	41	2,142	43	2,398	42	990	45	3,915	44	3,690	42	1,450
Street & Market Vendors	39	395	36	1,460	35	400	46	1,718	45	3,680	43	1,212
Agricultural Workers												
Farm Operators ¹	44	1,040	47	495	47	654	52	868	43	975	42	265
Farm Workers, Private	-	-	24	394	27	200	18	400	30	476	27	265
Fishermen, Own-Account	-	-	-	-	-	-	-	-	-	-	42	985
Teachers												
Private Employees	26	1,130	26	700	-	-	34	1,240	-	-	-	-
Government Employees	32	1,850	31	1,514	32	1,533	37	1,827	35	1,680	36	1,610
Tailors & Dressmakers												
Own-Account Workers	32	790	-	-	-	-	43	1,792	31	2,115	-	-
Private Employees	23	550	-	-	-	-	-	-	-	-	-	-
Textile Workers												
Private Employees	-	-	27	605	22	600	-	-	-	-	22	620
Mechanics & Blacksmiths												
Own-Account Workers	-	-	-	-	-	-	32	2,180	36	2,710	-	-
Private Employees	-	-	-	-	-	-	27	997	22	528	22	645

TABLE 3 AVERAGE AGE AND AVERAGE CASH EARNINGS PER MONTH OF HOUSEHOLD MEMBERS, FOR SELECTED OCCUPATIONS, BY SEX IN THE NORTHEAST

Occupation and Employment Status	Female						Male					
	Municipal Areas		Sanitary Districts		Villages		Municipal Areas		Sanitary Districts		Villages	
	Av. Age	Average Earnings	Av. Age	Average Earnings	Av. Age	Average Earnings	Av. Age	Average Earnings	Av. Age	Average Earnings	Av. Age	Average Earnings
Vehicle Operators ²												
Own-Account Workers	-	-	-	-	-	-	34	1,070	37	1,768	33	3,002
Private Employees	-	-	-	-	-	-	30	1,170	32	1,380	25	905
Government Employees	-	-	-	-	-	-	35	1,335	43	1,550	33	1,710
Construction Workers												
Private Employees	-	-	-	-	-	-	36	835	32	695	27	775
General Labourers												
Private Employees	21	240	32	290	31	265	34	668	30	552	34	503
Protective Workers												
Government Employees	-	-	-	-	-	-	42	1,836	32	1,060	39	1,450

1/ Earnings include total profits of family enterprises.

2/ Includes some tractor operators.

Variables	Units	Means of Variables by Village				Analysis of Variance	
		Nong Sang n ₁ = 50	Ban Lan n ₁ = 50	Gudpeerk- ham n ₃ = 50	Total n = 150	F - Statistics	Significance Diff. bet. means of 3 villages (level)
Family size	Heads	5.96	6.50	6.24	6.23	0.639	n.s. ²
Family mem. eng. in agr. empl.	Heads	2.78	1.16	3.20	2.30	28.307	.01
Family mem. eng. in off-farm empl.	Heads	3.22	1.10	3.16	2.49	16.633	.01
Land holding	Rais	22.16	27.04	21.60	23.60	1.706	n.s.
Land tenure	Rais	21.18	27.44	21.84	23.49	2.324	n.s.
Cultivated area	Rais	20.94	26.62	22.06	23.21	1.801	n.s.
Rain-fed area	Rais	3.96	25.96	21.40	17.11	37.271	.01
Irrigated area	Rais	16.66	0.00	0.00	0.00	-	-
Value of crop sold	Bahts	4,197.58	3,769.40	2,523.38	3,496.79	1,640	n.s.
Value of crop production	Bahts	6,344.46	12,881.40	14,357.26	11,194.37	10,107	.01
Income from livestock	Bahts	6,719.50	1,893.60	6,564.80	5,059.30	5.671	.01
Farm gross cash income	Bahts	10,923.08	5,563.00	8,534.68	8,340.25	3.238	.05
Value of crop & livestock prodn.	Bahts	20,491.60	26,140.24	28,205.28	24,945.71	2.093	n.s.
Farm cash expenses	Bahts	2,049.50	1,006.22	1,784.40	1,613.37	1.353	n.s.
Farm net cash income	Bahts	10,342.00	4,667.98	7,068.36	7,359.45	4.429	.05
Non-agri. income	Bahts	16,876.18	4,929.20	22,395.30	14,733.56	15,219	.01
Gross family income	Bahts	26,292.56	9,586.48	29,421.38	21,766.81	15.174	.01
Family net cash income	Bahts	12,114.72	3,101.66	12,639.00	9,285.13	9.295	.01
Amount of cash borrowing in 1978	Bahts	3,682.00	3,330.00	6,590.00	4,534.00	4.987	.01

^{1/} F.01 (2,147) = 4.75; F.05 (2,147) = 3.05

^{2/} n.s. = No significant difference between means of 3 village.

Table 4 ECONOMIC ANALYSES OF SAMPLE VILLAGES

Size of Lanholding (rai)	% of Respondents
Landless	4.0
1-10	16.7
11-20	31.4
21-30	18.7
31-40	16.6
41-50	6.6
51 +	6.6
$\bar{X} = 2348$ rai	

Range in size of landholding in village (rai)

Ban Lan: 5-149

Khud Pear Kon: 6-100

Nong Sang: 5-80

Table 5: Distribution of landholding (%).

2-3. Village Description.

2.3a Ban Lan (in ampur Ban Phai)

The history of Ban Lan, which has been preserved in the village temple records, dates back to the Ayuthaya period. The entire village itself is so large that it has been divided into three sub-administrative units, all of which pay allegiance to a single wat (temple). The temple and its monastery are indeed the focal point of all village activity.

Water, or really the lack of it, is the very pivot of subsistence of the villagers. There is a creek which runs to the south of the village; in addition, there is a number of ponds which either have a high saline content or often dry up. When the rain water stored for drinking and cooking purposes runs out, villagers get their supply from a neighbouring village, Ban Sawang. In severe situations when the supply in Ban Sawang runs dry too then the Accelerated Rural Development unit in conjunction with the district office brings in water from the district capital. Not only does the village lack a reliable water supply for agricultural production, it also lacks a portable water system.

This functional village of three administrative units is made up of 248 households and a population of about 1,600 out of which at least 200 people are working in Bangkok, either seasonally or permanently. The majority of the villagers are of Thai-Lao descent. There are however three persons in the village register who have Chinese names but who consider themselves Thai. For practical purposes then there is no ethnic multiplicity in the village.

At least 4,000 rai of village land is under rice cultivation. Beyond the rice farms, on land of higher elevation, cassava and water melon are grown on about a total of 2,000 rai. In general, each household owns two plots of land, one in the valley and the other on upland. All the forest upland has now been completely cleared up for cash crop cultivation; the only public land that remains is the cemetery ground. With all available land brought under extensive cultivation, there is only one family in the entire village which is landless; two families rent additional land, from the village school headmaster, for rice farming and, 6 families rent upland plots for cultivating cassava. Occasionally when a debt cannot be repaid the creditor lets the debtor cultivate part of his landholding: the debtor provides the land, the creditor produces the crop and keeps the entire harvest for himself as payment of the debt. Much of the school land including the playground has been leased out to bring in additional income for the school.

Landholdings range from 5 rai to 149 rai. Then, the statistical mean for landholding size shows up as 25 rai. But, since the range in actual size is so large, the statistical mean has no real significance. It should be sufficient to keep in mind that every villager, with the exception of only one, has his own holding which, if small, is supplemented with additional rented land. There are no absentee landlords and, every household attempts to cultivate its own rice requirements. If there is additional land, then that land is rented out.

The picture that emerges then is as follows: (i) each household has two types of land plots - one in the valley to grow rice and the other on slightly higher elevation* to grow cassava and some watermelon, (ii) all rice is grown for family consumption** and depending on the size of the family and its rice consumption capacity, land is either rented in or rented out; (iii) since there are no irrigation facilities, the cropping intensity is very low although all land is brought under extensive cultivation and (iv) soil fertility in the upland areas is slowly being depleted by the continuous cultivation of cassava.

Cassava is a fairly new cash crop which was introduced to replace kenaf. The water table in Ban Lan has a high Saline content, as the water level declines, the salinity increases. Thus the water in Ban Lan can no longer be used for soaking and wretting kenaf. As for the crop itself, there is a definite trend towards growing cassava, since it requires less labour than does kenaf which has to be processed before it can be sold to the mills. The villagers are definitely pleased with the decision to grow cassava. Prices for the crop have been encouraging; family incomes have increased and, since no water is needed for cassava as was needed for the processing of the kenaf fiber, conflicts over water use have declined considerably.

* The farmer usually does not have title to such land.

**All farm technology is confined to animal traction and this coupled with the lack of irrigation facilities allows for only limited production levels.

Watermelon is a very new introduction in farm crops. At present there are about six families cultivating the crop and it should not be surprising to see increased production levels. The market for watermelons, at least at this point in time seems to be assured, since even middlemen from neighbouring provinces come to the farms to buy the fruit harvest.

Livestock is not as important as it used to be before the coming of the village buses. Present village transportation is hardly reliable but it has replaced the bullock carts. Cattle are now reared only for their meat and that too only for village consumption. Each farmstead has to have at least a couple of buffaloes to work in the fields. But all such animals are bought and sold within the village. Pigs are raised too but only by the rice mill owners who have provision to rice bran. Be that as it may, each mill averages only about ten hogs which are either sold off to middlemen or directly to the abattoir in Ban Phan. Poultry production too is limited to village consumption levels. Thus, in terms of animal husbandry, the market is extremely limited and does not extend beyond the village.

The village is certainly not self sufficient. However since production levels are low and the marketing area is not very large, we suspect that village diets are deficient in protein. Livestock is slaughtered only for festivities and although the meat is cured - so that it can be consumed over a longer period of time - such consumption is minimal. In addition, the chicken are apparently often attacked by cholera epidemics.

Off-farm employment in Ban Lan is derived from sericulture and silk weaving, from small grocery store businesses or from employment in Bangkok. There are ten small grocery stores which range from temporary stalls (netting about 30 ¢ a day) to the more permanent establishments (which can account about 100 ¢ a day in profits). These shops are stocked by goods brought in from Ban Phai and a price margin analysis indicates an increase of 15 to 20 percent of the cost price.

Silk is woven predominantly for family use. If it is sold, it is sold only within the village. The most important non farm income is made up of the remittances sent home by the villagers working in Bangkok. Such remittances can amount to as much as 800 ¢ per person, over a period of a year. Many of these migrants, however, are transient, returning to their villages, in their middle age, to work the family fields.

Ban Lan typifies a Thai village which has until recently been self sufficient. Although household necessities have to be bought and cassava cultivation provides an important source of income as do the remittances sent from Bangkok, the village economy still only lurks in the fringes of commercialized activity. All village development is further constrained by factionalism which has resulted from the three administrative sub units competing with each other rather than working together.

2.3b. Khud Pear Kom (in amphur Chon-a-but)

Khud Pear Kon is six kilometers to the south of the Chan-a-but district center and market site. The village is dependent on rain-fed agriculture but as is typical of the northeast, the ecology allows for crop diversification. Two varieties of rice - glutinous rice for daily consumption and ordinary rice for sweets and desserts - and two other upland cash crops (cassava, groundnuts) constitute the range of crops grown. Landholdings range from 6 rai to 100 rai. Landlessness is uncommon but because of a deficient water supply the land is underutilized. There is also 500 rai of communal grazing land.

All rice is grown for household consumption, although small amounts are bartered for fresh water fish, salt and lime with neighbouring villages. Farm technology is limited to water buffaloes and animal traction. Not all families, however, own buffaloes. They prefer to rent the beasts. There are at least twelve families who rent out their buffaloes for about 6,000 to 1,000 per animal for the entire farming season.

Unlike most other self-sufficient farming villages in the northeast, Khud Pear Kon is beginning to commercialize its rice cultivation. Technology still remains traditional and non-mechanized; labour however is not family labour but hired labour. And such labour is usually from outside the village. It is not that the rice acreage is so large that additional labour is required: Farm labour has been reduced because of out-migration and because it is more profitable for the womenfolk to be involved in an off-farm

activity, i.e. sericulture and silk weaving then to actively participate in farm work. Hired labour is paid 20 ¢ a day together with a free lunch. The women's income from weaving coupled with the remittances sent by those in the family who have left the village, is sufficient to hire labour for farm work.

Cassava is the main upland crop. But because it depletes soil fertility at an astonishing rate, agricultural extension workers have recently introduced groundnuts to rotate with the cassava. Each household also has a small plot for vegetables, all of which is for home consumption. Livestock is important. Cows and pigs are raised for sale while buffaloes are predominantly for farm use. Butchers from either Ban Phai or the district center in Chon-a-but purchase live animals from the villagers and return the next day to sell the meat. But not everyone sells to the roving butcher or middleman. Some of the hog raisers who are members of the Pig Rearers' Cooperative located in Ban Phai, sell directly to the cooperative. Unfortunately there are certain constraints to selling to the cooperative which only enhances the importance of the middleman even if he offers a lower price. All poultry is reared for home consumption although eggs are bought and sold between neighbours.

Off-farm employment provides an important addition to farm incomes. We have already mentioned silk weaving. The wives of a number of the wealthier villagers contract other village women to weave silk. Yarn and the design for the weave is provided. Labour is paid by the piece or, occasionally, by the day. The

woven silk is then taken to the market center in Ban Phai where it is wholesaled to agents. In some cases these wholesale agents provide the yarn and contract villagers to weave the silk, paying for the labour by piece work. Much of the silk is used locally although the more enterprising agents have begun to export but usually only within Southeast Asia.

The silk industry in Chon-a-but is very important and in Khud Pear Kom it provides employment for the women. At the present time however the market is limited and there is a potential which is yet to be fully tapped. This is resulting in the weavers earning minimal wages with the agents accumulating a tidy profit.

There are 3 grocery stores in the village and these are supplied by larger stores in Ban Phai. Since the Chon-a-but market is 6 kilometers away and Ban Phai town only a further 10 kilometers, the range of household and consumption items available in the village is fairly large.

After the rice has been harvested or even during the slack season when there is little farm work to be completed, many of the village men become itinerant traders. These peddlars have motorcycles or pick up vans which are piled high with high-demand consumption items applied from village to village. Some of them travel extensively throughout the entire country.

Most of these itinerant peddlars operate on credit - they buy on credit and sell on credit. And since the time lapse before repayment is long, the peddler's clientele is willing to accept the 200% increase in price. The peddler provides a service to the

village consumer by delivering necessities right to the door-step; the consumer is willing to pay for the extra costs which cover for the transportation and services rendered by the trader.

In some instances the peddler works as an agent for a merchant in town. The merchant provides the inventory of goods and the peddler provides his labour and business acumen: the latter is an additional retail outlet for the farmer; the farmer provides the latter with the capital (i.e. the inventory) needed to maintain his economic activity (i.e. peddling).

We have described the above intricate sales mechanism because it typifies all transactions in the marketing system. In the final analysis one is tempted to conclude that the entire trade and commerce of the project area hinges on the careful manipulation of credit, a phenomenon inevitable in all situations where the amount of money in circulation is limited.

In summary, the economic structure of Khud-Pear Kom is made up of a farm and a non-farm sectors. The farm provides subsistence as well as a cash income derived from the sale of commercial crop(s); the latter supplements the income derived from the farm. Furthermore, because of the high incidence of trading activities and emphasis on cash cropping the villagers are much more commercialized than the average rural northeastern farmer.

2.3c Nong Sang (in amphur Nam Phong)

The villagers were originally from Ubonratchatani. They fled to Nong Sang in 1894 to avoid being drafted into the local army or

into being recruited by an out-law group. Originally this village was part of the Sai-num subdistrict but in 1975, together with seven other villages it became reclassified as part of the kraserm sub-district.

Nong Sang is located in a valley along Nam Phong river, seven kilometers southwest of the district center. This nucleated village of 187 households benefits from an irrigation facility which allows for a double cropping of rice. In addition, there are a number of fresh water ponds which provide fish and a certain type of reed which is used to weave floor mats. Total farming land constitutes about 2,372 rai and all of it is under rice cultivation. Individual landholdings range from 5 rai to 80 rai. With the exception of only one villager every one else has title deed to his holding. The one tenant farmer share crops.

Rice is cultivated for subsistence and for the market. The rice grown in the wet season is of the glutinous variety and is predominantly for personal consumption. The dry season non-glutinous rice variety is cultivated for the market. Since farm technology is still very traditional and the family labour force is small - many of the youths have left the village - little attempt has been made in the direction of crop diversification. Land is not a constraint. There are large pockets of uncleared land suitable for cash cropping. Only a handful of enterprising farmers have begun experimenting with cash crops - cassava, sugar cane and banana. The largest cassava holding in the village is 15 rai; 3 farmers plant sugar cane on an average of 4 rai and; 3

others grow bananas (80 rai, 35 rai and 7 rai). All such cash cropping is on public land to which the farmer has no title deed. Be that as it may and despite the unsophisticated technology, these innovative farmers have found their yields to be satisfactory.

Animal husbandry plays a large role in the village economy. Poultry, especially ducks, are reared for their eggs. Women Traders from the district market come to the village daily to buy the eggs. Sometimes, if there is an egg gent in the district market, the eggs are sent to the central market in Khow Kaen city. Ducks raised for the table are sold either to roving middlemen or to wholesalers in the market in Nong Kung*. These wholesalers then distribute the ducks to markets all over the Nam Phong district. Chicken are raised for the home and for sale within the village. There is a fair amount of hog raising too although production levels have declined because of the pork crisis. Pigs are sold to middlemen who then sell to butchers in Nong Kung; some of them transport the pigs to Nam Phong to sell to the Pig Raisers' Cooperative.

Other livestock include cattle and buffaloes. Buffaloes are needed to work in the rice fields but once land preparation is over, the animals are sold off. Occassionally a female buffalo is retained for calving but in general, trading in buffaloes is a significant seasonal activity. The animals are bought just before

*Nong Kun is a tambon (subdistrict) town; Nong Sang is part of Nong Kun subdistrict.

land preparation. Once that activity is over the animals are sold of only to be bought again six months later for the next rice season. The transactions involved in the buffalo trade are therefore phenomena. We suspect that all draft animals are bought and kept only during the duration of their use in the farm so that the household's labor and cost in maintaining the buffaloes are reduced - the labor that would be needed to graze and cut forage for the animals could be used for some other farm or non-farm activity. Also, the income earned from the sale of farm animals can be used as productive capital for purchasing fertilizers and pesticides.

Nong Song's behavior pertaining to livestock trading warrants attention. All villagers endeavour to raise animals for sale. But unlike the normal practice of letting the livestock breed, animal raising is a temporary activity of a kind similar to the trading activities of the stock exchange. The animals are indeed regarded as an investment to be sold when prices are high, and bought when prices are low. Fortunately feed for livestock is cheap and readily available. The income earned from the livestock trade is a heavy contribution to net farm earnings.

Non farm employment is sought in the labor crews hired to maintain - irrigation canals and dams. A few of the villagers have formed together as a group of construction workers and carpenters. Finally, mention has to be made of the remittances sent by the young migrants to Bangkok. Some return to the village during transplanting and harvesting; most however prefer to send home the money to hire field labor.

Most women weave floor mats and cloth for family use.

There are 10 grocery stores in the village with provisions supplied by traders from Nong Kung. All farm inputs and household items are bought in Nong Kung. On the other hand, much of the rice for the market is sold in Nam Phong since it is a larger center (being at the district level) and prices are more favorable than those offered in Nong Kung.

The village has four rice mills which process padi for the farmer's own family consumption. Only very rarely is rice sold to the mills in the village.

We hope that this chapter has provided the general framework for understanding the marketing pattern which prevails in the northeast of Thailand. It goes without saying that the structure of production influences the conduct of the marketing system and the behaviour of its participants. In Ban Lan, only cassava is sold; non-farm activity is limited; the villagers appear to be self sufficient and; there is potential for market development. In Khud Pear Kom, cassava is, once again, the only cash crop. But because of the significance of silk weaving and itinerant peddling, the village is much more integrated into the commercial economy. It appears to us that this integration into a wider network has made the farmers more sensitive to changes in the market. In Nong Sang, because of rice production for the market, the villagers are more affected by government intervention in the form of the rice premium which, although levied on the exporter, falls heavily on the producer. Unfortunately, the rice premium together with the failure

of Farmer's Association and Cooperatives to provide the farmers with favorable prices is having the result of alienating the farmers and supporting the Chinese dominated private sector. Thai officialdom and public opinion is that the vast and complex structure of the Chinese rice milling and marketing system is highly exploitative by virtue of being now competitive (and dishonest), and constitutes a heavy burden on the Thai rice farmer and the main source of his economic ills. The farmers however favor the Chinese.

The individual particularities of each of the sample villages - all located in the same province and with similar ecosystems - and how this affects the production-distribution system provides, we hope, the clue as to why it is necessary to identify the heterogeneity within a project area. With attention focussed on multiplicity rather than uniformity policy prescriptions will undoubtedly be more meaningful and applicable over a larger area.

CHAPTER III

A FARMER PROFILE IN THE PROJECT AREA

In the previous chapter we had presented the structural background of the project area with the hope it will put into context the influence of the larger farming environment on the pattern of marketing and marketing behavior of the farmer. A point that we will stress continuously is the need to see production and marketing as an integrated system so that economic performance is multi-dimensional and a multi-goal concept.

We continue our profile of the project area by spotlighting on the participant - the farmers - themselves. Market development is not affected singularly by macro consequences overtime and space but in combination with the micro behavior of all the participants in the agricultural production-distribution system. A large number of independent agents working within different types of enterprises (private, cooperative or state) and widely separated through space and time perform a myraid of functions in the production-distribution link. All these functions and activities are bound together in a highly complex and dynamic system of interaction and reaction. Within the context of the research approach what all this amounts to is that for the aggregate functions of the market to be fully understood, it is vital to observe the micro-behavior of the farmers and market intermediaries alike.

Unlike the previous chapter which flushed out the variability of the different sites in the research area, here we look at a general

profile applicable to the entire area. All statements made here are dependent on the sample of 150 farmers to whom the questionnaires were issued. Such findings are the result of a "one-shot" survey and we do not have recourse to any time series. Aggregate numbers undoubtedly affect the presentation of the actual situation. Thus, the figures that are specified here should be treated with caution.

3-1. The Farmer: Production Profile

Typical of the Thai agricultural family, our figures indicate a family size of 6.23 persons but a farm labor force of only 3.1 persons per family*. This rather low family labor participation in the farm, in an environment which is predominantly agricultural is indicative of the heavy reliance on off-farm employment and out-migration.

Table 6. Farm Household Composition

<u>Size of Composition (no. of members Members/Family)</u> Nature of Composition	Size of Family	Size of Labor Force/Family	Size of Labor Force In Agric./ Family	Size of Labor Force In Off-Farm Employment Family
0	-	-	-	10.7%
1-3	9.4%	43.3%	59.4%	68.7%
4-6	48.0%	46.7%	39.3%	17.3%
7-9	34.6%	8.7%	1.2%	3.3%
10, 10 ⁺	8.0%			
\bar{X}	6.23	4.13	3.11	2.49

n = 150

\bar{X} = average size of household and labor composition.

*The labor force per household is 4.13

Although there has been an attempt at crop diversification and nearly all our sample farmers cultivate at least one crop for the market, such cultivation is very limited. In the two villages which practice rain-fed agriculture, for instance, the amount of cassava grown is severely limited by the amount of land available and by depleting soil fertility. Villagers therefore turn to long distance travelling or, as is frequent among the younger generation, migrate to Bangkok in search of employment there. Those who do find employment in Bangkok certainly earn more than they would if they had remained in the village. The unfortunate problem that arises is the resultant congestion in Bangkok. We shall not concern ourselves with the social consequences in Bangkok but we should be aware that such consequences are a result of the poor production capacity of the northeast. Soil fertility is low and this coupled with the lack of a reliable water supply makes agriculture unattractive. Subsistence, i.e. rice, has to be met and this is easily enough achieved; so, the problem sets in with the cash crops.

One problem to low production levels could be the result of an inadequate marketing system. On the other hand, an improved marketing system should not be seen as reacting in higher production levels. In our project area, although the cropping intensity is low, the factors of production that are available are limited. An expanded or improved marketing system will not initiate farmers into cultivating more. It might, however, help elevate problems faced by farmers in terms of their participating fully in a market economy and benefiting from this participation.

With the exception of only a handful, most of the respondents owned the land which they cultivated. Each land holding is made up of at least two plots located in two different ecological zones - the rice fields in the valley and upland plots for cash crops. Most of the upland cultivation is illegal; farmers do not have title deeds to such land. And since they do not own this land, cash cropping is thought of as being temporary; there is little incentive to maintain soil fertility and if the farmers do not take active steps for soil conservation, then production levels are going to fall, if they have not already begun to do so, especially for cassava.

Unlike land holdings in the rest of the country, average size of land holding of respondents is thirty rai. This compares with the average holding size of 3.5 rai in the Central Plains where intensive double cropping of rice is the norm. But although our land holding is much larger and land tenancy is uncommon, rice yields average only 189 kilograms per rai. In the Central Plains yields average 275.6 kilograms to the rai. On the other hand, farmers in the Central Plains are commercialized, use heavy farm machinery and grow non-solar sensitive high yielding rice varieties. Farmers in the project area cultivate only the traditional glutinous variety. Even the rice growers in Nong Sang cultivate a traditional variety for the second, dry season market crop. Anyway, assuming that yields of other crops vary as do that of rice, production per capita in the northeast is only forty-five percent of that in the Central Plains.

Average value of crop production for 1978, in the entire project area amounted to 11,194.37 ฿ . In Nong Sang, however, the value was only 6,344.46 ฿ , although the village enjoys irrigation facilities and the farmers grow two crops of rice. In both the other villages, production includes cash cropping—the value of agricultural production turns out to be higher than the average value for all three villages. But although total crop production in Nong Sang is low, the income earned from the crops sold is higher. This results in a number of implications (i) rice fetches a higher price than a cash crop ; (ii) the yields per rai for rice are higher than the yields per rai for a cash crop; (iii) more land is devoted to rice than is devoted to a cash crop; (iv) the problems associated with the market for a cash crop are more severe than those associated with the market for rice.

Interestingly enough most of the complaints as regards to poor marketing conditions and unfair pricing were made by the rice farmers. The government has introduced a guaranteed minimum price for rice* but the rice exporters in Bangkok are very much in control of the rice trade and although the support price was introduced for the benefit of the farmer, he is the one who bears the brunt of fluctuating international prices. There is a support price for cassava too but it has not been fully instituted.

*So that only the country's surplus rice is exported and, the price of rice in the country is not subject to the fluctuations in the international market.

The two caasava growing villages in our project area are well located to benefit from good roads and accessibility to cassava mills. Furthermore most of the farmers sell their cassava directly to the mills. At the same time, although there is a substantially large number of cassava mills, there are indeed more mills for processing rice. The existence of a greater number of sales outlets for rice could be one reason why prices for the grain are comparatively higher than prices of cassava. This then goes to show that a greater number of participants (c.f. the rice mills) in the system, all of whom undoubtedly duplicate the same service, need not necessarily be dysfunctional: such might not be operationally efficient but the farmer benefits from the steep competition among the buyers of his crop.

Leaving crop production, income earned from livestock production is highest in Nong Sang. As we described in the preceeding chapter, the villagers of Nong Sang treat livestock as a capital investment and transactions of such investment follow the market very closely. Livestock production in Ban Lan, on the other hand, is limited to personal consumption and localized exchange within the village.

Generally, the income from livestock has been on the decline because most of the farmers in the project area have cut back hog production. Although pork prices are very high, the selling price of a live animal is low. The government has introduced measures to control the number of pigs slaughtered in a day — Only pigs sold to the cooperative can be slaughtered; Neither can pork

be transported across provincial boundaries.

Since the cooperative regulates the number of animals slaughtered in a day, when the animal is full grown and ready for the market, the farmer usually finds himself having to wait his turn in the cooperative sales roster. During this interim however the animal might gain weight. Pigs weighing* more than 100 kilograms fetch proportionately lower prices because the meat then becomes fatty. Farmers will want to raise their animals to about 100 kilograms so that they can receive the maximum possible price but if they have to wait their turn in the cooperative sales roster, then they are faced with the risks of a weightier animal and a definite lower price. This situation should explain it self as to why the middleman is more sought after than the cooperative, although the former offers a lower price. Ultimately the middleman ends up supplying the cooperative which has to maintain its daily slaughter rate. The cooperative was set up to eliminate the middleman; yet, in the end it becomes dependent on him itself and the farmer becomes less confident of the cooperative movement.

In Khan Kaen province, there are a number of meat processing plants. Ban Phai, for instance, is well known for its sausage and pork floss. So, there is indeed a local demand and market for pork. Unfortunately due to the incompetency of the cooperative, the middle-

*Although weights are hardly used, the butcher or middleman uses his years of experience to guess the weight of the animal. To us this weighing system seems unfair and to the disadvantage of the farmer. Many a farmer, however, assured us otherwise.

men have tended to manipulate the situation to their own benefit*. But, rather than to have to sell cheap to the middlemen, the farmer cuts back his production. Also, the politics behind the pork trade is so complicated for us to even begin describing it. By manipulating the price of pork some of the larger merchants in the trade were able to affect a political appointment.

On the income side, net farm cash incomes have increased substantially. In 1963 the income per holding in the northeast was 2,407 ฿ , on the average. In 1979 the income per holding for the project site stood at 7,365.48 ฿ . This increase of 32.69% includes inflationary costs. Real incomes have therefore not increased. If over a period of 16 years, incomes have remained the same or increased only slightly, it is not surprising that the northeast region of Thailand remains the back water of the nation.

At the present time, productive surpluses are practically nil, there is not much land left. Farming technology too is limited. The farmers, understandably so, do not seem to be adapting their agricultural techniques to the changing resource pattern. Till recently, virgin land had been readily available in the northeast. Methods of cultivation have therefore tended to be determined by the type of field (i.e. whether or not it is irrigated, how closely it lies to the village and so forth) rather than by the land-to-labor ratio.

*When the cooperative was first introduced as posed as a competitor to the middlemen, the latter offered slightly higher prices than the farmer so as to maintain the clientele. But as the cooperative became operationally inefficient, the middlemen lowered their buying prices.

Income levels are rather low to afford farm machinery; neither is the economic environment attractive for entrepreneurs to provide contract services with heavy farm machinery.

On the other hand, farmers in the area have quite fully accepted the idea of crop diversification and are indeed cultivating at least one cash crop, cassava. The international market price for cassava is fairly high. For the rice growers too, the government has provided a support price. Yet the returns to the farmer have not been substantial enough to have improved his general standard of living. A related concern which is soon going to become extremely problematic is the astonishing rate of out-migration by the younger generation.

Between balancing the influx of villagers out of the area and initiating substantial growth in output and income of the northeast in general, it appears that the Thai government is the obvious agent which can provide all the ingredients of change - seeds, fertilizers, irrigation, instruction and demonstration, transport, storage, credit, etc. Yet, as we will lay out more explicitly in the proceeding chapters, the marketing system is best left in the hands of the private sector, at least for now. And historically, economic change in Thailand has taken place only in those areas reached by the commercial distribution system, a private initiative.

For any type or form of productive possibility to occur in the northeast, the public sector has to bear responsibility since the private sector, although well known for its dynamism, will not invest in the kind of infrastructure certainly beyond the capability

of the individual farmer. The problem that arises then is the way in which the private sector and the public sector can be articulated into a system meaningful and beneficial to the small farmer. If production has to be aided by the public sector and an efficient marketing system can be maintained only by the private sector, how do we plan a development strategy in which both sectors work congenially, rather than being suspicious of each other.

In all three villages non-agricultural incomes surpassed incomes from the farm. At the same time, the average number of persons per household, in the project area, engaged in non-farm employment was 2.49 while the figure for employment in agriculture was 2.30. In Khud Pear Kom where most of the villagers are itinerant traders and peddlers, non-farm incomes were three times more than farm incomes. Of course in all three situations non-farm incomes are heavily subsidized by remittances. But the fact that farm incomes are supplemented heavily by incomes from non-agricultural activities is an important phenomenon. It is fortunate that the villager has recourse to a non agricultural source for additional income. On the other hand we are left with a number of questions. If the agricultural produce is not fetching suitable prices then does it imply that the marketing system is inefficient or does it imply that the farmers are growing the wrong kinds of crops. If we find out that introducing other crops would be more to the benefit of the farmer than we are faced with the related question of whether the existing marketing system, including product processing and the technologies involved in such processing, would be able to handle the new crops and production

levels. Introducing new crops is an innovation with high risks which the small farmer might not be willing to take. And, if the marketing system is not equipped to handle these new crops, then the farmer will be more reluctant to innovate.

This reliance on non agricultural incomes could also mean that policy implementation for market development should not only be geared towards the commodity market but also towards the financial and service markets. In Khud Pear Kom, for instance, trading is a very important activity. Such trade is of a very small scale but these farmer-traders identified finance as one of their key bottlenecks. They frequently perceive that inadequate finance is the major reason for their limited profits, while in fact their management of limited capital may be the real problem. The credit that is used is frequently obtained from informal sources such as input suppliers, purchasers, friends and relatives and, money lenders, all of whom charge excessive interest rates.

This part-time trader is forced into stocking his inventory on credit. The amount of money circulated in the local economy is limited, all transactions revolve around credit and, the profit that a small trader can acquire depends solely on his business accumen. If the trader has the capital facility to purchase his inventory then his profit margin will be slightly larger since whatever price he charges the final consumer will be to his gain and not to the merchant from whom he loans the inventory. Also, if he has the capital to purchase his inventory then he will not have to pass on the additional cost of the credit to his customers.

Offering reasonable prices will, at the same time, allow the trader to build up a large and steady clientele.

In Khud Pear Kom too most of the womenfolk are involved in silk weaving an important cottage industry. But since many of them lack the necessary capital to set themselves up in business they weave for the village silk agents and are paid minimum wages, because their labor would otherwise go unused; alternative employment opportunities are practically nill. The market for silk is not fully developed and there is room for the expansion of production possibilities. If the women could have access to some form of institutionalized credit they might be able to set themselves up in the silk industry. Since the demand for silk can be readily tapped, a market for it can be developed. Entrepreneurs are very sensitive to such market potentials and they would move into the system very rapidly.

What we are implying then is that in a situation where non agricultural incomes constitute a larger portion of the net farm cash income, concern should be directed to the development of interventions which could provide the small farmer and his family with a credit scheme organized solely for setting up small scale home industries and trade. Thus strategizing for small farmer access to markets should include a policy which stresses the development of a rural financial market with two components: credit for crop production and credit for small-scale, rural, non-farm family enterprises.

Although we call for the creation of an improved rural financial market we will not deny that there are institutionalized credit facilities available at the present time. 46.7% of our respondents

	NE1	NE2	NE3	National Typical
Agricultural households in group as % of all agricultural households	20(c)	12	8	100
Area of holding (rai)	25	25	25	22
Cropping intensity (%) (a)	61	68	69	77
Total net income 1976 (B)	8,530	12,330	9,980	12,180
Farm	7,530	10,830	8,480	10,030
Off-farm	1,000	1,500	1,500	2,150
Change in real income since 1962 (%)				
Total	+ 38	+ 91	+ 44	+ 49
Owing to area change	+ 11	+ 74	+ 18	
Owing to yield change	+ 12	+ 7	+ 11	
Owing to change in relative prices	+ 15	+ 10	+ 15	
Access to services (100 = national average)				
Secondary school	65	75	58	90
Rural health centers	93	73	90	99
Electricity	63	53	32	99

(a) Area planted as % of area of holding.

(c) This figure takes account of agricultural households in other parts of the Northeast which have not diversified into upland crop cultivation.

Table 7 Profiles of Typical Agricultural Households in the Northeast

NE 1 - upper northeast
 NE 2 - mid northeast
 NE 3 - lower northeast

Socioeconomic Class of Household	Northeast	
	Average Household income (B)	% households
Entrepreneurs, nonfarm	42,190	n.a.
Professional, administrative & technical	46,600	n.a.
Clerical, sales & services	27,020	n.a.
Production	24,360	n.a.
General workers	16,240	n.a.
Economically inactive	29,920	n.a.
Farm operators	24,780	n.a.
<u>Total</u>	<u>36,530</u>	<u>100.0</u>

Source: N.S.O. Socio-Economic Survey 1975/76, Preliminary Results..

Table 8 Average Incomes of Urban Households In The Northeast, 1975/76.

Socioeconomic Class of Household	Northeast	
	Average household income --(F)--	% household
Farm operators		
Owning land	14,210	n.a.
Renting land	14,790	n.a.
Farm workers	14,660	n.a.
Subtotal Agricultural		
Own account workers nonfarm	26,030	n.a.
Professional, administrative & technical workers	36,160	n.a.
Clerical, sales & service workers	22,770	n.a.
Production workers	18,420	n.a.
General workers	16,310	n.a.
Economically inactive households	16,770	n.a.
Subtotal Nonagricultural		
<u>Total</u>	<u>16,860</u>	<u>100.0</u>

Source: NSO Socio-Economic Survey 1975/76, Preliminary Results.

Table 9 Average Incomes of Rural Households in the Northeast, 1975/76

Socioeconomic Class Of Household	Average Household Income (B) Northeast
Farm operators	
Owning land	14,210
Renting land	14,790
Farm workers	14,660

Source: N.S.O. Socio-Economic Survey, 1975/76, preliminary results.

Table 10 Average Incomes of Agricultural Households in the Northeast

	1970	1976
Glutinous rice	100	310
Nonglutinous rice	110	270
Cassava	n.a.	80
Rubber	80	150
Cattle	160	330
Buffalo	n.a.	470
Cost of living (High income farmer)		190
(Low income farmer)		250

Source: Ministry of Agriculture, Division of Agricultural Economics and Mission Estimates.

Table 11 Farm-Gate Prices and Cost of Living 1962-76
 (1962 = 100)

Major Crops	Annual Growth Rate/a (%)					
	Production		Area		Yield	
	1959-70	1970-79	1959-70	1970-79	1959-70	1970-79
Paddy	2.9	0.2	2.1	2.3	0.7	-2.1
Maize	12.9	13.4	13.3	13.3	-0.4	0.1
Cassava	6.4	37.9	8.1	38.6	-1.6	-0.5
Kenaf	16.8	-1.4	16.0	0.8	0.6	-2.0
Sugar cane	1.5	34.3	0.1	27.0	0.5	5.7
Rubber	5.0	4.8	4.4	3.7	0.6	1.1

(a) Estimated by log regression with respect to time over the period.

Source: World Bank Report

Table 12 Growth Rates of Major Crops, 1959-1979

	<u>Average yeilds (ton/ha)</u>		
	1969-61	1969-71	1973-75
Rice	1.531	1.802	1.670
(Central Plain)	1.644	1.833	1.910
Maize	1.844	1.862	1.731
Cassave	17.284	15.931	15.328
Kenaf	1.237	1.290	1.157
Sugar	33.431	36.262	46.956
Rubber	0.359	0.358	0.371

Source: Extension Department and DAE of MOAC.

Table 13 Average Yields

	Annual Growth Rate %						
	Yield			Area Planted		Production	
	1959- 1970	1970- 1975	1976- 1990 Proj.	1959- 1975	1976- 1990	1959- 1975	1976- 1990 Proj.
Rice (Central Region)	0.6	0.3	0.9	0.3	1.0	0.9	1.9
Rice (Other regions)	0.8	-3.1	-0.7	2.6	1.0	3.3	0.3
Maize	-0.4	0.1	-1.0	12.2	1.5	11.2	0.5
Cassava	-1.6	-0.5	-0.7	14.1	1.1	13.3	0.4
Kenaf	0.6	-2.0	-0.6	10.7	0.5	10.5	-0.1
Sugar	0.5	5.7	-	6.1	-	8.7	-
Rubber	0.6	1.1	7.2	5.4	3.4(b)	5.6	8.4
Other crops (a)						5.0	3.8
Fishing, forestry and livestock (a)						6.5	4.1
Agriculture (a)						<u>5.0</u>	<u>3.2</u>

(a) Value added 1960-1976 and 1976-1990

(b) Area times yield increases exceed production growth because of 7-10 year lag between planting and first production of rubber.

Source: MOAC, Departments of Agricultural Extension and Agricultural Economics and mission estimates.

Table 14 Projected Agricultural Growth Under Current Trends

	1960-70	1970-76	1976-80	1980-85	1985-90	Share in GDP 1990
	------(%)-----					
GDP	8.1	6.5	7.0	6.2	6.3	100
Agriculture	5.5	4.3	3.0	3.2	3.3	17
Industry	11.3	7.3	10.6	8.3	7.9	39
Manufacturing	11.0	9.6	11.3	8.8	8.2	34
Services	8.8	7.4	6.8	6.1	6.2	44

Source: World Bank Mission Report

Table 15 Projected GDP Growth Rates as Consequence of a Decline in Agriculture Growth.

	Annual growth rate			
	1960-70	1970-76	-----Projected----- 1977-85 1985-90	
	------(%)-----			
Rice	-2.7	9.5	-3.8	-3.2
Rubber	4.7	4.4	6.1	7.0
Maize	13.1	7.3	2.5	-1.3
Cassava	14.3	20.4	1.0	0.8
Sugar	-1.6	50.9	0.0	0.9
Jute	12.5	-10.1	-0.6	-1.4
Clothing & textiles)	5.0	5.0
Other manufacturing) 35.9	23.0	13.0
<u>Total Exports</u>	<u>8.8</u>	<u>7.4</u>	<u>6.9</u>	<u>8.1</u>

Source: Bank of Thailand estimates.

Table 16 Projected Growth of Major Exports Based on Current Trends.

	Annual Growth Rate (%)						
	Yield			Planted Area		Production	
	1959-70	1970-75	1976-90	1959-75	1976-90	1959-75	1978-90
Rice (Central Region)	0.3	0.3	2.8	0.3	0.9	0.9	3.7
Rice (other regions)	0.8	-3.1	1.0	2.6	1.0	3.3	2.0
Maize	-0.4	0.1	1.3	12.2	4.2	11.2	5.6
Cassava	-1.6	-0.5	0.7	14.1	5.4	13.3	6.1
Kenaf	0.6	-2.0	0.6	10.7	2.0	10.5	2.7
Sugar	0.5	5.7	-	6.1	-	8.7	-
Rubber	0.6	1.1	7.3	5.4	3.6	5.6	8.8
Other crops(a)						5.0	5.5
Fishing, forestry & livestock (a)						6.5	4.1
Agriculture(a)						5.0	4.5

Source: World Bank Mission Report

Table 17 Impact of Agricultural Strategy.

belong to the agricultural cooperative and most of them became members so as to be eligible to borrow from the cooperative. The farmers also have access to a credit union which gives them opportunity for loans, irrespective of purpose. Unfortunately, the funds available in the Union are limited. One other credit outlet is the Bank of Agriculture and Agricultural Cooperatives.

We will save further discussion on cooperatives and other credit facilitating institutions till later. It will suffice to inform here that access to these cooperatives is often limited to the larger farmers. These larger farmers then borrow from the cooperatives and extend loans, to the poorer farmers, at exorbitant interest rates. There are also many Indian money lenders who are only too willing to lend money, but at excessive rates.

3-2. The Farmer: Marketing Behavior

Until recently much of the literature on the sociology of the farmer had us believe that the farmers were irrational and any economic decisions they made were not logically constructed. Reality however had shown us, in case after case, that the small farmer, when making a decision, does not only lack capital and land and sometimes labor, but information too. In many cases this creates uncertainty in deciding the future; even an approximate estimation of the risks involved becomes impossible.

In a situation of uncertainties which faces the small farmer, the nature and structure of the marketing system - the way in which it affects the behavior of the small farmer - is a crucial component

of economic change. A farmer's production decisions, for instance, will be a function of existing market conditions. Thus, as a response to price change he will alter production levels or alter the modes of production (including the techniques of production) or even alter the production mix (i.e. the combination of the factors of production).

We have described the farming environment of the project area — this gives an idea of the uncertainties and risks faced by the farmers. Within this context we want to see how the farmers perform and what their attitudes to the existing marketing systems are. Our research findings are no different from what has been stated in previous studies, i.e., the farmer is the price taker and the middleman the price fixer. But we would like to use this observation to project further into its implications and its consequences on questions of market access, i.e. to what extent does the control of a marketing system by middlemen of a different ethnic group from the farming population, affect the structure, conduct and performance of the farmer in the marketing system.

In Thailand, it cannot be disputed that the Chinese middlemen are critical in the post harvest handling of agricultural produce. They have been, in no small way, responsible for a fairly efficient marketing system. Unfortunately one characteristic of many of the Thai government policies has been the tendency to treat all such private Chinese intermediaries as being unscrupulous and motivated only by gain. Diatribes against the exploitative practices of "middlemen" have been a regular part of Thai political statements.

We are not saying that the Chinese traders are without fault. Some of them are definitely exploitative. Nevertheless, indiscriminating efforts to control such exploitative practices lead only to poor policies which impede the working of the system without providing a viable alternative. Most of these market middlemen work on limited profit margins. Yet they are willing to provide their services. Marketing margins incurred by the government and parastatal agencies like the farmers' cooperative, are almost always higher than these incurred by the Chinese trader, mainly due to high overhead costs and poor management rather than due to better direct services. Many cases of high profits by traders, especially the wholesalers, can be justified because of the high risks involved (especially in the case of perishable produce) or special services provided (transportation, processing, credit). The opportunities for excessive profits, however, seem to be provided by the formal marketing system. The controlled channels are far from being assured channels. To take the case of hog marketing in the project area— The livestock cooperative which is the formal channel for marketing the animal is highly dysfunctional. Private traders however do the "illicit" job of meeting market demand at lower cost and, of course, higher margins.

To avoid misinterpretations: the private Chinese traders in our project area are no angels; they have to be controlled in order to protect the interests of the producers and consumers alike. But, as it looks now, the old instrument of "workable competition" is still the most efficient way: control of self control.

As we mentioned a couple of pages ago the farmers are the price takers while the middlemen are the price fixers. At the same time these middlemen perform a range of service roles - merchandizing, money lending, transmitting information regarding price and product - which the formal market channels are unable to perform because of bureaucratic constraints coupled with the lack of capital resources and management skills.

Inasmuch as we counted a large number of middlemen in the marketing system and we are only to aware of the lower than market prices these middlemen offer the farmers, it is very difficult if not inconvincing to argue that the middlemen (both traders and mill owners) monopolize the marketing system. The farmers in all villages have the option to sell their products wherever they think is best and profitable. This has been made possible by the relatively well developed road system and the presence of enterprising villagers who operate the local transportation system. Travelling in these village pick-ups can be uncomfortable because people are often packed into and on top of the vehicle till there is hardly any breathing space left. But such "human loads" cut down operating costs which then result in cheaper fares. What all this amounts to then is that the market for agricultural produce is quite readily accessible to the farmer who has the option of selling his produce either at the farm gate, or at the processing plant located in the district center. He even has the alternative of transporting his commodity to the provincial market. The farmer then has the choice of testing the market for competitive prices before he carries out a transaction.

The problem that we are faced with then is not one solely of market accessibility but the extent to which the small farmer receives equitable returns. Since the farmer is not receiving compensating returns could we assume that it is the middlemen who, while controlling the marketing system to their benefit, hinder price movements?

It has to be remembered that the Chinese middlemen are agents for the marketing process and since there is a good many of them, competition is very steep. At certain times a number of the middlemen operate on levels of very little or no returns. They do this simply to be able to remain in the marketing system. The actual culprits of the system, as we see it then, are the product exporters in Bangkok. Each product has a very small group of exporters who completely monopolize the market for the product. They also control vital information on price and market conditions for the product. What is more, these exporters have a regular foreign clientele and relevant international banking facilities.

We hope that we have shown this far that any marketing decision made by the farmer is rational but since he has practically no control over the conduct of the marketing system the decision that he makes usually does not work to his benefit. Irrespective of the fact that it is he who produces for the market, because of his inaccessibility to relevant market information and his limited management capabilities, his attempts at production are not duly compensated. Thus, when we talk of the market being accessible to the farmer, we refer only to the physical accessibility of the market. Policy prescriptions for market development in the project area should therefore include the means by which the farmer is made accessible to information of the

conduct and performance of the market for his products. Such information should include updated prevailing prices in the international, national and local levels. Comparative and updated price information, coupled with his accessibility to an assembly market (beyond the farm gate) could put the farmer in a better position to be the price giver than to be the price taker. On the other hand, the average units of outputs per individual farm are so small that unless the farmers can be encouraged and cajoled into forming informal groups (since they are suspicious of cooperatives), price manipulation is beyond the realm of the farmers and especially the smaller farmers.

To get back to the particular from the general. For padi rice, the farmers sell their rice at assembly points in the district town. Only farmers in Nong Sang cultivate rice for the market and they take their rice to Nan Phong for sale. Rice in the other two villages is grown for home consumption although small amounts of the grain are bartered, with neighboring villages, for fish, salt, etc. Barter still remains as an important media of exchange for food. In Ban Lan for instance, there was a shadow puppet show in the temple grounds. The four-man show team had come to the village to exchange their "service" for rice. In some instances bartering is more expensive than if a medium of exchange is used and initiated peddlers have tended to benefit from this. A good example is the case of earthenware jars used to store, water, food and for pickling fish or fermenting rice wine. The peddler charges 3 baskets of rice for each of these jars which actually only cost half the amount of rice.

The rice farmers in Nong Sang sell at a district level market (and therefore eliminate the farm gate assemblers) because the central assembly point is only 6 kilometers away. The road is laterite, full of pot holes and extremely muddy during the rains but it provides the farmer with access to a better price than that offered at the farm gate. This has to be seen as an important decision on the part of the small farmer. The villagers sell their farm produce at Nong Sang, a central assembly point but buy their farm inputs in Nong Khai which is only a tambon (sub-district) center. All supplies available in Nong Khai are brought in from Khon Kaen as are supplies available in Nam Phong. However, Nong Khai is closer to Khon Kaen than is Nam Phong. The cost margin (transportation costs, handling costs, commission costs) is, as to be expected, lower in Nong Khai. Therefore, rather than to pay a higher price in Nam Phong, farm inputs are purchased in Nong Khai.

For rice however, the prices in Nam Phong are better than those offered in Nong Khai: the price for agricultural produce increases proportionately with the distance from the farm gate. Therefore, to sell at a larger market and to buy at a smaller market (which understandably so, is closer to a central market) could only reflect a calculated and rational choice on the part of the farmer. By selling the rice in Nam Phong where there are numerous mills and agents for the grain, the farmer expands his range of options in terms of sales outlets and competitive prices.

When the farmer is ready to sell his rice, he surveys the markets for price. There are two categories of outlets for rice,

the mill and the agent. Both groups of rice intermediaries have their own contacts and assemblers in Bangkok. Every week each intermediary is sent a price list "Hang Cheng", from Bangkok, by their respective dealers. Each is also informed of the quota of rice he is expected to fill. Manipulating the Hang Cheng together with his grain quota, the local intermediary sets his own price. Since each of them has a different calculated price, the farmer is provided with a range of prices.*

It would be assumed that the farmer would sell his rice to the outlet which offers the highest price. But other economic as well as sociological considerations affect decisions. The reputation and morality of the rice intermediary often determines the farmer's choice. Most farmers prefer to sell to the mills than to the agents although the prices offered by the former are always almost lower than those offered by the latter. It is generally felt that measurements and weights in a mill are more accurate and just than those used by the agents.

The cassava grown in Ban Lan and Khud Pear Kom is sold to assemblers and processors in Ban Phai. Unlike rice, prices for cassava fluctuate more over time than over space. Furthermore buying prices tend to be fairly uniform. A support price was introduced for cassava. It does not appear to be effective and prices tend to be influenced more so by the international market. With the price movement being free, the buyer for cassava, irrespective of his role and function in the marketing channel, competes for the farmers' produce. *Price differentials, however, are small.

Yet the vicious dilemma still remains. Why does the farmer remain the price taker? The only excuse that immediately comes to mind is the low level of production per farm unit although as we noticed in Ban Lan and Khud Pear Kon, the land is fully utilized.

We have presented what we think is a very interesting case: for rice, there is government interrention by way of a minimum price; for cassava the intervention is not effective. One is a subsistence crop with an inelastic demand, both nationally and internationally; The other is a cash crop with a predominant market in Europe. For both crops however, the farmer bears the price burden. This shows that for the proper understanding of the market for a particular crop, at least three different types of information are required (i) farm-level information (predominantly production and marketing behaviors), (ii) structure and conduct of the marketing system (the elements in a marketing channel, their roles and functions) and, (iii) the performance of the marketing system vis-a-vis macro-economic policies and interventions.

Although we have described the marketing pattern and resultant farmer's behavior for only two of the major crops, the trend is fairly universal, with most of the initial transactions carried out beyond the farm gate.

Given the physical and environmental limitations of the northeast and its agricultural, if not entire economic structure, it is very easy to assume that the major marketing problem faced by the farmer would be one of market access. This assumption coupled with the

over-emphasis of the exploiting market intermediary actually distorts the real issues. It cannot be disputed that the farmer has a serious marketing problem but by focusing on a problem area not even identified by the farmer himself, "oil is added to the burning fire," so to speak.

We have established that production possibilities in the project area have been pushed and utilized to the limit. We have also established that the nationally organized cooperative movement is not being fully accepted. Finally, we will not hesitate to claim that the farmers themselves are more willing to market their produce through the private sector than through formalized, government instituted channels. This takes us squarely back to from where we started: what are the market constraints?

This chapter seems to have rambled on but before we bring it to a close, we want to reiterate the points that have been made this far. One question asked the farmers concerned their decision to sell beyond the farm gate. We had four basic responses:* (i) the prices at the district level are higher (33.4%); (ii) the farmers had regular market intermediary clients, located at the district center, with whom they had established fairly permanent social and economic relationships (2.7%); (iii) the different sales outlets at the district center were conveniently located (12%); (iv) very little assembling was carried out at the village level by local intermediaries (31.3%). 11.3% of them sold at the district center because they were urged to do so by their neighbors, only 9.3% of our respon-

*The numbers in parentheses indicate the percentage of respondents.

dents sold at the farm gate.

It was generally agreed that it was convenient to sell at the district center because the village roads were good, transportation was available and the farmers did not have to wait around for the middlemen/agents to come to the villages at their own convenience and when market prices were lower.

This leads us to our prime concern over price and equitable returns to the farmers. 87.6% of the respondents felt that the market intermediaries at the local level influenced all prices; 11% claimed that they bargain with the traders and 1.3% were definite that they were the price fixers themselves. The later two categories of respondents are farmers with land holdings larger than the average.

In order to determine the process of price setting we asked our respondents to name the different sources from which they obtained market information: 51.3% depend on middlemen; 18.7% relied on their neighbors (who in turn were informed by middlemen); 3.3% kept abreast with information provided by the media. Only 0.7% of the respondents depended on extension workers while 14% relied on a combination of the above mentioned. The remaining 12% were not responsive.

The market problems as identified by the farmers were: (i) generally low market prices, (ii) price depression by middlemen, (iii) lack of standardized grading and (iv) lack of proper and systematic weights and measurements. We would like to end this chapter with the optimistic note that the problems can be rectified with careful policies instituted to regulate market performance while allowing for free enterprise.

CHAPTER IV

MARKET DYNAMICS

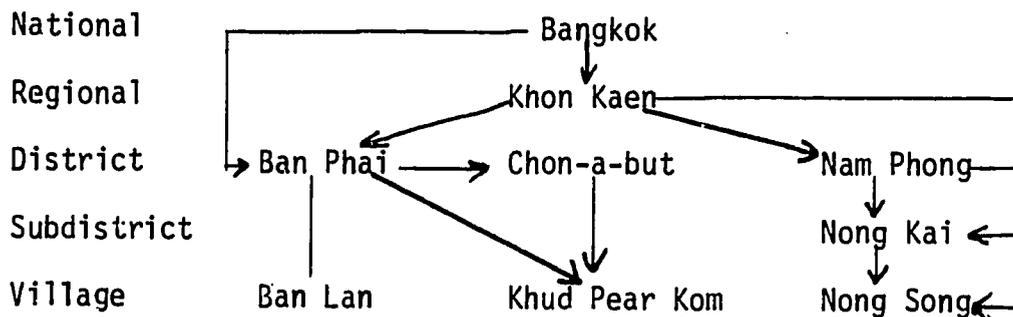
Profiling the general economic system and the farmer's role in this system has set the pace, so to speak, for determining and then isolating the dynamics of the market structure. The process will include identifying the locations of market activities, the way goods flow through the marketing system and the manner in which various actors participate in or respond to market situations. Irrespective of observable differences in levels of market activity, most of the marketplaces function primarily for the movement of foods items, household necessities, farm inputs and primary products. Agricultural crops produced for the market are not conveyed through the marketplaces but are bought and sold outside the arena of marketplaces, i.e. in mills, factories and warehouses.

In our project area there are four marketplaces which meet daily but which indicate marked differences in levels of activity when compared with each other. These four marketplaces include* Ban Phai, Nam Phong, Chon-a-but and Nong Kai. The former three are located in district (ampur) centers while the latter serves the villages in a subdistrict (tambon). Whenever relevant we shall mention observations from the other three markets but for purposes of this report we shall

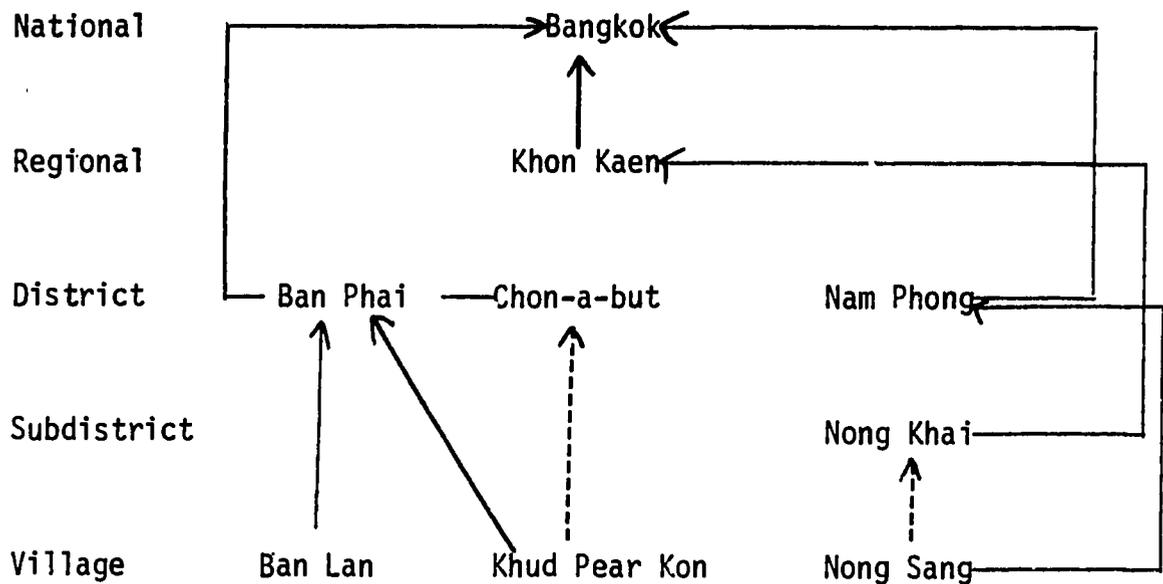
*In order of intensity of market activity and scale of trade.

focus only on the marketplace and marketing arena of Ban Phai which is second only to the central market in Khon Kaen city.

The locational arrangement of the marketplaces and the general dependence of a smaller market on a larger market tempts us to view the marketing system as resulting from a hierarchical arrangement of vertical flows. This is true not only of food, household necessities and farm inputs but of the farm outputs too. A point to note however is that the hierarchical arrangement does not constitute a step-like progression of flows. The flow of a commodity is not from one point to another point which is either immediately above or lower (i.e. it does not follow that commodities move from the nation's capital to the market center in a provincial capital and then to a district market, a subdistrict market and finally, to the village) but between different points all of which, on the other hand, can be located on a vertical scale measuring the level of market activity (i.e. a commodity can move from the nation's capital directly to a district market and from there taken to the village). The vertical arrangement that we talk of is affected by location and price.



Diction --- General Flow Chart for Food and Farm Inputs in Project Area



-----> Represents an occasional flow

Diagram - General Flow Chart for Agricultural Produce of Project Area.

In the case of location, as has been graphically presented above, food items flow directly from Khon Kaen to Nong Khai and from Ban Phai to Khud Pear Kon. Nong Khai is located to the South of Nam Phong and it is closer to Khon Kaen than it is to Nam Phong. Khud Pear Kom is located closer to Chon-a-but than it is to Ban Phai but since the latter can be easily reached and transportation costs are relatively cheap, the villagers prefer to sell in Ban Phai where there is a much larger and varied selection than in Chon-a-but.

The price variable is more profound in the flows for farm outputs. Cassava, for instance, is brought from the farm in Khud Pear Kan to Ban Phai because the prices offered in Ban Phai are higher than those offered at the farm gate or even in Chon-a-but. And since

Ban Phai is located between Bangkok and Khon Kaen, produce from Ban Phai is sent directly to Bangkok without first being channeled to Khan Kaen. The farmer's decision to sell at a market center with a high level of activity is not only motivated by the price but since he handles part of the marketing himself he eliminates the extra transportation and handling costs.

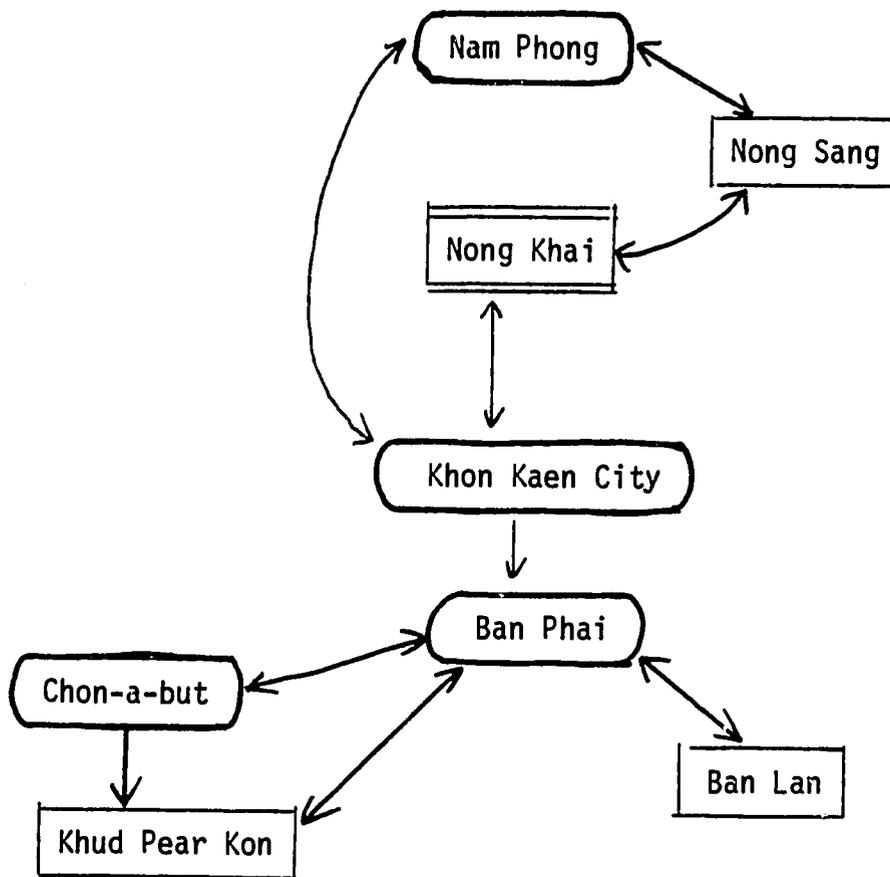
The general pattern and market geography that emerges for the project area then is as follows. Market activity is intense in Ban Phai. Next in importance is the market in Nam Phang followed by the market in Nong Khai. Chon-a-but is of least importance since it tends to be shadowed by the entire marketing area of Ban Phai. Of interest here is that although Nong Kai is a tambon (subdistrict) market and Chon-a-but an ampur (district) market, the level of activity in the former is more than in the latter. This reflects the significance of the spatial location of a market vis-a-vis the larger marketing area of which it is part. Our particular study also shows the consequence of an adequate transportation infrastructure. The Friendship Highway which has greatly increased the marketing potential of the northeast runs through Ban Phai before it reaches Khon Kaen. Although Ban Phai is administratively much smaller than Khan Kaen it is beginning to form an important mode in the trade between Bangkok and the northeast region.

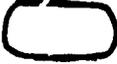
4-1. The Market Area of Ban Phai

Ban Phai has been a market focus for at least three decades. Previously it was a junction where connections could be made to a

number of provinces in the northeast including Buriram, Maha Sarakan and Rai ET. At that time, these provinces could not be reached by rail; road transportation too was poor. As such Ban Phai was a transit point where goods were stored before being

Diagram ----- Graphical Representation of Project Market Area



-  District level
-  Subdistrict
-  Village
-  Direction of flow

If the arrow is unidirectional then it implies only movement of family needs and farm inputs; otherwise it includes flow of farm output to market location.

distributed to other market centers in the region or before being transported to Bangkok. And, it was identified as the place to set up business and to make money. Many of the present traders in Ban Phai are in fact immigrants or children of immigrants who migrated into the area some twenty-five years ago in search of the opportunity to make a quick dollar.

Today with the government having constructed roads, and to some extent railway lines, which penetrates a wider area of the Northeast region, the role and importance of Ban Phai as a market center has been reduced. It is now confined to serving only the smaller neighboring districts. Be that as it may, Ban Phai has been able to develop a number of marketing facilities which some of the other centers have not yet achieved. It has five commercial banks and a similar number of hotels, not to mention the numerous restaurants and eating places. And, for a town the size of Ban Phai there is a remarkable number of commercial and service enterprises. Within an area of one and a half square miles, in the commercial zone, we were able to count 327 such enterprises. On the outskirts there are some twenty rice and cassava mills which should not only be seen as processing agricultural produce of the hinterland but, also as providing seasonal off-farm employment for villages from near-by areas. There is also a newly established tobacco processing plant barn which employs at least eight hundred of the local women*. Finally, located in Ban Phai is a very large wat (temple and monastery) which accommodates as many as 200 novices.

*The wages paid these workers is not compensating, indeed they do not even receive the minimum wage rate set by the government for the locale. Neither do they work under safe nor proper conditions.

For analytical purposes and for best describing the vibrancy, if not the vivid color of the market area of Ban Phai, we have constructed four conceptual categories: (i) the marketplace; (ii) the market shops, (iii) the service market and, (iv) the market for agricultural farm outputs. This categorization becomes relevant in the light of trying to understand the role of ethnicity in a local economy, an economy which at first glance leaves one with the impression of constituting two sectors - one of primary production and related small scale marketing activities and the other of a much more capital intensive entrepreneurial sector. Agricultural production is managed by the Thais while the Chinese control the distribution of such production. All are Thai nationals and while there is the inevitable tension and conflict that is rife in any multi-ethnic society, the relationship between the Thais and the Chinese is very much a symbiotic, if not reciprocal one. It is this very relationship which tends to constrict any attempt by the government to set up marketing boards and cooperatives aimed at providing the farmer with compensating prices for his produce. This Thai - Chinese dichotomy of the economic structure is very important and especially so for our analysis. Any such discussion is, however, best left to be included in the conclusion.

The marketplace, as implied by the concept itself is the physical locale where fresh and cooked food, small items of household necessities, small farm implements and, clothes are brought and sold. The market shops, specializing in semi-perishable or non perishable commodities, are located around the marketplace. In some instances,

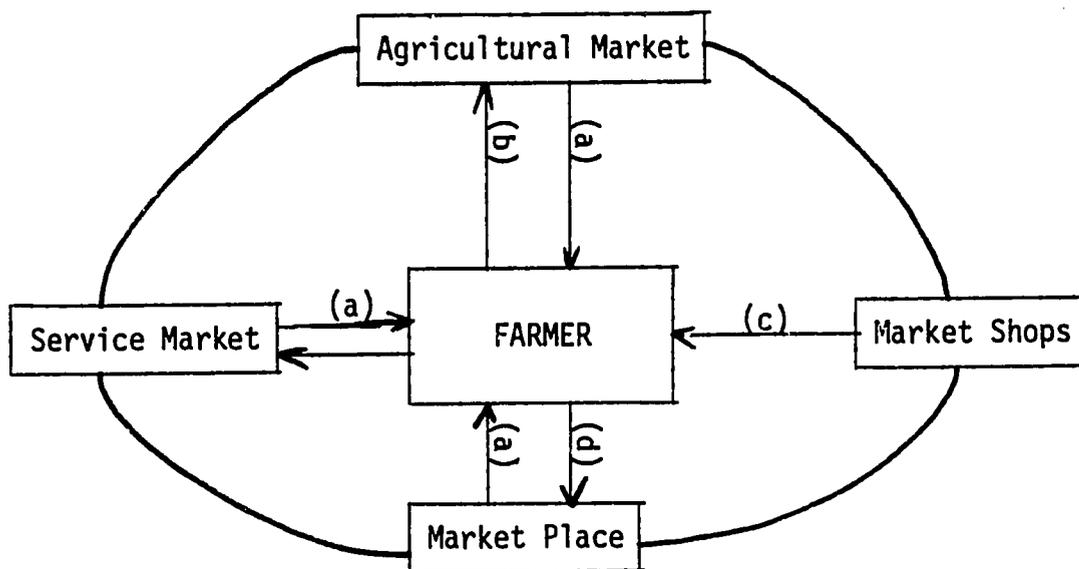


Diagram 1 — Graphical Representation of a Market System.

- (a) employment and therefore off-farm income
- (b) cash crops
- (c) farm inputs, household necessities, consumption items
- (d) food produce for the market
- (e) skilled and specialized services beyond the capacity of the farmer

the kinds of commodities offered and services rendered are duplicated in both the marketplace and the marketshops. When this occurs an observable difference between both categories is the level of capital involved and business acumen. The service market constitutes all those firms which provide services of the kinds distinguishable from the commercial firms. Our final category, the market for agricultural farm outputs, is made up of the mills and agents responsible for the processing and distribution of rice, cassava, silk and vegetables. This agricultural market handles the distribution of very many more farm and small-scale village enterprise products; we have unfortunately had to limit our study to only five of the most common items in the project area.

The four categories are conceptually different. Yet when studied within the context of the behavioral characteristics of the participants within the economic system, the categories actually appear to be complementary. The differences between these categories are in terms of commodities handled, scale of trade, ethnic composition, and capital investment, to mention a few. But to the participants of each of our categories there is no differentiation. All of them function in the same locale and live in the same community. Social exchange is common, everyone prays at the same was and, send their children to the same schools.

We are aware that by conceptualizing the market area of Ban Phai into a separate categories, we might give the impression of a discontinuous economic system. If we do so, we want to point out quickly that it is not our intention. We are concerned with identi-

ifying marketing problems. We want to show, through this study, that different people occupying different roles in the system are faced with different sets of constraints which, when added together and put into the context of understanding the small farmer's problems in marketing his produce, call for policy prescriptions of the kind that will not only affect the small farmer but the structure and content of the entire marketing system itself.

4-1.a The Marketplace

The marketplace in Ban Phai is a daily affair in a strategic position in the transportation and communication network. It is easily accessible to villagers who come from as far as twenty kilometers away and part of the daily morning market scene is the cluster of people waiting for their village buses to pick them up. The market is a source of supply for the smaller markets in the district as well as in neighboring districts. The majority of the vendors in the marketplace are dependent on the market for their main source of income: the small scale of marketing operation and the low capital investment make marketing practical as a supplemental, if not major, source of income to many farming families.

By local standards, the marketplace in Ban Phai is large. Marketing hours are officially set between 6:30 in the morning and 6:30 in the evening but activity begins, as early as 3:00 am when the butchers start cleaning and dressing the carcasses. Each individual vendor spends a different length of time in the market depending on his/her role, the kind/nature of produce sold, season.

During the rains when trade is generally sluggish, many of the sellers close early but for most of the vendors, the market represents a routine of slow, long days and the occasional appearance of a customer to break the tedium.

Market activity fluctuates in its intensity, depending on the hour of the day, the day of the week and time of the year. The busiest daily period is between 7:30 am and 10:00 am. A second minor peak occurs towards the end of the day. Many of the sellers in the open market do not usually stay beyond the morning rush because they bring along small supplies of produce - grown by the family - which is often bought up by the vendors in the main area. Some of them too, when they find that sales are not good, leave their place to hawk their produce from house to house or to peddle inside the marketplace.

The busiest day is Saturday when people from the outlying areas come to town. More dramatic however are the seasonal fluctuations. The peak seasons are during the harvests: rice, cassava, kenaf, fruits and vegetables. At such times there is more money in circulation, as well as an increase in supplies. The worst period is during the rains. Not only does demand fall, but so do supplies.

Physically, the marketplace is made up of two sheds constructed from concrete and timber with zinc roofs. The first shed houses all the food vendors while the second shed is taken up by those selling clothes and by tiny eating stalls. The open market, in contrast to the main marketplace constitutes all those sellers outside the two sheds. Accommodations of such sellers are reduced to the road itself, each seller having a small space which is fixed by mutual arrangements of all other sellers in the area, large enough to

accommodate a few baskets, or a couple of plastic sheets on which to arrange their displays. Some of the enterprising open-market vendors have wooden platforms and large umbrellas. In addition to the open market, there are numerous sellers who weave through the crowd and add to the general confusion.

On any given day there are at least 200 sellers in the main area of the market. The number in the open market, on the other hand, fluctuates from season to season, but there are never less than at least 50 of them. About eighty percent of the sellers in the entire marketplace are women. And, a good fifty percent of them who sell in the open market come from farms in the surrounding villages.

Trade within the marketplace is generally in the hands of the Thai, and that too women, varying in age from ten to fifty years and above. In general, the marketplace vendor has a small inventory and a rather limited range of goods together with the smaller uneconomical packages which comes from the extreme bulk-breaking that occurs in the marketplace. There are so many people in the marketplace involved in one form or other of minute scale trading that at first glance the tendency will be to assume a similarity in the business practices of all the vendors. They can however be differentiated by the commodities they sell. By their very nature - perishable versus non perishable, seasonal versus continuously available, locally grown versus manufactured - the sales of these commodities place of a variety of constraints and conditions on their businesses. And even among the vendors of the same commodity,

there are often major differences in their sources of supply and modes of dealing with customers.

Role specialization in this market may be classified on the basis of the position or point in the distributional process at which the roles intervene. It is possible to distinguish classes of roles in terms of one of the two stages of the circulation of goods: (i) collection and transport of goods to the marketplace and; (ii) storage accumulation and bulk breaking for the buyers in the marketplace.

A frequency count of the market vendors confirms a correlation between sex and scale of operation. Men gravitate towards the larger businesses which require a bigger capital outlay. Women seek employment in the market to supplement family incomes. Many of them come to the market in search of immediate cash which can be easily obtained when selling small amounts of those commodities which have regular, inelastic demands. These women either bring, to the marketplace, vegetables which they have grown themselves or picked in the padi fields. Some of them might bring a few baht to make purchases either in the marketplace itself or to sell in their homes or even to peddle along the way home. One reason for women tending towards the trade of small quantities of perishable food items could be their lack of know-how in seeking financial aid from learning agencies - most of their socializing is within the community. Women traders too are generally unwilling to take risks. There are definitely constraints to women traders in the marketplace, or for that matter, in the entire market situation. But to us the market woman is of special

concern. She is often from a small farm, sells what the family cultivates, or picks in the fields and since she does not have much of an idea as how to price her family labor, the prices she is willing to accept are, more often than not, way lower than prevailing market prices. Unfortunately in our project area the income earned from market vending is of consequence to net farm incomes. Every effort has to be made to improve the working conditions of these women. There are market agents, some of whom are women too, who tend to flood the local marketplace with, (unfortunately), better quality produce from the rest of the country. The very small producer-retailer stands no chance against these bigger agents. And, with the most inadequate market facilities available them, they are left out of the race, so to speak.

Inasmuch as the marketplace reflects trade of a minute scale it is an important mechanism for providing employment. Anyone can sell at the marketplace and only a small initial capital is needed. A housewife, for instance, could buy a watermelon for a few bahts, slice the fruit and peddle it around the marketplace. If she is shrewd enough she might be able to earn double her investment; what is not sold can always be consumed by the family.

There is also such a heterogeneity of market roles available that the individual has the alternative of choosing that role which is best suited to his skills and resources. The result is a highly patterned set of roles which emphasize stability and security for the great majority of the participants in the marketing system. It

could be thought that the duplicity of market roles could only be injurious to the marketing system since the type of "fragmentation" that results is not operationally efficient. Fortunately, it is these multitudinal and duplicating market roles that enable the maintenance and exchange of commodity flows in an environment of limited capital.

Much of the produce available in the marketplace is brought in from outside the district. There are a few market gardening villages around Ban Phai, but production levels are low because of the lack of a water supply. The village women bring their produce to the marketplace as early as four in the morning and rather than to sit around waiting for the market to come alive, they wholesale their produce. If they can complete all transactions before the arrival of similar kinds of produce from outside the district, then there are slight chances that they may be able to ask for more reasonable prices.

Most of the vegetables and fruits in Ban Phai come from all over the country. Although agents plying between Ban Phai and Khon Kaen city appear to monopolize the trade. These agents sell the produce to the market vendors on credit, to be repaid before the end of the market day. Fish is brought in from Nam Phong via the Khon Kaen central market. Fish is also supplied by the villagers but in small and unreliable amounts. All meat is locally slaughtered; chicken is provided by the company which has national franchise. All dry sundries are supplied by five middlemen who visit Bangkok at least once a week.

Prices are not fixed, haggling is the norm. There is little price differentiation between vendors; competition is fierce. Most vendors aim for a quick return so that the limited capital invested in the business is kept rolling; they can therefore aim for only a small profit margin. A strategy used by most of the vendors then is to lower the price of an item which has a fairly elastic demand and add on that price differential to an item with an inelastic and assured demand. There is also a conscious attempt to maintain the quality. If the consumer cannot be lured by price - because competition among vendors for consumers is steep - then at least the consumer can be motivated by quality control.

Examining the fine grain detail of the structure and functioning of the marketplace in Ban Phai, one is struck by the variation and heterogeneity permitting the operation of very many roles which accept the resources allocated to them such that the resultant combination of labor and limited capital helps maintain a certain balance in the economy. These patterns provide the basis for description of a marketplace that is at once circumstantial but still general enough so that its major contours can be readily grasped and compared with those of the other markets in Thailand or elsewhere in developing countries. In general, the physical facilities and upkeep in the markets are inadequate to meet the basic needs and aspirations of market users. Insufficient display space, insufficient water supplies, lack of lock-up storage space and poor sanitation are just a few of the more common problems.

4-1.b Market Shops

Around the marketplace are market shops selling a variety of products ranging from manufactured items, farm inputs and implements to heavy machinery, construction material and motorcycles. Such trade is controlled by relatively wealthy Chinese who also tend to occupy key positions in local business associations and district committees. The inventories stocked in these shops are larger and much more capital intensive than the kinds of goods (of dry sundries) sold inside the marketplace. In cases where there is a duplication of inventories inside the marketplace and in the surrounding shops, prices are slightly higher in the latter since operating costs of these larger establishments (as compared to the smaller market stalls) are proportionately higher.

One of the startling differences between the marketplace and market shops is not only the ethnic composition but also the nature of price setting. Prices in the shops are fixed. Price negotiations take place but serve a function different from that in the marketplace. In the marketplace, prices are not posted, the use of standard weights and measures is minimal and bargaining is a way of establishing a price for the commodity. In the shops, however, bargaining establishes the competition between the seller and the buyer with each trying to maximize his/her gain in the transaction.

Many of these shops are both retail and wholesale houses. Some of them provide goods to marketplaces and shops in other smaller neighboring districts. But the most interesting observation of

these shops is that they all tend to carry a mixed inventory. We were always fascinated by those establishments which carry, for instance, a mixed inventory of gold jewellery, electrical appliances and a few items of heavy farm equipment. Such a varied range of classes of commodities is not uncommon in the stock register of marketplace vendors. They face competition from fellow vendors who carry identical stocks, risks one high and need to be spread over a range of commodities, each of a different quality, price and demand elasticity. To find a similar phenomenon in the market shops is however quite surprising. It appears that in situations where the amount of capital in circulation is limited, traders (big and small alike) achieve stability by spreading their overheads and profits over a wider variety of merchandise.

Most of the shops rely on wholesale houses in Bangkok, only rarely are items brought in from Khon Kaen. These Bangkok wholesale houses have travelling agents and representatives who regularly visit the shops in Ban Phai to collect orders which are picked up by lorries sent into Ban Phai from Bangkok. Transportation costs between Bangkok and Ban Phai are reasonable. There are a number of Chinese owned transport companies, each of which own a fleet of lorries plying between Bangkok and Ban Phai. These companies charge a flat fee of only 5 baht per unit-of reasonable weight.

Bangkok is the major supplier but commodities are brought in from elsewhere too. Simple farm implements, for example, are brought in from Chiangmai, a northern province.

Nearly all the shops are family enterprises with children learning the trade by assisting their parents. And, many of them in the family market shop enterprise have business interests outside Ban Phai too especially in those areas which depend on Ban Phai for their supplies.

The wealthier and more educated shop owners occupy prominent positions in the trading community which, to repeat, is predominantly Chinese. A number of them are also elected members of the Sanitary Committee which is responsible for revenue collection within the district*. For those who are members, the Ban Phai chapter of the Junior Chamber of Commerce provides the opportunity to establish contacts with the high ranking local government officials. This network of official and commercial friends is of course to the advantage of the entrepreneur. Be that as it may, the business community lacks any real cooperation. Each business family tends to be very independent and responsible only for itself. The one unifying institution is a Chinese benevolent association and shrine to which each family makes a small monthly contribution.

Before we begin to describe our third conceptual category we want to summarize the differences and similarities between the marketplace and the market shops. The shops carry a whole array of things

*The Sanitary committee is made up of government officials, village and commune leaders and four elected members from the trading community. One of the responsibilities of this committee is the maintenance of the marketplace and revenue collection.

ranging from processed food, textiles and paste jewellery to electrical appliances, hardware and motorcycles. The shops are large, usually have glass display windows and the stock is more expensive. One goes to the shops to purchase any kind of hardware, good quality kitchenware, electrical appliances, phonographs, books, canned and imported foods and, finally, for a good quality meal. In contrast, the market place specializes in agricultural produce, staples and cheap manufactures. A visit to the marketplace is due when needing fresh meat, dressed fowl, rice, vegetables, fruit, cheap patent medicine, native foods, local handicrafts and scrapped coconut. The two sectors, however are not absolutely discrete in the goods they distribute. Duplication occurs in most categories of commodities; the quality and prices vary and there are differences in the quantities offered.

The shops appeal to wage earners and professionals, while the market is frequented by people from the lower income groups. This distinction should not however be taken as absolute: some foods are only obtained in the marketplace while to the extent the poorer villager might wish to purchase more expensive items, he might have to return to the shops. Most of the marketplace vendors come from farming families with low incomes and usually very little education. The merchants who operate the shops are wealthy and the more influential members of the community. As with differences in sellers in the two categories, there are also differences in business techniques, or strategies, if you will. In shops, items are tagged and priced, haggling is not a feature in transactions, although the seller might

give a discount to a familiar customer. In the marketplace, only the reverse is true. Prices are ascertained only by inquiring and bargaining is the usual mode of conducting transactions. But although there are differences in the organization of enterprises in the marketplace and in the marketshops, there are certain similarities. Both sectors are not owned by stock cooperations, they are family enterprises, managed in accord with commercial accounting techniques similar to the 'firm' - there exists notions of capital and a deep concern for gains, losses and rates of turnover.

4 2.c Service Market

Though this market sector is not directly relevant to our present study, a brief description of it is needed in order to present the entire perspective.

As the term implies the service market includes all such non commercial enterprises in which the item of sale is labor. In our roster, constructed after the street enumeration of the commercial zone of Ban Phai, we have such enterprises as tailoring, beauty salons, barbers, restaurants, hotels, coblering, motor and electrical appliance repair shops and so on. What was astonishing was the frequency of such enterprises. There are, for instance 33 restaurants (excluding the numerous other eating stalls and food hawkers), 14 beauty salons, 10 tailors and 12 seamstresses. Ban Phai is a typical Thai rural town, not very large in its layout and very traditional in its social and cultural content. But in every block of buildings in the commercial zone, there are apt to be more than a handful of these service enterprises.

Most of the larger enterprises are owned and run by Chinese. The smaller concerns - tailoring, beauty salons, and such of the like - are operated by Thai. All tailors, irrespective of the size of the enterprise, are Chinese. On the other hand, Chinese specialization in tailoring is of very common occurrence throughout Southeast Asia, even in the rural areas.

Of consequence to us is that the service market provides off-farm employment. Restaurants for instance, hire a number of the village girls as waitresses. In other situations, young villagers are apprenticed to, say, seamstresses or motor mechanics. After their apprenticeship these young people return to their villages to set up their own enterprises.

The service market does not only cater to the population within Ban Phai town. Villagers from the surrounding area and hinterland too benefit from such services too. There are at least four medical clinics, with qualified doctors, in the vicinity and hardly a day goes by when there isn't a crowd of people, spilling onto the roadside, waiting to see the doctor.

Our discussion here will not be complete if we do not mention that service enterprise, which, for lack of a better term, we call audio-visual enterprise. These are very small business operations specializing in mobile movie theatres. There were at least four of these that we counted.* These mobile theatres are very popular

*Many of the service enterprises are small and are conducted in the family home itself. We are sure that while we were taking a frequency count of the various enterprises, we had overlooked a good many of them tucked away in the sois (back lanes and villages).

with the villagers. Indeed it has become fashionable to hire a mobile movie unit for village festivities. Some of us in the research team had opportunity to see such movies. They were only mediocre. On the otherhand these movies constitute important entertainment in a social environment where entertainment is limited and usually of a religious flavor.

The large size of the service market is quite astonishing since average income levels of the surrounding farms is certainly not high enough to warrant many of these services. And, the wealthier people in Ban Phai prefer to resort to what is available in Khon Kaen city - only forty kilometers away - or even in Bangkok which can be reached within seven hours by road. How then is the service market maintained? Like the marketplace, and for that matter, the market shops too, the entire service market is fragmented into multiple and duplicating enterprises. It is inevitable that returns are small: what these people lack is not a lack of drive; they display the virtues of industry, frugality, independence and determination in almost excessive abundance.

402.d Market For Agricultural/Farm Outputs

For purposes of this report, the agricultural market is crucial. We have already made references to and in a number of situations described, in some detail, the structure of the marketing system for farm produce. The discussion will be taken up again in the following chapter. The agricultural market is made up of the mills, factories and processing plants located around Ban Phai. Included too are the

intermediaries who buy farm produce for the mills and factories or for larger wholesale houses in Bangkok.

There are basically 3 market levels through which farm produce is channeled.

(i) The local market is at the village level and is the focus of transactions between farmers and assemblers, either from the village itself or from neighboring villages.

(ii) The central market constitutes an assembling point, either at the district level or the provincial level. The middlemen operating in this level of market activity function predominantly as shippers responsible for bulking the produce supplied them by village assemblers or the farmers themselves.

(iii) The terminal market located in Bangkok is of course the largest market in the system and supplies Thai farm produce to the international market. At the same time this market is charged with the responsibility of distributing farm produce to consumption markets throughout the nation. The terminal market also refers to the mills and factories which absorb large daily supplies of farm products for processing. Such mills and factories are located at different administrative levels from the nation's capital, right down to the district. In the case of food items, the terminal market refers to any level of consumer market, be it at the village, subdistrict, district or province, where food items are sold directly to the final consumer.

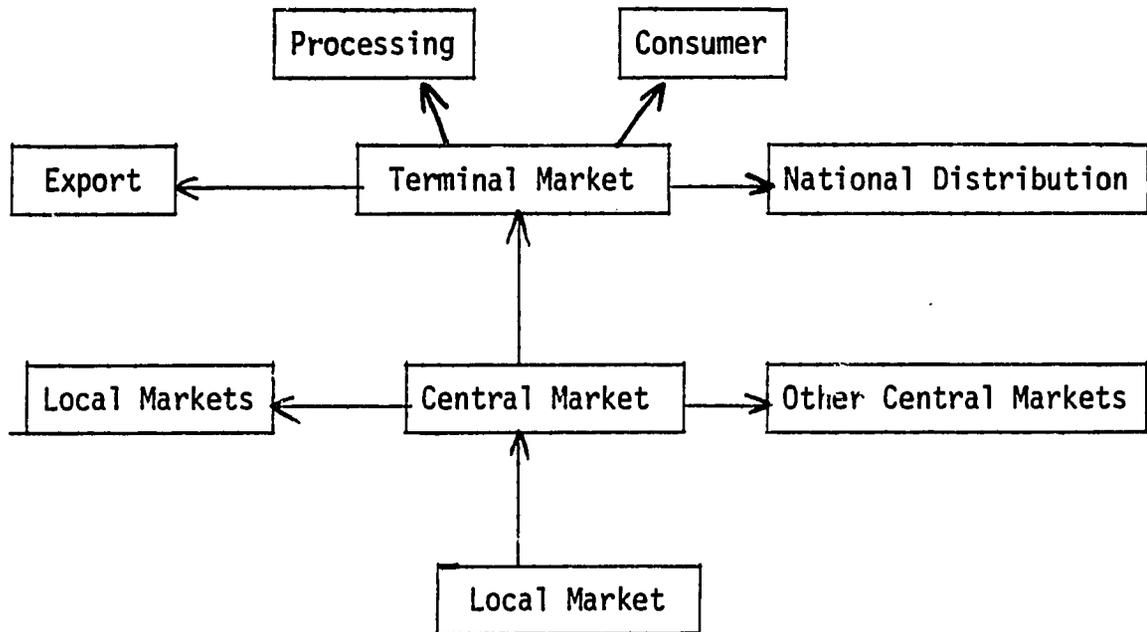


Diagram - Market Levles in Distribution of Farm Produce

Although the markets appear to be hierachical in terms of volume and level of activity and farm produce tend to move from one assembly point to the next larger one, it is common for produce to move between assembly points of the same level.

Operating within the different market levels are the following participants: (a) producers in the northeast are actively involved in the marketing of their products. It is indeed difficult to draw the line between production and marketing because the farmer is responsible for transferring his produce from the farm gate directly to the central market. In all our three villages there were hardly

any local assemblers at the village level. Not only do the villagers by-pass the local market, in the case of Khud Pear-Kom they by-pass the central market in Chon-a-but and transport their produce to a larger central market in Ban Phai. It has however to be pointed out that active producer participation in the marketing system is made possible by the availability of proper transport facilities and cheap transportation costs. Although the producer is involved in marketing, the volume marketed is small. The producer has, therefore, a limited bargaining position. Also, the producer is not responsible for the marketing of all farm outputs. In the case of livestock, all initial transactions are carried out at the farm gate - there are no fixed assembly points for livestock in the northeast as there are in the northern provinces of Thailand. One reason why the livestock trade is in the hands of itinerant traders is that the transportation of live and bulky animals can be costly for the farmer; neither does he have the facilities.

In summary the producer initiates the beginning of a marketing channel only if the produce is not too bulky, transportation facilities are available and costs are small. Otherwise, the entire marketing is handled by intermediaries.

(b) After the producers, the traders are the most important functionaries in the distribution system. Based on product and type of marketing - channel, there are at least four different groups of traders or intermediaries responsible for the movement of agricultural farm produce from the farmer to the consumer: (i) the local assemblers are the first intermediaries - other than the

farmers - who collect agricultural produce at the farm gate for delivery to other larger intermediaries or markets. These local assemblers are either intermediaries from the village or within the nearby vicinity or are commission agents. The commission agent assembles produce on behalf of traders in the central or terminal markets. He is paid a nominal fee in proportion to the amount of farm produce he delivers to his buyer; (ii) the shippers are traders located in the central markets. They make their purchases from local assemblers or through their own commission agents; they also buy directly from the farmers but only from those farmers who deliver produce directly to the Central markets. In Ban Phai and Chon-a-but, for instance, it is more frequent than not for farmers to deliver directly to the shippers. By eliminating the local assembler or commission agent, the farmer's returns to his produce are higher than if he had completed transactions at the farm gate. The shippers can be stratified into different levels of operation based on volume of business and capital invested; (iii) the terminal market traders tend usually to be concentrated in Bangkok, operating large wholesale and export houses for Thai agricultural produce. But not all the traders in this category are exporters. Some of them are wholesalers for the consumption market in Bangkok. With the population of Bangkok approaching 5 million people, the daily demand for food is phenomenal and the volume alone has attracted many intermediaries; (iv) the processors give the farm produce new form utility before it can be distributed and as such have to be included in the roster of market intermediaries. But unlike the rest, all produce that they assemble is first processed

before distribution to the next market level. In fact the availability of processing facilities reduces the burden on the farmer. Take the instance of cassava. The farmer sells the tubor, he is not responsible for shredding or drying his harvest before it can be sold to factories producing cassava pellets for livestock feed in the international market.

The market channels for crops and livestock (in fact for all agricultural produce) tend to be alike, although market charges and market margins will definitely be different. A longer channel which would require several market intermediaries will result in higher costs the burden of which is borne by the people occupying either ends of the market channel, i.e. the farmer's and the consumers. The most direct flow in the market channel is, of course, most desirable because the consequent costs will be lower. This however is not of common occurrence because a direct market calls for capital investment of the kinds which the farmer (or the smaller market intermediary) does not have access to or which the shippers and terminal market traders do not want to risk. Inasmuch as the presence of numerous intermediaries within a single marketing channel can be operationally inefficient because services are duplicated resulting in total revenue generated within the marketing channel being fragmented. Yet, because production of Thai agricultural produce and assembling of such in each market level is of an amount which is uneconomical in terms of costs and returns, a larger number of intermediaries is actually functional and not disruptive to the whole marketing system.

Market Channel for Livestock

There are four basic market channels.

Channel 1: (most common)

producers - local assembler - shippers

Bangkok assemblers - Bangkok carcass wholesalers -

Bangkok meat retailers - Bangkok consumers

Channel 2:

producers - shippers - Bangkok carcass wholesaler -

Bangkok meat retailer - Bangkok consumer

Channel 3:

producers - central market wholesalers (district or

provincial level) - local meat retailers - local consumer

Channel 4:

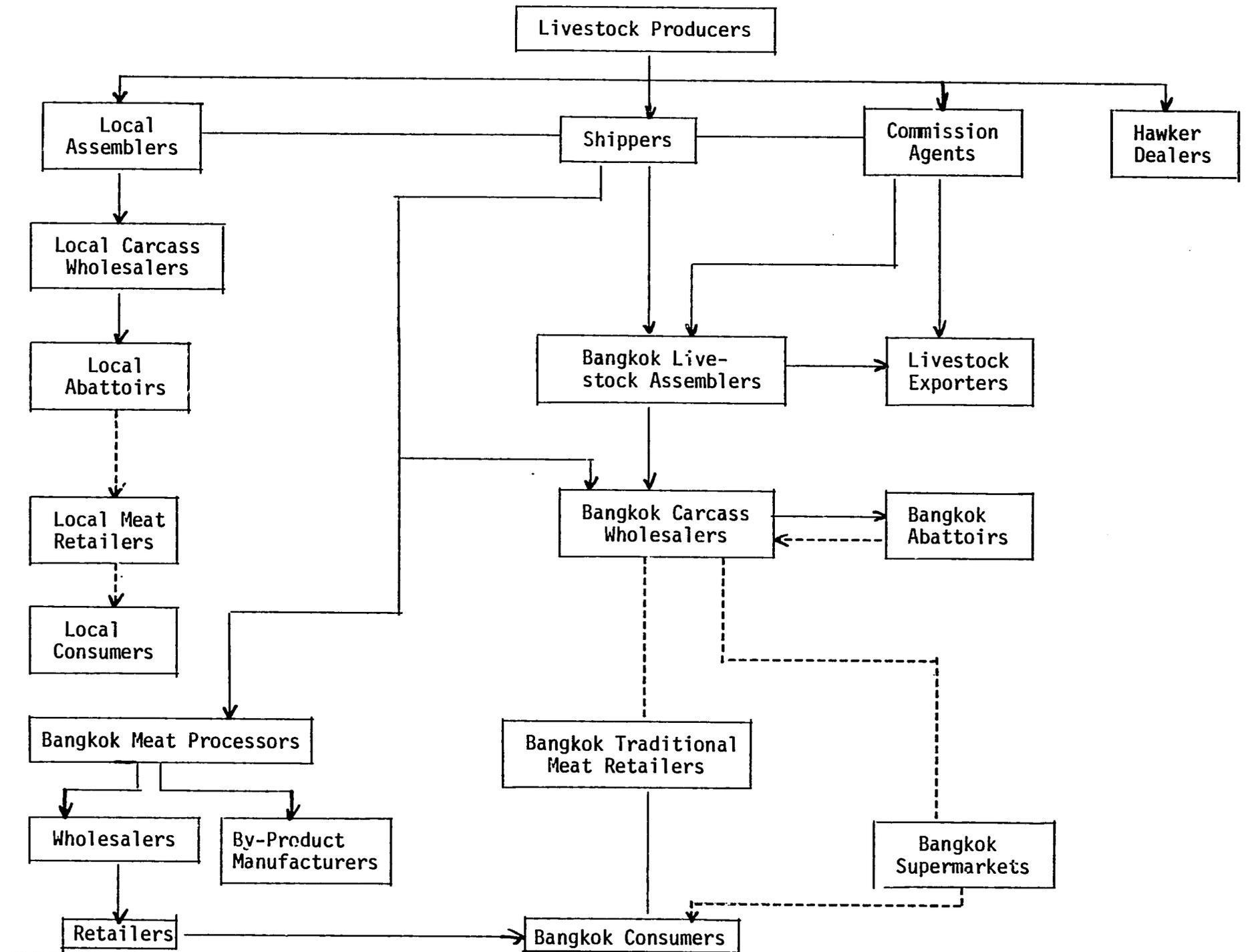
producers - commission agents - shippers - Bangkok

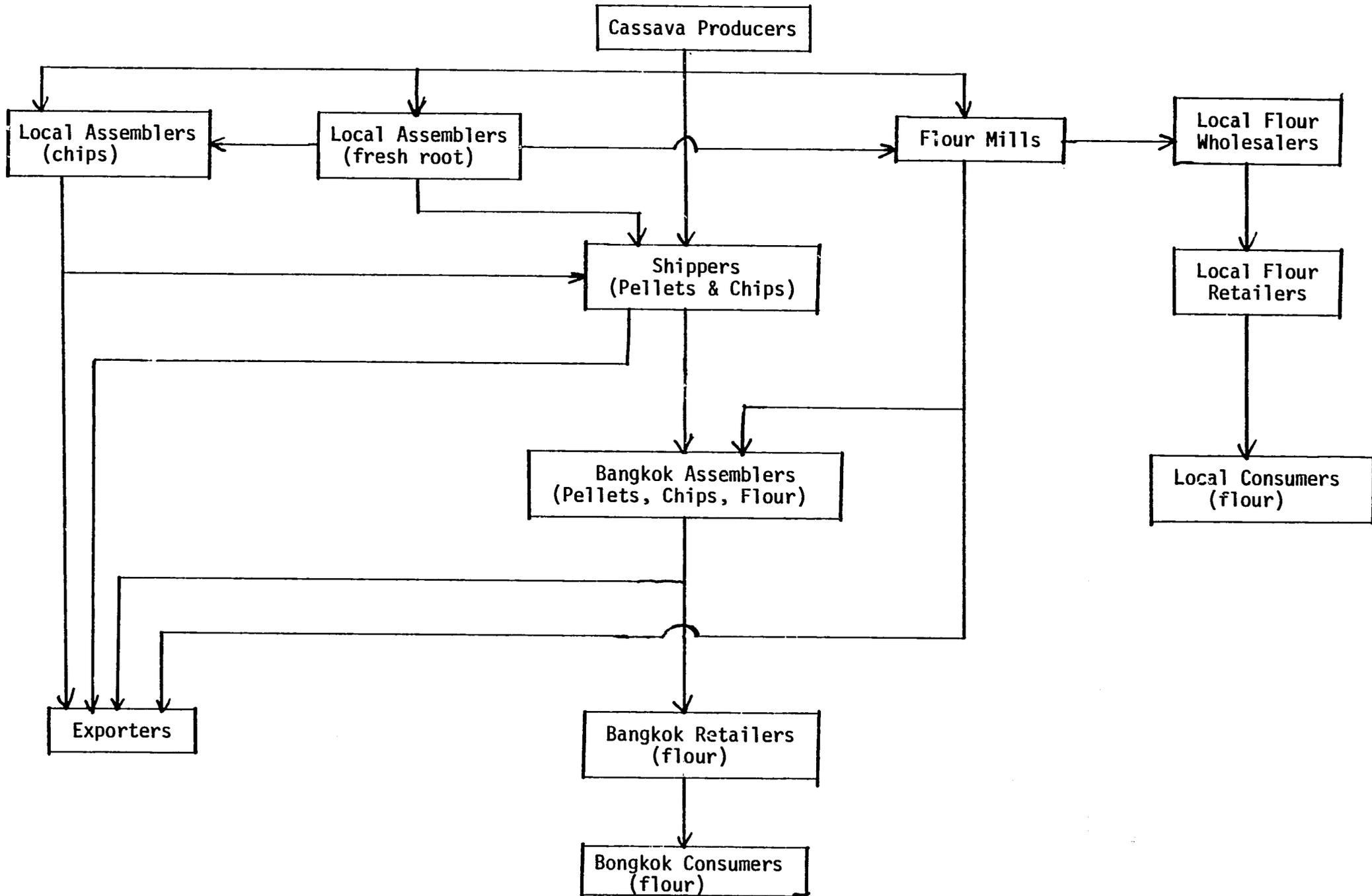
livestock assemblers - exporters - import market

One other marketing agent in the flow for livestock is the cooperative which has, however only been set up for hog production. The farmer sells his pigs to the cooperative which slaughters the animals for distribution to butchers in the local marketplaces.

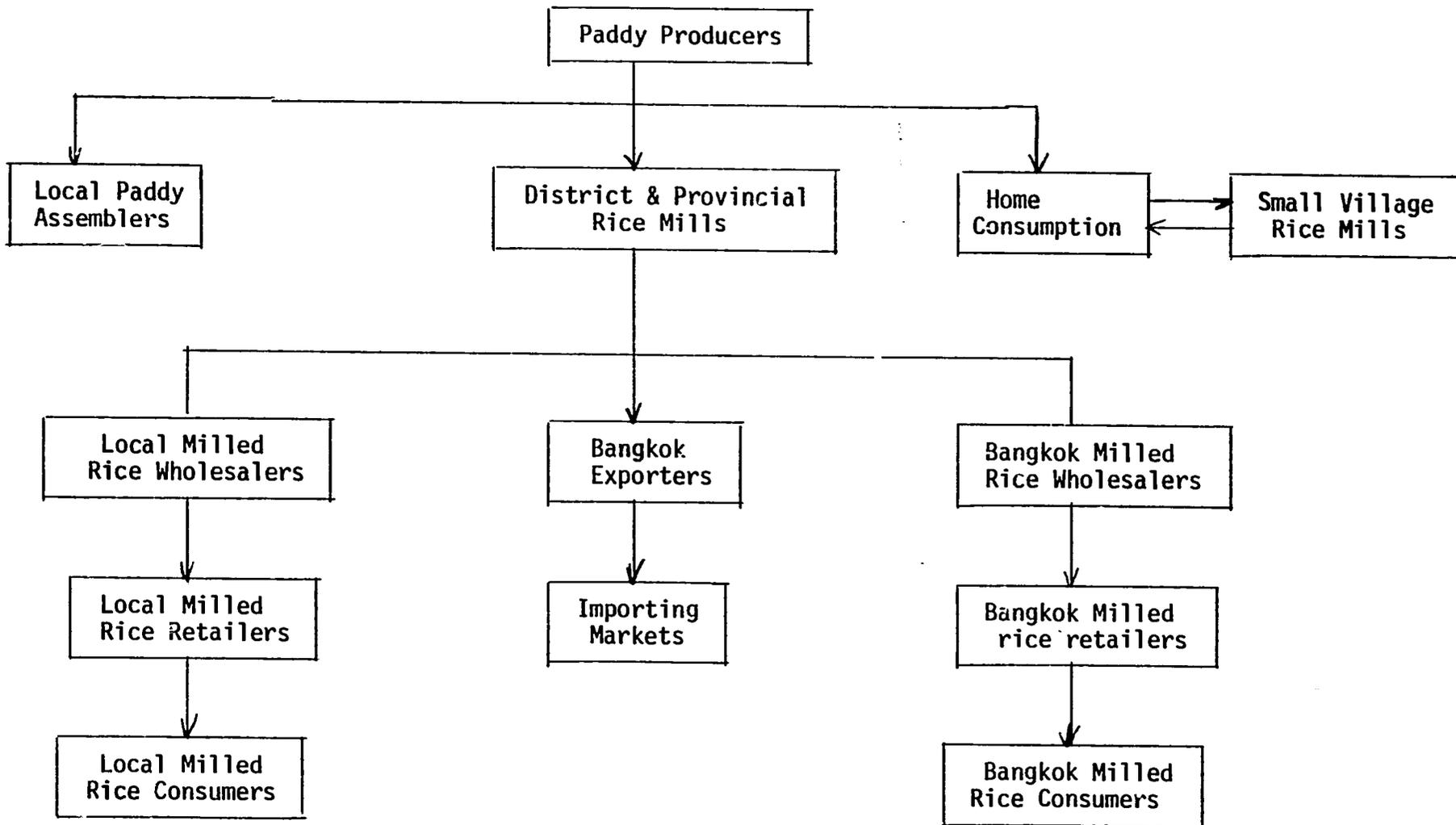
Market Channel for Cassava

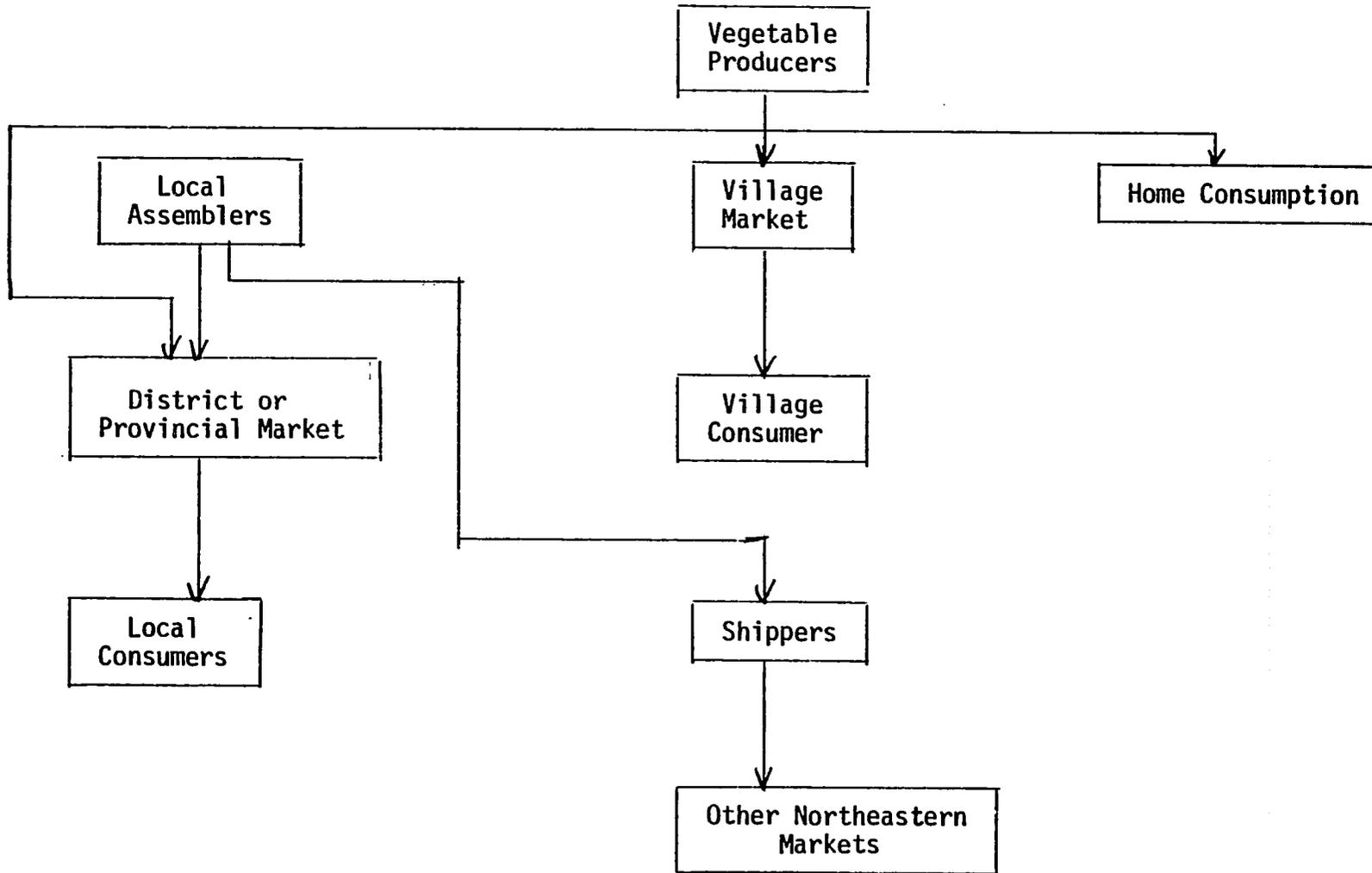
75% of the cassava flows directly from the producer to the processor and then on to Bangkok. The cassava is either shredded, ground into flour or processed into pellets for animal feed. The remaining 25% of the cassava flows through local assemblers of the





FLOW DIAGRAM - MARKETING CHANNELS FOR PADDY RICE





fresh root or assemblers of cassava chips to shippers and/or to Bangkok assemblers. There are seven main markets.

Channel 1:

producers - local assemblers (fresh root) - local assembler (chips) - shippers (pellets and chips) - Bangkok assemblers.

Channel 2:

producers - local assemblers (fresh root) - shippers (pellets and chips) - Bangkok assemblers.

Channel 3:

producers - local assemblers (chips) - shippers (pellets and chips) - Bangkok assemblers.

Channel 4:

Producers - shippers (pellets and chips) - Bangkok assemblers.

Channel 5:

Producers - millers (flour) - Bangkok wholesalers - Bangkok retailers - Bangkok consumers.

Channel 6:

Producers - millers (flour) - local wholesalers - local retailers - local consumers.

Channel 7:

Producers - shippers (pellets and chips) - livestock feed millers - feed wholesalers - feed retailers.

although cassava is part of the Thai diet, much of it is absorbed by assemblers in Bangkok for shipment to foreign markets. Cassava contributes heavily to the foreign exchange of Thailand. In terms of export earnings, it is second only to rice.

Market Channel for Padi and Rice

Most of the rice cultivated in the locale of the project area is of the glutinous variety grown mainly for consumption in the farm itself. Available surpluses are however shipped to Bangkok and other provinces. There are only two main channels for rice.

Channel 1:

producers - local padi assemblers - rice mill - local rice wholesalers - local rice retailers - consumers.

Channel 2:

producer - local padi assembler - rice mill - Bangkok rice wholesaler - Bangkok rice retailer - Bangkok consumer.

Market Channel for Vegetables

Vegetable production is extremely limited because of the lack of irrigation facilities. Each farm markets only small amounts of the produce, usually the surplus. All such vegetables are consumed locally.

Channel 1:

producer - consumer.

Channel 2:

producer - market vendor - consumer

Channel 3:

producer - local assembler - market vendor - consumer.

At present, although the farmers complain of poor prices (as do their buyers too) and there is a definite lack of standardization of weights and measures, if not quality control, there is a market to which the farmer, even the small farmer has access to. There are numerous rice and cassava mills. And although all livestock can only be slaughtered after the approval of the livestock cooperative middlemen who are willing to buy the live animals - granted at a lower price and often for illegal slaughtering - are readily available. In fact contrary to what we had expected, the farmers are very receptive, if not sensitive to the market for their agricultural produce. Talking to many of the farmers we found out that they were willing to try new cash crops, if they have been proved successful under similar environments, but more so, if there was a reliable market for the cash crops. It is not even as much as price determining their decisions as the availability of a market into which the crop can be channeled.

Continuous cassava cultivation is depleting the soil and agricultural extension workers have been trying to promote peanut (a nitrogen fixing legume) cultivation. At present peanut production is limited to very small plots because there are only a couple of processing mills and agents. Most of the peanuts produce are sold in the local marketplace. There is, however, a potential for peanuts since Khon-Kaen is nationally famous for its peanut brittle and cookies. We are confident that as a market channel develops, peanut production will definitely increase.

While we are on the subject of crop technology, the mills, factories and agricultural produce agents, play an important function which extends beyond their role as market intermediaries. Many of the cassava mills, for instance, were responsible for introducing the crop. They provided the farmers with the seeds, on the understanding that they would be sold the crop. At that time, since the farmers were not as yet knowledgeable of the cassava market, high profits must have accrued the mills. But the point is that market intermediaries can be used as agents for introducing crop technology. If they can provide the incentive, i.e. the market the farmer seems to be willing to try out new crops. And, at this point, with cassava causing serious soil fertility depletion in the northeast, there is a definite need for crop diversification. Probably then the agricultural extension workers should seek to help and support of the agricultural marketing intermediaries. Crop diversification should be advanced together with an equitable market for the newly introduced crops.

Many of the farmers are shrewd marketers. Before selling their produce, usually in the district center, they test out the market for price. Such information is sought from neighbors or from the village bus drivers. If the farmer has the time and the money, he will make the trip to the district town to visit the mills and agents himself. When he decides to whom he is going to sell his produce, he hires the village bus to transport the harvest to town. Since each village has at least two or three of these village buses, transportation is hardly a problem.

All crops move directly from the farm gate to the processing plant or intermediary in the market center. In the project area the movement is directly from Ban Kan or Khud-Pear Kon to Ban Phai. In the case of Nong Sang's rice, it is usually sold in Nam Phong although, occasionally, if the farmer has neither the time nor the cost for transportation, he may sell his rice in Nong Khai. Where prices are slightly lower than those offered in Nong Sang.

For agricultural crops, unlike livestock, there are no roving middlemen who bulk at the village level. Farmers sell directly to the mills. In the case of cassava and, in some cases, rice too (although the frequency of occurrence in the northeast is much lower than in the central plains) the crop is sold before it is harvested. This happens when the farmer is in dire need of cash. The kinds of credit facilities available to the farmer are much more constraining than helpful. So, the farmer sells his unharvested crop to a wealthy villager. The informal village credit institution is unserious; the more formalized loaning institutions are bureaucratic. In a transaction of this kind, both parties - but more so the buyer - take a risk. The buyer has no way of knowing whether the price of the crop at the time of harvest would fluctuate to his favor or otherwise. Also, he has the responsibility of harvesting the crop.

Without exception, all the factories and mills are owned by Chinese. Each operation varies in size and scale and employs different sized labor forces. All labor is provided by people from nearby villagers. In Ban Lan, for instance, fifty of the villagers worked in such mills. Such employment is very important to the farming

family. Since the place of work is within easy reach of the farm, it is easier to coordinate the work on the farm with employment outside the farm.

Like every other market sector that we have described this far, the agricultural market is fragmented too: there are many intermediaries and competition is high. Each mill resorts to all kinds of advertisements and incentives to attract the farmers. Some of them pay village bus drivers a commission for transporting the farmer and his produce to the mill.

The mill or any other market intermediary will want a large enough profit margin for himself and will undoubtedly aim at a lower buying price. Unfortunately - in this case for both the farmer and the intermediary - all prices are determined by traders in Bangkok who send weekly price lists to their district level counterparts, who in turn set their own local prices based on the information from Bangkok. But, now fortunately for the farmer, there is so much competition at the local level, that the mill owner, for instance is hardly in a position to affect prices. Many mills have closed down while those which are still in existence aim at obtaining a larger volume of the crop harvests* than their competitors so that the net income will at least be sufficient to pay for operating costs.

*This they have to do by offering slightly higher prices. The hope is that the price differential (i.e. offered price minus prevailing market price) will be off-set by volume (higher price will attract more clients).

A number of the mill owners have organized themselves into an informal organization which has, fortunately, not been able to function as a single unit monopolizing the market for that particular crop. Each mill owner or market intermediary has his own contacts in Bangkok and each has his own price list provided by his own contacts. And, the competitive buying prevents him from doing anything at all. As one cassava mill owner expressed, "...we are in a difficult position. The farmer wants a higher price but the price is determined in Bangkok.... We do our best to please the farmer. Our profits do not exceed ten percent of the market price." The market intermediaries are no angels. They temper with the weights and scales; they try every trick in the book to profit from the farmer. Nevertheless, as our observations show, the farmer does not suffer from market manipulation by the local intermediaries. Who are in the mercy of (so to speak) of the big time, monopolistic exporters in Bangkok.... Attacking these people would be, sad to say, extremely problematic. The exporter is a foreign exchange earner and has significant political influence. The exporter-bureaucracy symbiosis, regrettably, works to the detriment of the farmer.

Given the situation as it is, until such time as the Thai Cooperative movement can gain the full confidence of the farmer, the farmer will depend on the Chinese dominated private sector. Other than nationalizing the entire economic structure the only other alternative that is available to the government of Thailand is to stimulate a free market enterprise which has to be carefully controlled so that monopoly does not set in. In many "free" intermediaries

can be attracted into the marketing system and the government watches closely over proper weighting and scaling, then the farmer's position might improve: competition could be channeled so that it is not between the farmer and the market intermediary; it should be between the intermediaries themselves competing for the farmer's produce.

In summary, the market for agricultural produce is expanding. The intermediaries are willing to buy whatever crops are produced in the area so that they can at least maintain their operation. The market is competitive. Price control, at least at the local level, is not possible.

Each of the four market sections are interdependent. Change in one affects all the other three. Taking a hypothetical example, the market shops stock goods according to season. During the planting season, emphasis is on farm implements and other inputs. Some of the more enterprising shops might even introduce new chemical fertilizers and methods of application. And if this results in a good harvest, the market for agricultural produce will flourish, assuming that prices are favorable. With more money to spend, the farmer and his family brings business to the marketplace and its surrounding shops. Finally, as the other market sectors expand, so will the service market and, more employment could be created for farming families.

The entire marketing system is complex. The farmer is, nevertheless, very much part of this system. Although farm incomes in the project area still lag behind incomes of farmers in some other regions* of the country, it cannot be disputed that they are not necessarily exploited by the local trading community.

*Where land sizes are smaller and land ownership is not common.

MACRO CONSEQUENCES

Chapter V

Existing Market and Price Policies

In the previous sections we have described the behavioral characteristics of the participants and the actual functioning of the marketing system in the project area. It now remains for us to examine and appreciate the policies which assist the marketing apparatus* to function as aggressively and efficiently as possible.

Over large areas of the Northeast - the project area was no exception - and until quite recently, little development took place where no adequate transmitting mechanism existed. The physical prerequisites of a market were practically non-existent. Where a market did exist, its imperfections were such as to make decisions to increase production irrational in terms of income maximization.

At the same time, the market mechanism, of Thailand is basically organized under the private enterprise system and is oriented toward an open market with minimum direct intervention from the government. Under such an open market policy, free trade practices are fostered: The production and trade of most agricultural commodities rest to the large extent on the principle of comparative advantage. Because of a favorable foreign demand, the agricultural production in most parts of the economy is therefore export oriented and efforts have been strengthened to keep the internal markets actively linked to the world market situation.

With this open market policy, private enterprises are encouraged and promoted, private traders, including producers, are free to enter or exit from the markets.

5-1 Price and Market Policies for Farm Products

Prior to 1961, the general agricultural policy in Thailand rested entirely on the free trade system in which the development of farm-product marketing was induced solely by the expansion of the export markets. Efforts to accelerate the development of agricultural marketing was initiated in the first five-year plan of the national economic and social development (1961-1965), when emphasis was given to accelerate the expansion of farm production. The goal of increased production of farm products is to increase the country's exports. Foreign exchange earnings are badly needed for the further development of the economy. With this development goal, the actual formulation and implementation of the farm price policies started in the early second five-year plan of the national economic and social development program. The commodity price policies adopted since then included the minimum price guarantee program, the fertilizer price subsidies and the cheap-food policies. However, as far as the private enterprise system is concerned, the actual impact of these policy programs on the market and the well being of the farm population seems to have not been well realized. Instead, it has posed some critical problems relating to resource allocation and income distribution, both within the farm sector and between the farm and non-farm sectors. For example, an observation of a change in income in the rural and urban areas during 1963-1970 indicated that the income share in the national income account of the 40 percent lowest-income profile of rural households dropped from 15 percent in 1963 to 14 percent in 1970; while that of the 40 percent lowest-

income group of the urban households increased from 13 to 17 percent over the same period.¹

Despite realizing this fact, the government's market and price programs for farm products under the third and the fourth plans of the national economic and social development have been strengthened in order to fill up the income gap and to stimulate further expansion of the agricultural sector itself. For example, the marketing development programs for farm products during the second through the fourth plans have stated their prime objectives as follows:²

1. Creation of a more orderly and efficient commercial system so as to enable the distribution sector to serve the public interest more fully.
2. Expansion of exports and encouragement of participation by Thai nationals in commercial and service activities.
3. Stability of prices of agricultural, industrial and consumer goods.
4. Expansion of private initiative and employment in the service sector.
5. Improvement of income distribution system through the direct price and market programs in specific and monetary and fiscal policies in general.

¹Udom Kerdpibul, "Income and Distribution of Income in Thai Agriculture," Thai Journal of Agricultural Economics, Vol. II, No. 2, December 1972, pp. 8-11.

²National Economic and Social Development Board, The Fourth Five-Year National Economic and Social Development Plan, 1977-1981.

To achieve these objectives, the government has expressed the following attitudes and desires for commercial development policy:

1. Discouraging the monopolistic trade practices and certainties which are contrary to the best interests of producers and consumers.

2. Promoting a healthy and orderly competition in private commercial activities, so as to secure equitable treatment for the producers, the distributors, and the consumers.

3. Maintaining of price stability for both industrial and consumer goods, so as to prevent harmful increases in the cost of living.

4. Supporting and stabilizing the domestic price level of important export commodities, such as rice, corn and other agricultural and industrial products.

5. Developing and promoting export trade so as to achieve growth in terms of export volume and value, as well as diversification of exports.

6. Encouraging Thai nationals to participate more in commercial and service activities by designing new and more effective measures.

7. Issuing and enforcing standard and quality specifications for import and export commodities.

8. Promoting the tourist industry in Thailand.

9. Encouraging private initiative and employment in service sector by providing loans and technical assistance.

In a program of market expansion at both domestic and international levels, the government has also outlined the following criteria of actions to be launched under the plans:

1. The government will study and analyze domestic and foreign market situations in order to design measures to assist domestic producers in marketing of their products.

2. The government will put every effort to promote consumer preference for Thai products in the domestic and overseas markets by means of participation in domestic and international trade exhibitions and by sending trade missions abroad.

3. The government will promote the exports of Thai produces by organizing an efficient export system and by discouraging competitive price cutting among exporters. Exporters will be encouraged to meet their export commitments. Quality standards will be specified and maintained.

4. The government will provide Thai nationals the educational facilities in business administration and marketing advisory services so that they would participate more effectively in commerce.

5. The government will improve the marketing system so as to give agricultural producers a fair share of the retail price paid by the consumers.

6. The government will encourage the establishment of an efficient warehousing system throughout the country in order to reduce the costs of distribution.

7. The government will provide technical assistance to the nation's marketing system by conducting market studies of the major domestic products. Marketing facts and intelligence will be made available to producers and distributors so as to enable them to make their business decisions at their best.

8. The government will set the price support program for basic agricultural commodities, such as rice, so as to benefit both producers and consumers, and also for raising income and standard of living of the farm population.

5-2 A Case Study: Rice

It has long been maintained by Thai public opinion in Bangkok that the vast and complex structure of the Chinese rice milling and marketing system is highly exploitative by virtue of being non-competitive. Despite the fact that the whole history of the growth of the Thai rice farmer production for the export market has been made possible by the marketing mechanism erected by the Chinese merchant class, Thai leaders have felt it necessary to dismantle this system as part of a general effort to rest control over the country's commercial sector away from the Alien Chinese. In 1938 the Ministry of Agriculture formed the Thai Rice Company, a government enterprise engaged in buying, milling and exporting rice. That the same year the first paddy cooperative was designed to increase the return to producers by eliminating middlemen profits. The rationale for organizing the Rice Company and the cooperative was identical and is well summed up in this official description of the domestic market.

We shall only examine the rice market. The price policies for up-land crops - cassava in our instance - have been established but

In Thailand marketing of paddy has to pass through the hands of many merchants and middlemen who set aside for themselves a big margin of profit. This inevitably means that farmers can receive but low prices for their paddy. The reasons are many. In the first place, farmers usually run short of capital for farming and personal expenses before harvest. To ameliorate their plight, they resort to merchants or middlemen who advance to them the necessary cash under contract to sell their crop to the creditors and at absurdly low prices. The repayment of such debt is very often paid in kind. Thus, after the exactions of the middlemen - non-creditors, the farmers have very little or no paddy left for sale. Again, their small marketable surplus of paddy is not conducive to its being sent to the central market or central wholesaler for direct selling and better prices since it means high cost of transport and low bargaining power. Thus, under such handicap, they are obligated to dispose of their small marketable surplus to the local merchants and middlemen who, apart from setting very low prices for their crop, very often employ means of weighing and measuring which are altogether dubious (Ministry of Agriculture, Agriculture in Thailand Bangkok 1961: 221-22)

This description of the marketing structure at the level of the first transaction is significant as an indication of the misconceptions prevailing in government circles, and as the basis for a wide range of government policies relating to rice and other marketing. The belief that the middlemen derive large profit margins at each turnover, forcing down the original paddy buying price to the farmer, would appear prima facie highly unlikely from the very large numbers of middlemen engaged in the rice trade and the small volume of rice handled by the individual trader before the market narrows in the Bangkok wholesaling and exporting stages. That the competition system does result in small profit margins is supported by our own findings. Our examination of the rice marketing process has led to the conclusion that comparison of prices at each turnover with the costs involved in each handling leaves room for only "insignificant" profit margins. These margins are somewhat larger than mere comparison of prices and costs would imply, due to unfair and dishonest practices and to a certain lack of uniformity in the system of measuring quantities which permits merchants to buy from farmers by volume and sell by weight, picking up between 4 and 15% of the volume in effect, without payment. After reviewing the margins obtained at each stage, including that derived from irregularities, we conclude that the farmers get as their share approximately 72.19% of what consumers pay for their rice, and that service charge of the wholesalers and retailers of all categories is approximately 12.05%

Thus the allegation that local merchants "set" low prices and put suppliers at a competitive disadvantage is untenable under the

competitive demand conditions of the market. Nevertheless the official view has gone virtually unchallenged in government circles and is still used as one of the principal justifications for government intervention.

The few attempts that have been made to offer the rice farmers an alternative to the long standing marketing structure have been inadequately financed to achieve so enormous an objective. The paddy cooperatives have not developed to a point where they offer a significant alternative to commercial marketing. In addition to the credit which they could be in a position to lower rates than prevail in the non-institutional credit market, the cooperatives could theoretically benefit the farmer by (a) providing storage capacity enabling the farmers to hold a larger portion of their surplus from the market until prices rise later in the year; (b) reducing the price of fertilizer to the farmer by selling at wholesale cost without retailer margins, (c) returning to the farmer the marketing margins of the mills and (d) returning the margins earned by the mills, in cases where the cooperatives have their own mills or are linked to a federation which operates a mill, and earned by the intermediaries who perform such functions as blending, grading, etc.

The fact that cooperative marketing has failed to achieve any importance is partly due to the apparent farmer satisfaction with the returns obtained from dealing with the private market. This is reflected in the frequent complaint that farmers are not "loyal" to

their cooperatives, i.e. they weaken the cooperatives' bargaining power and financial condition by selling to private merchants who compete with the cooperatives. Given the poor level of cooperative management (mainly by provincial officials of the Ministry of Cooperatives who have had little training in marketing), and the fact that they have been organized from the top down, i.e. imposed by government as a paternal measure rather than arising from the inherent needs of the producers, it would be too much to insist that farmers sell through their coops even if they believe it would be to their disadvantage.*

The farm price of paddy is prevented from rising to a higher fraction of the final export price by the imposition of a rice export premium levied on the exporter but falling on the producers. The incidence of the premium falls not only on that portion of the total supply which enters the export market and on which the tax is levied directly, but also on that portion of the crop which is sold to domestic consumers and which is retained by the producers for their own consumption, since the premium keeps the domestic retail price (and the whole paddy-milling-wholesaling price structure behind the retail price) from rising to par with the international price level. The gap between the domestic and the international price structures is about one third the international (f.o.b. Bangkok) price.

*We believe that the competitive nature of the marketing structure at the collecting stage is sufficient as an explanation of farmer disinterest in cooperative marketing.

The problem of how to deal with the premium is complicated by the fact that it is intended to meet two different policy objectives. As often happens when one policy instrument is used to meet more than one objective, the requirements of the different goals frequently call for contradictory movements. The premium is first a price regulation mechanism. As a buffer between the domestic and international price levels, the premium is raised when a rise in export prices threatens to increase the domestic rice price. In this event, the change in the premium will generate additional revenue, consistent with its second policy objective. Since the returns to exporters and the volume exported will be unaffected. If export volume threatens to produce a short-fall in supplies for domestic consumption, the premium may be raised to squeeze export profit margins and reduce the incentive to draw off domestic supplies.

With government intervention in the rice market an established feature of Thai economic life, it is not surprising that similar attempts have been made in the markets for cassava and other upland crops. Although government support prices are publicized, they have little effect in attracting the farmer away from the private sector marketing because the funds available to the warehouse organization at the provincial level were not sufficient to maintain the price floor.

Under the circumstances of failing government support prices, it is critical to provide an adequate transportation system, and equally critical to prevent growth of institutional distortions in the marketing apparatus which result in depressing the farm supply

price below what a perfectly competitive system would offer, given the real costs of movement. As we have seen, formal government attempts to weaken the hold of the existing competitive commercial class have had insignificant results. In addition, improvements in transportation are eliminating rural monopsony, the natural result of poor access limiting the number of market intermediaries. Unfortunately the growth of new lucrative markets through these improvements in transportation and the northeastern marketing mechanisms have led to the development of a new type of sophisticated centralized monopsony at least as inhibiting to agricultural growth as the more diffused local monopsonies. This recent institutional distortion depends on the existence of large, efficient marketing processes, and exploits the opportunities offered by the concentrated flow of large volume through limited channels at the point of export or final demand. It is a recent phenomenon of utmost significance for present and future economic growth in Thailand that certain small commercial - political interests have become prone to form syndicates in the markets for agricultural commodities offering prospects of high profits to be extracted from control over the collection and export or sale mechanisms. The products selected for these interventions include some of the very commodities spearheading the diversification described earlier.

The typical syndicate attempts to control the entire wholesale range of the market. In the case of export goods the power of the syndicate to intervene ends with the export transaction. The most powerful of the syndicate controls the slaughter and sale

of meat in the Bangkok market. The middlemen who operate the shipment of cattle and hogs to Bangkok directly from the Northeast for Bangkok consumption or livestock export are organized into a "federation of livestock traders and marketing cooperative." This organization has exclusive franchise for livestock slaughter in Bangkok; the federation also has exclusive authority to issue livestock export licenses. The combined control over livestock purchasing from the producers, sale of dressed meat to Bangkok retailers, and export of live animals, place these interests in a position where they can extract a monopsony profit from one end, and a monopoly profit from the other end of the market. The extensive purpose in farming this and other similar arrangements was market "stabilization", i.e. fixed prices to protect the domestic producers from price fluctuations, low prices to Bangkok consumers, and an enhanced bargaining position in international markets for the exporters who will no longer compete among themselves.

The rise of these new monopolies and syndicates is a post-war phenomenon. They reflect the same attitudes towards economic activity, on the part of some sections of the Thai elite, that gave rise to the pre-war attempts to alter marketing processes by fiat, although the more recent arrangements have had increasingly dubious formal government sanction.

5-3. Existing Programs

a. General Measures

i) Measures to improve functions: From experience, it has been evident that the existing disorder and inefficiency in the commercial system of farm products have resulted in unnecessarily high marketing and production costs. In this respect, several actions have been made. These include the revision of existing laws and regulations as well as the introduction of new legislation. The Office of Commodity Standardization was established to control and improve standardization of the products with emphasis on gaining better reputation for Thai product exports in foreign markets. Under the fourth five-year plan of economic development, this program will be to enforce more suitable export regulations in order to assure a better quality for export products.

ii) Rural highway construction program: Transportation for agricultural products in Thailand is increasing in importance. Generally, in the past, farm products were shipped by surface transportation or by boats from the villages or farms to the port of Bangkok. Nowadays, truck transportation is the most important means of shipping farm products to the terminal markets. As a consequence, the emphasis on the improvement of highway transportation is apparent in each plan of the national economic development. The objective of highway development is not only to develop a more efficient distribution of the different goods to the different consumers, but to also support and encourage the growth of medium and large scale industries in the locality, which, later would generate greater opportunity for local employment and service.

5-3 Specific Marketing Programs

i) Government's Farm Price Support Program: The farm level price support programme was first introduced only for rice, an important staple crop. But under the fourth five-year economic development plan, which started since 1979, a few more crops, such as corn, cotton, sugar, soybean, mungbean, and peanut were included in the price support programme. The main purpose of the rice support programme is to mitigate the drastic seasonal fluctuations in rice price. Unfortunately, areas of its impact are very selective. Since 1979, the programme has been reemphasized and strengthened not only to mitigate price variation but also to improve the level of income of the farmers throughout the country.

The Farmers' Market Organization of the Ministry of Agriculture and Agricultural Cooperatives is currently assigned to handle the programme. However, it appears that the programme, is unlikely to be effective in raising the market price of the products concerned. Instead, the increase in export demand for rice has been actually claimed as most the important factor which has raised paddy prices well above the support level. Furthermore, there is evidence from the project area (where farmers have only a small rice surplus) that the price support programme does not benefit the farmers.

ii) Farmer Cooperative Organization Programme: This programme was launched a long time ago but has not been in active operation. Since the first and second plans of national economic development, the programme has been reorganized and has received more support from the government. The main objective of the farmer cooperatives

is to help farmers secure possible high prices for agricultural products through their cooperation and organization. However, the scale of operation of this organization has been limited by constraints on operating funds and poor managerial abilities. As a consequence, their effect on the normal channel of trade is considerably light. During the latter part of the second five-year economic development plan, another reorganization of the farmer cooperatives took place: the existing small farmer cooperatives at that time were then regrouped into a number of larger organizations called "The Multipurpose Farmer Cooperatives". The advantage of this type of cooperatives was the enlarging of the economies of scale and an increase in bargaining power through greater cooperative efforts. In 1979, the number of multi-purpose farmer cooperatives registered were 823. These included about 685.5 thousand member farmers.³ In Ban Pai District, the farmer cooperatives has organized 1,422 member farmers. In other districts such as Nampong and Chonnabot, the records on the status of the farmer cooperatives are not available for analyses.

5.4 Critical Marketing Bottlenecks in Project Area

Despite expressing a good deal of concern over the production and marketing of farm products in general and over the poverty problem of small farmers in specific, the government's effort in

³Technical Division, Department of Cooperative Extension, Ministry of Agriculture and Cooperatives, Statistical Records on Cooperatives in Thailand, June 1979.

solving this problems will never be fully achieved. In the project area there still exists a number of problems, most of which are a reflection of the disadvantaged status of small farmers.

1) Small Marketing Surplus of Farm Products: In the project area the main occupation is rice farming; the average farm size is about 23.48 rai or approximately 9.1 acres and; the average family size is 6 persons. The rice productivity of the areas is however relatively low with most of the crop grown is for home consumption. Among the 150 sample farm households, 111 households or about 74 per cent reported not having a rice surplus for sale. Ban Nong Saeng in particular (about 90 of sample households) does not have a rice surplus.

2) Low Cash Farm Income: Because of the small surplus of farm products, the farmers earn only a small cash income from agriculture. This low income problem has not only resulted in low investments on the farm, i.e. only about $\text{฿}1,613$ per farm per year, but has also forced the farmers into seeking on non-farm incomes. The average non-farm income for the whole studied area is $\text{฿}14,733$ per year (1978), while the average household expenditure amounted to $\text{฿}14,178$ per year (1978). The earned non-farm income is therefore just sufficient for covering the family's living expenses, savings and investment, have been minimal. Investment on the farm has thus to be financed mainly by loans from the Agricultural Cooperatives and from other non-institutional sources. In 1978, the average loans amounted to $\text{฿}4,534$ per farm household. However, most of the loans received were used for purposes other than farm

investment.

3) Lack of Information on Grading and Standardization: In the project area, market information relating to grading and standardization of cash crops is not available to all parties concerned. Grading and standardization is indeed a critical problem reported by the farmers. The survey for example indicated that about 85 percent of the farmers felt that they were being exploited by incorrect grading and standardizing of the products. About 74 percent felt exploited by the inaccurate measurement of the produce. This has of course resulted in the farmers receiving lower than market prices.

4) Ineffective Farmer Cooperative Organization. The farmer cooperatives in the project areas operate actively only for purpose of offering agricultural credit. The other functions of the cooperatives (selling of farm output and purchasing of farm inputs) are carried out on a very limited scale. The major constraints faced by the cooperatives are limited operating funds, poor managerial ability, and the lack of members' participation. One other reason which explains the poor marketing performance of the farmer cooperatives is that the farmer cooperative organizations have been established amid the more efficient private enterprises. The keen competition from private traders offering better market prospects for the farmers, has, in turn, driven away the farmers' participation in the cooperatives.

5) Ineffective Price Incentive Programmes: As mentioned earlier on, the government's price support programme for rice, the main crop

in Khon Kaen, does not operate effectively to benefit the small farmers. The rice surplus of individual farmers is small and does not constitute sufficient income. Other cash crops, moreover, do not contribute much in raising income level of the farmers because they are grown mainly as supplementary crops to rice. At the same time, the existing market prices for these cash crops, although higher than in the past, are still not high enough to encourage the farmers to put more investment efforts into their farms.

6) Limited Access to Institutional Sources of Credits: As small farmers generally lack the necessary loan security assets and this limits them from receiving loans: the farm land is of low value due to poor land productivity; and crop cultivation is still subject to natural conditions. These pose a high risk either on loan repayment or larger capital investment on farm. In addition, the credit supply from the government's financial institutions as well as from the Agricultural Cooperatives, is also inadequate. This further poses a critical constraint to individual farmers in running and expanding their farm business effectively. In a word, the financial problem of small farmers has been the basic factor leading to the development of very many other problems.

Chapter VI

Conclusion and Policy Recommendations

6-1 Conclusion

The study of the marketing system of farm produce in Khon Kaen province has focused on the question of small farmer's access to the market. In specific, the study deals with a) identifying the existing marketing patterns and its resultant problems in rural Thailand; and b) relating the above information to structural variables characterizing the small farm population in this society. The results of four-month case study in three separate villages in Khon Kaen province reveal that the characteristics of farm households within the project area fall into the category of small farmers, i.e.:

1. Small farm enterprise. An average per farm of about 9.1 acres of land area is devoted for cultivating subsistent crops, particularly rice. Other minor cash crops such as kenaf, cassava, beans, and vegetables are also grown on farm as supplementary enterprises.

Rice is grown mainly for home consumption. Because of the large family size, i.e. 6 persons per farm and low land productivity there is only a small surplus of rice available for sale. Even the production of cash crops is still relatively small: Vegetables are produced for sale in the local markets; kenaf, cassava, and beans go

to the markets in Bangkok and those in foreign countries.

2. Low cash farm income. Farm income contributes to only a small portion of total family income even though cash crops and livestock are likely to fetch a good market prospect. But, because of low farm income, farmers have to rely on non-farm incomes derived mainly from silk weaving, mat weaving, and other non-farm activities both on the farm and in nearby towns or cities. Again, the non-farm income is just barely sufficient to cover the family's living expenses.

3. Inadequate marketing facilities. The marketing facilities in the project area is inadequate and inefficient. Grading and standardization of farm products, particularly cash crops, are not widely practiced and market information is not available to all parties concerned, especially the farmers. Farm credit and market finance are inadequately extended to both farmers and traders. This poses critical constraints on expanding the scale of business as well as farm operations. Other market functions such as storage, warehousing, and transportation are also deficient, thus causing a high marketing cost between farm and local assembly markets.

4. Inadequate price incentive programs. Because the production of the principal crop, rice, is oriented towards subsistence and only a small farm surplus is generated, the government's farm price support programme does not effectively provide enough incentives for the farmers to increase their farm productivity in order to generate surpluses.

In addition, the farmers' cooperative organization is still not beneficial, to member farmers, as to tool to fetch better output prices or to lower production costs. The constraints on the development of such a farmer's institution include limited access to credit sources, poor and scant managerial ability, and the lack of farmers' participation.

6-2 Policy Recommendations

Based on the findings of this case study, it is recommended that the following policy programs should be strengthened or reformulated. They are:

1. Improvement of the small farmers' productivity. The existence of subsistent crop cultivation and a small surplus of farm products in rural northeastern Thailand, is not a reflection of the farmers' conservative attitude. Rather, it is a result of the critical constraints in production. These constraints range from a inadequate irrigation system, low level of soil fertility, to a limited access to farm inputs such as fertilizers, farm credits, and so on. Rural Thai farmers are not irresponsive to changes in market prices. Instead, they are trying hard to adapt themselves to the changing situations. For example, formerly, there was absolutely no cassava production in the Northeast of Thailand. Now, however the higher and higher cassava prices have resulted in a very rapid expansion of cassava production in this region. And in many instances farmers have diverted their own poor paddy land into cassava areas.

In order, to raise the small farmers' productivity, a good deal of effort has to be pushed to improve farming. Irrigation projects must be heavily expanded as first priority. Some input subsidizing programs such low price fertilizer and new varieties of crop and livestock are perhaps further effective measures to stimulate a rapid expansion of farm production of small farmers.

2. Improvement of marketing system. It can be said that the existing marketing system has necessary impact on the expansion of crop and livestock production. Such improvements in marketing facilities as feeder roads, storage, grading and standardization, market and price information, and credit facilities are of importance in contributing to the operational as well as pricing efficiency of the marketing systems of farm products in rural North-east of Thailand.

3. Strengthening of the government's marketing policy. Experience has proved that the government's direct intervention programs in the markets do not render much success in raising the farmers' income. The shortage of purchasing funds has caused the failure in this effort. Also, there has been evidence that the keen competition from the private traders has resulted in a failure of either the farmer cooperatives or the government price support programs. It is therefore recommended that the effort to improve the marketing of farm products should not emphasize a direct government's purchase programs. Instead, greater efforts should be made to improve marketing practices by businessmen through the enforcement of stronger commercial laws and regulations.

In addition, efforts should be strengthened to create favorable economic and political environments which encourage smooth trade and transaction. In particular, for those products which are export oriented, efforts to expand the foreign demand should be reemphasized. An increase in exports, of course, would result in a higher price and the latter would provide more production incentives to the farmers. Finally, measures which tend to limit the market and production potential of the farm products should be avoided and a trade creation policy should be adopted.

All said and done, the problem of market development in North-east Thailand is not a simple one. Comprehensive marketing reform programmes like many other basic economic development activities can only be achieved over a long period of time. Also, a meaningful market reform is no easy task, a substantial intellectual commitment has to be made by everyone concerned. Scarce human, financial, and political resources will have to be allocated to programmes which are often institutional, rather than physical in nature. Continuity and commitment are critical. The task is challenging, but the rewards, we believe, are exciting.

APPENDICIES

APPENDIX I

Socio-Economic Data for a Market Study in Northeast Thailand

	Region's share of Total Population 1976 (%)	Percentage of region's population in urban areas(a) 1976	Crude	
			Birth rate (per 1,000) 1974-75	death rate
Bangkok	10.5	100.0	32.6	4.3
Center	22.0	9.8	34.1	6.8
Northeast	34.2	4.3	45.0	10.0
North	20.9	6.4	26.6	10.3
Sough	12.4	11.4	41.4	8.9
Whole Kingdom	<u>100.0</u>	<u>16.9</u>	<u>37.0</u>	<u>8.9</u>

Source: Ministry of Interior, National Registration Office.

- (a) Urban population is defined as the population living in municipalities. There are officially 120 places classified as municipalities and each of Thailand's 71 provinces has at least one municipal area which is its administrative center. Municipalities include cities with a population of 30,000 or more and a minimum density of 2,000 people/sq km, towns with a population between 5,000 and 30,000 and a few communes serviced with urban infrastructure.

Table 18 Regional Distribution of Population

Region	1975	1990		Annual growth rate (%)	
		Natural increase only	With migration	Natural increase only	With migration
Bagkok	4,200	5,400	7,700	1.7	4.1
Northeast	14,800	22,900	19,800	3.0	2.0
North	8,900	10,800	10,900	1.3	1.4
Center	8,800	11,900	11,800	2.0	2.0
South	5,200	7,800	8,600	2.7	3.4
Kingdom	41,900	58,800	58,800	2.3	2.3

Source: World Bank Mission Report

Table 19 Projected Population by Region (1,000)

Size of holding (rai)	<u>Northeast</u>		<u>North</u>		<u>Center</u>		<u>South</u>		<u>Total</u>		
	1962	1974	1962	1974	1962	1974	1962	1974	1962	1974	
Under											
6.0-	5.9	14.8	4.1	28.8	14.7	16.7	7.7	14.3	7.8	18.6	7.9
15.0-	14.9	29.8	19.1	35.1	29.8	21.1	14.0	31.4	30.4	29.3	22.5
30.0-	29.9	31.2	34.4	20.1	21.8	27.9	28.3	29.5	35.3	27.5	30.2
60.0+	59.9	19.6	32.0	12.7	21.5	25.3	32.5	19.0	21.0	19.2	27.9
		4.5	10.4	3.4	12.2	8.9	17.4	5.7	5.5	5.4	11.5
<u>Total</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Mean	21.6	31.7	16.1	27.9	26.8	38.5	23.0	24.7	21.7	31.0(a)	
Mode	11.5	22.0	8.8	9.9	11.8	21.4	11.0	13.8	10.4	14.8	
Gini coefficient	44	39	70	50	47	43	45	41	47	43	

(a) Land use data implies that this average holding size has been underestimated by as much as 15%.

Source: Ministry of Agriculture, Division of Agricultural Economics.

Table 20 Percentage Distribution of Holdings by Region, 1974.

	Area of holdings 1975 ('000 ha)	Available forest ('000 ha)	Suitable scrub and idle land ('000 ha)	Forest & scrub land suitable for agriculture (as % of holdings)
Northeast	9,357	638	240	9
North	5,282	138	885	19
Center	4,698	100	396	11
South	2,683	536	555	41
<u>Whole Kingdom</u>	<u>22,020</u>	<u>1,412</u>	<u>2,076</u>	<u>16</u>

Source: Estimates based on land capability data from the Land Development Department and land utilization data from the Department of Agricultural Economics and the Land Development Department.

Table 21 Land outside Holdings Suitable for Agriculture.

	% expansion in planted area due to expansion of agricultural holdings -----	% expansion in planted area due to increase in cropping intensity within holdings (1975 to 1990)-----	Annual rate of growth of planted area 1975-90 (%)
--	---	--	--

Center	11	19	1.3
North	19	18	2.3
Northeast	9	40	2.9
South	41	33	2.5
Kingdom	16	22	2.3

Table 22 Future Land Expansion

Regions	Croppable -----('000 ha)-----	Planted -----	Planted as % of croppable
Northeast	8,530	5,196	61
North	4,950	3,577	72
Central	4,370	3,800	87
South	2,450	2,051	84
<u>Total</u>	<u>20,290</u>	<u>14,624</u>	<u>72</u>

Source: MOAC, Land Development Department and Department of Agricultural Extension.

Table 23 Intensity of Land Use Within Holdings, 1975.

	Size of farm (rai)					Average
	Less Than 5.9	6-14.9	15-29.9	30-59.9	60+	
Northeast						
Cash farm	1,220	1,040	1,710	2,770	4,740	2,120
Cash off-farm	1,210	1,030	930	1,190	1,110	1,060
North						
Cash farm	1,290	2,190	4,050	6,300	13,540	4,203
Cash off-farm	1,820	1,540	1,690	1,330	1,470	1,570
Center						
Cash farm	6,810	8,300	6,520	6,960	13,880	8,000
Cash off-farm	4,900	3,960	1,550	2,950	3,010	2,910
South						
Cash farm	1,440	2,280	3,140	4,500	12,140	3,330
Cash off-farm	2,630	1,940	1,700	2,850	1,610	2,100
Total						
Cash farm	2,330	2,500	3,260	4,700	9,850	4,000
Cash off-farm	2,460	1,750	1,320	1,820	1,770	1,700

Source: Ministry of Agriculture, Division of Agricultural Economics.

Table 24 Average Gross Farm and Off-Farm Cash Income of Agricultural Households by Region and Size of Farm, 1970.

	1980	1985	1990
	--- (% of total at current values) -----		
Rice	8.2	4.9	3.1
Rubber	7.6	6.4	6.1
Maize	9.4	8.1	7.1
Cassava	7.3	5.8	5.2
Other commodities	24.7	19.4	15.4
Manufacturing	29.9	43.7	52.8
Total goods	<u>87.1</u>	<u>88.4</u>	<u>89.8</u>
Nonfactor services	13.0	11.6	10.2
<u>Total</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Source: World Bank Mission Report

Table 25 Projected Structure of Exports

Region	1975	1990	Real rate of growth 1975-90 (% per year)
Bangkok	295	444	2.8
Northeast	44	110	6.4
North	65	154	6.0
Center	144	310	5.3
South	100	226	5.6
Kingdom	100	218	5.3

Source: World Bank Mission Report

Table 26 Gross Regional Product Per Capita By Region 1975-90
(100 - national average 1975)

	1960-70	1970-76	1976-80	1980-85	1985-90
	------(%)-----				
Labor force	2.3	2.6	2.9	2.9	2.6
Nonagricultural employment	4.2	n.a.	4.4	3.9	3.9
Agricultural employment re- quired to prevent open unemployment	1.8	n.a.	2.1	2.4	1.9

Source: World Bank Mission Report

Table 27 Projected Growth of Employment Under Current Trends.

APPENDIX II

**Selections From Thailand's Economic Development
Plans Which Relate To Marketing Development**

I. The First Economic Development Plan, 1961-66

Except for agricultural marketing, including the stimulation of cooperatives and improvement of warehousing, the First Plan provided for no development expenditures specifically for the commerce sector. In the statement of overall economic policy, a section entitled "Improvement of Merchandising Methods" set the objectives of price stabilization and grading of agricultural products, promotion of exports and cooperatives, and

"(4) Promote commercial interest among the Thai people

(5) Maintain as much competition as possible among producers and distributors."

In the statement of proposed implementation steps ("VII Commerce", except for those concerned with agricultural marketing, cooperatives, and warehousing, only the following were mentioned:

Item 2: "General commercial activities are to be left in private hands.

Item 6: (6) "To provide loans on an installment basis to various small retailers. This is to encourage the Thai people to enter into business more and more."

(Quotations from unofficial translation of the Plan reproduced in Mayer 1962.)

II. The Second National Economic and Social Development Plan,
1967-1971 Chapter XIII - Development of Commerce and Services.

1) The development of commerce in Thailand is an important factor in raising the standard of living of the people, in generating revenue for the government, and in accelerating the growth of the economy as a whole. Since Thailand is still basically an agricultural economy, domestic consumption and the export of agricultural products are important to the economic welfare of the country. In this respect, an efficient and freely functioning commercial system, with equitable treatment for those who are engaged in the production and distribution of goods and services, is necessarily a primary force in the economic development of the country.

2) At present there are approximately 20,300 registered business firms in the country. The rate of increase in number has been on the average about 9 percent per annum. In addition to the registered firms, there are numerous unregistered business establishments in the Bangkok-Thon Buri area and the provinces. Most of these are small retailers, and research is being conducted to obtain reliable data and information on them. The rate of growth in the number of firms is expected to continue. The government intends actively to promote the development of an efficient commercial system, so as to facilitate the flow and the exchange of goods within the domestic market and as exports to overseas markets. Encouragement will also be given to

greater participation by Thai nationals in commercial and service activities.

3) The growth of external trade has been phenomenal during the First Plan period. From 1961 to 1965, exports increased from 9,997 to 12,941 million baht and imports from 10,287 to 16,185 million baht. Equipment and other types of capital items accounted for over one fourth of total import value. This relatively large percentage reflects the dependence of capital information on imports. Chapter Five explains that the rapid increase and the absolute size of capital goods imports have not created balance of payments problems because of the increased receipts from invisible items and the inflow of private capital and foreign assistance.

4) The services sector (private transportation, construction, and tourism) has experienced a rapid rate of growth in the past few years. Most of the activities in this sector are undertaken by private efforts and initiative. In consultation with the private sector, the government will seek to assist the development of this sector so as to ensure steady growth and to promote healthy competition within the sector and vis-a-vis other sectors.

Objectives

Policy Objectives

5) The Government will seek to create an orderly and efficient commercial system and to promote healthy competition so as to enable the commercial sector to serve the public interest more fully. Subsidiary objectives are to promote exports and to encourage wider participation by Thai nationals in commercial and service activities. To achieve these objectives, the government will:

(i) Promote healthy and orderly competition in private commercial activities, so as to secure equitable treatment for the producers, the distributors, and the consumers.

(ii) Discourage monopolistic trade practices and cartels which are contrary to the best interests of producers or consumers.

(iii) Develop and promote export trade so as to achieve growth in terms of export volume and value, as well as diversification of export products.

(iv) Maintain price stability for both industrial and consumer goods, so as to prevent harmful increases in the cost of living.

(v) Support and stabilize the domestic price level of important export commodities, such as rice, and other agricultural and industrial products, in order to provide equitable treatment for the producers, the distributors, and the consumers of the country.

(vi) Encourage Thai nationals to participate more fully in commercial and service activities by designing new and more effective measures than in the past.

(vii) Issue and enforce standard and quality specifications for import and export products.

(viii) Promote the tourist industry in Thailand.

(ix) Encourage private initiative and employment in the service sector.

(Items 6-16 omitted, which specify export targets for individual crops and products.)

Development of Commerce

17) Total government expenditures on the development of commerce during the Second Plan period will amount to 180 million baht, financed entirely from the government budget. Programmes will be implemented for market expansion, market research, and price stabilization.

18) In a programme of market expansion, the Government will:

(i) Study and analyze domestic and foreign market situations in order to design measures to assist domestic producers in the marketing of their products. Special efforts will be made to expand the volume and value of exports in new overseas markets. Furthermore, marketing advisory services will be made available to agricultural and industrial producers.

(ii) Promote consumer preference for Thai products in the domestic and overseas markets by means of participation in domestic and international trade exhibitions and by sending trade missions abroad.

(iii) Promote the export of Thai products by organizing an efficient export system and by discouraging competitive price cutting among exporters when it is contrary to the best interests of the country. Exporters will be encouraged to meet their export commitments, and quality standards will be specified and maintained.

(iv) Encourage Thai nationals to participate more effectively in commerce through the provision of educational facilities in business administration and marketing advisory services.

(v) Improve the marketing system so as to give agricultural producers a fair share of the retail price paid by the consumers.

(vi) Encourage the establishment of an efficient warehousing system throughout the country in order to reduce the costs of distribution.

19) In a programme of market research and forecasting, the Government will provide technical assistance to the nation's marketing system by conducting market studies of the major domestic products. Marketing facts and intelligence will be made available to producers and distributors so as to enable them to make their business decisions on a sound basis as possible.

20) The objective of the price support programme is to stabilize the prices of basic agricultural commodities, such as rice, so as to benefit both producers and consumers. At the same time, the Government will improve the wholesale and retail price indices as well as the cost of living index, in order to assist the formulation of economic policy and the consideration of price stabilization measures.

(Items 21-30 omitted, which concern private transport services, construction and tourism.)

Problems and Future Outlook

31) Policies and measures for the development of Thailand's commerce and services are based on the desire to encourage the growth of a strong and healthy free enterprise system. The Government's role is not one of regulation, but of assistance to the private sector, particularly in the provision of technical assistance and the solution of critical problems and the bottlenecks in commerce and services. The key problems and the proposed solutions are as follow:

32) The existing disorder and inefficiency in Thailand's commercial system have resulted in unnecessarily high marketing and production costs. This facilitates the exploitation of rural agricultural producers by the middlemen and commodity speculators, as well as creating economic losses for the country as

a whole. To improve the functioning of the marketing system, the Government will take the necessary measures, including the revision of existing laws and regulations and the introduction of new legislation in fields such as that of company law, where there is lack of coverage. Reorganization of government agencies responsible for the administration of commercial laws and for the collection and distribution of commercial intelligence will also be effected, particularly at the provincial and regional level.

33) Quality control and improved standardization of production will strengthen the reputation of Thai exports in foreign markets. During the Second Plan the Government will take steps to implement suitable export regulations in order to assure better quality of export products.

34) Lack of capital and the inability to obtain prime locations for retail activities have so far been the main obstacles to a more active participation by Thai nationals in commercial occupations. The Government will coordinate inter-ministerial efforts to overcome this problem.

35) Coordination among government agencies at the planning and the operations levels will become increasingly necessary in order to give effect to policies which cut across ministerial responsibilities; for example, the policy to encourage farmers to take a more active role in the marketing of their products

will directly involve the Ministry of Agriculture and the Ministry of Economic Affairs.

36) In a longer perspective, the growth of the commerce and service sectors will be inevitably tied to the growth of the economy as a whole. As the measures to eliminate monopolistic and other unhealthy trade practices become more effective, an orderly and competitive commercial system will become a prime force in economic development.