SOCIOECONOMIC CHANGE IN RAINFOD AGRICULTURAL
VILLAGES IN NORTHEASTERN THAILAND

PART I

INTRODUCTION AND SOCIAL BASES OF PRODUCTION

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I. Introduction

1. "Rural Crisis" in Northeastern Thailand

Since the early 1950s Thailand has enjoyed an economic growth rate that has been one of the highest among lesser developed countries. Between 1951 and 1959, "GDP rose from 29.3 billion baht to 130.8 billion baht, yielding a cumulative growth rate of 3.5 percent" (Ingram 1971:221). "Between 1960 and 1969, gross domestic product, at constant prices, grew on the average by 8.1 percent annually" (Pisit Pakkasem 1972:26). In the 1970s the growth rate fell off owing to the oil crisis and the withdrawal of American troops from Southeast Asia. Nonetheless, the Gross Domestic Product continued to grow, averaging 6.2 percent for the kingdom for the period between 1971 and 1976 (Thailand National Economic and Social Development Board 1976:36). While the effects of this growth have been heavily concentrated in Bangkok and in other urban centers, the rural peoples of the country have also enjoyed some of the benefits. A significant proportion--perhaps as much as a quarter of the population, rural and urban, has risen since 1960 from a state of "absolute poverty," defined by the World Bank as 1,800 baht--approximately $90--per person per year in the rural areas and 2,400 baht--
$120--per person per year in the urban areas in 1975/76 prices (International Bank for Reconstruction and Development 1978:iii). This dramatic change in the economy notwithstanding, the World Bank still found in 1976 that a quarter of the population lived below the absolute poverty line. Moreover, those living in poverty conditions were found to be concentrated in rainfed agricultural villages in northeastern and, to a lesser extent, northern Thailand. In the words of the World Bank report: "nearly three-quarters of all poverty households--about 8 million people--are in the rural North and Northeast, most of them farmers growing rice under rainfed conditions" (loc. cit.)

The relative poverty of the rural peoples of northeastern Thailand is even more striking than the incidence of absolute poverty in the region. In 1977 the average per capita income in the northeastern region was 2,240 baht (U.S. International Development and Cooperation Agency, Agency for International Development 1980: Table 4), a figure that did represent modest increases when compared to the average per capita income figures of 1,663 baht for 1970 and 1,121 baht for 1960 (Pisit Pakkasem:1972:42). The increase in income among northeasterners was, however, in no way comparable to that experienced by peoples elsewhere
in the kingdom and especially in Bangkok. Taken as a percentage of the average per capita income of the kingdom as a whole, average per capita income in the northeastern region dropped from 61 percent in 1965/69 to 42 percent in 1977. Taken as a percentage of the average per capita income of Bangkok, average per capita income of the northeastern region declined from 29 percent in 1965/69 to 14 percent in 1977 (statistics calculated from Thai government data aggregated in U.S. International Development Cooperation Agency, Agency for International Development 1980: Table 4). Given that even by 1976 only 4.3 percent of the northeastern population lived in urban areas in the region (International Bank for Reconstruction and Development 1978: 32), the relative poverty of the Northeast was characteristic primarily of a rural population. Moreover, given that by 1978/79 only 7.2 percent of the cultivated land of the Northeast was within irrigation areas (Thailand. National Economic and Social Development Board, Northeast Regional Development Center, Regional Planning Division, 1980), it can be further adduced that the relative poverty of the northeastern populace, like absolute poverty, is to be found primarily in rainfed agricultural communities.

While conditions of poverty have long existed
in northeastern Thailand, they did not become of particular concern to the Thai government until the regime of Sarit Thanarat, who came to power in 1958. Prior to World War II, the various governments both before and after the 1932 Revolution instituted few agriculture development programs and those that were created were restricted almost exclusively to the central region. Northeastern villagers, like other villagers throughout the kingdom, did experience significant change in their understanding of the world in which they lived as a consequence of the institution of compulsory primary education. By the late 1930s most rural children of appropriate ages had been enrolled in schools in northeastern communities.

World War II precipitated a political crisis during which a number of northeastern politicians rose to political prominence, capped by inclusion as ministers in the postwar government of Pridi Phanomyong. Following the return to power of Phibun Songkoram in 1948, these northeastern leaders were viewed as subversives, were arrested, and died under conditions that clearly suggested that they had been murdered on orders of high government officials (Keyes 1967: 32-35). The political tensions thus created, coupled with a growing awareness among northeastern villagers
of their conditions of poverty, lent considerable credibility to the appeals for support initiated by legal and illegal leftist movements. These movements were viewed with considerable concern by the Thai government instituted following a coup against Phibun led by Sarit Thanarat in 1957.

In the late 1950s the Thai government began to devise policies to deal with what was termed "the northeastern problem." The "problem" was conceived of as rooted fundamentally in conditions of underdevelopment, the dimensions of which having been underlined in a World Bank report based on a year's investigation in 1957-1958 (International Bank for Reconstruction and Development 1959:7; also see pp. 18-19). These conditions took on political significance owing to ethnoregional factors, to the efforts of the Communist Party of Thailand to mobilize support in the region, and to the expanding conflict in the neighboring Indochinese states (Keyes 1964:1967).

In about 1960, the Thai government created a Committee on Development of the Northeast under the National Economic Development Board in the Office of the Prime Minister. The Committee included many ranking members of the government and was chaired by Sarit himself. In 1961 this Committee completed
its major task, the formulation of a five year plan for the development of the Northeast. The goal of The North­east Development Plan, 1962-1966 was stated as follows:

The aim of the Northeast Development Plan is to raise the standard of living of the Northeastern people to levels comparable with that of other regions, bringing about greater welfare and happiness to the inhab­itants of this region, and to lay down economic and social infrastructures for future economic stability and progress. The Committee holds above all the fact that the Northeastern part is an integral and inseparable part of the Kingdom of Thailand and that the Thai nationals living in the Northeastern region are Thai citizens. (Thailand. Committee on Devel­opment of the Northeast, 1961:1)

This goal has been pursued through subsequent Five-Year plans as well.

Government programs did have the effect, during the 1960s and into the 1970s, of bringing about marked changes in the lives of peoples in northeastern Thailand. An excellent system of roads was constructed and trans­portation of persons and goods, often by locally-owned
vehicles, has risen dramatically. Villagers have been able to bring new rice lands under cultivation because of tanks which the government has built. Many large scale irrigation projects were undertaken beginning in the mid-1960s, although their potential has yet to be adequately realized. New strains of rice have been introduced and widely adopted, with concomitant increases in rice yields. Agriculture has been diversified to some extent, with kenaf and cassava becoming the most important of the cash crops. The various government programs have certainly contributed to the decline in incidence of absolute poverty in the region that has occurred over the past two decades. This decline notwithstanding, the relative poverty, as noted at the outset, of northeastern villagers has worsened and average per capita income for people in the region still remains among the lowest in the world. The conditions of poverty that were deemed two decades ago to have been at the base of "the Northeast problem" still continue today, making northeastern Thailand one of those areas in Asia that Morrison has characterized as having a "persistent rural crisis" (Morrison 1979-1980).

The persistence of a rural crisis in northeastern Thailand in the face of two decades of efforts
to eliminate it underscores an important point that needs be recognized by any agency contemplating support for new programs aimed at alleviating conditions of poverty in the rural communities of the region. There is no simple solution to this crisis; if there had been, it would have been discovered long ago (compare in this regard Regional Planning and Area Development Project 1979:19). The rural crisis of northeastern Thailand is characterized by a complexity of factors that can be fully comprehended only in micro-level analysis, analysis that attends not only to present conditions but also to the dynamics of social life in communities in the region.

2. The Case Study Method and Two Rainfed Agricultural Villages

This report presents the results of field researches carried out in 1980 of socioeconomic change and of the impact of programs of planned change in two rainfed agricultural communities in northeastern Thailand: Ban Nong Tyn, Tambon Khwao, Amphoe Muang, Changwat Mahasarakham and Ban Tae, Tambon Tae, Amphoe Uthumphonphisai, Changwat Sisaket.¹

Research was focused on rainfed agricultural communities because it is in such communities that the rural crisis that characterizes the northeastern region
is most acutely manifest. The research was designed to permit both a longitudinal analysis of change and a comparative analysis of sub-regional variation. Intensive field research had been carried out in the community of Ban Nong Tum in 1963-1964 and short research visits had been made to the village in 1967, 1968, 1972, 1973, 1974 and 1979 (for reports of previous researches, see Keyes 1966, 1975a, 1976a). This previous research makes it possible to place the findings from the 1980 study into a perspective that permits identification of dynamic factors that often evade one in research restricted to one period of time (compare, in this connection, the reflections on longitudinal research in the volume edited by Foster, Scudder, Colson, and Kemper 1979). Indeed, the typical study of conditions in rural northeastern Thailand (as well as of most other rural areas in Asia), being based on survey research carried out in the space of a few weeks (or even less time) or upon census data, ignores the dynamic factors that should be of central concern.

The study based on survey research or upon census data does permit comparison of sub-regional variation. It should be stressed, however, that the variables explored in research based upon sampling or census must needs be ones that are quantifiable. The full significance of variation can be understood only
through closer attention to contextual factors that this type of research permits. It is for this reason that this study draws upon intensive research in two communities rather than upon extensive research in a sample set of communities. Attempt has been made, nonetheless, to juxtapose findings from the intensive research with the statistical findings of other studies based upon survey and census data.

Ban Tae was chosen for comparison with Ban Nong Tun for several reasons. In the first instance, since Mahasarakham has been shown to be, with reference to such indicators as average per capita income, income growth rate, paddy yields, and risk to rice from natural disasters, to be one of the poorest provinces in the Northeast (Regional Planning and Area Development Project 1979:45, 46), it was deemed important that the village chosen to be compared with Ban Nong Tun be from a province equally as poor. The choices reduced to Sisaket, Surin and Roi-et. Secondly, it was thought important that the village chosen for comparison be from a different sub-region within the larger area of the Khorat basin (an area including the drainage areas of the Mun and Chi river valley). While an adequate sub-regional analysis of the Khorat basin has yet to be made, it is clear that the area of the lower Mun River basin
in which Ban Tae is located shows some significant differences in micro-climate, flooding patterns, and soil conditions to the area of the central Chi River Valley in which Ban Nong Tun is located. Secondly, the fact that Ban Tae is located in a tambon that was known to be the probable location of a USAID-supported agricultural development project was also considered to be important. It is hoped that the data collected in Ban Tae will be used for a baseline against which changes instituted under the project can be assessed. Finally, Ban Tae was known to contrast with Ban Nong Tun in the degree of previous involvement in government-sponsored projects. Since a major concern of the research lay in examining the impact of such projects, it was deemed useful to have included in the study one community in which the institution of such projects had been atypical compared to other communities in the region while not being so in the other village.

Ban Nong Tun and Ban Tae, together or singly, cannot be said to typify all rainfed agricultural communities in northeastern Thailand. They do share many of the same environmental conditions with other villages located in the same sub-region. Thus, Ban Nong Tun villagers have adapted to environmental conditions that are similar in most respects with other rainfed
agricultural villages located in the central Chi River valley that occupies parts of Khon Kaen, Mahasarakham, Roi-et, and Yasothon provinces. The characteristics of the environment in which Ban Tae villagers live, while contrastive to those in the Ban Nong Twn area, are much the same as those found throughout the lower Mun Valley occupying parts of Surin, Sisaket, and Ubon provinces. The environmental conditions of these two sub-regions, in turn, contrast with those found in such other sub-regions as the Nong Han area of Sakon Nakhon, Kalasin, and Udon provinces, the upper Chi area of Chaiyaphum and Khon Kaen, the Mekong drainage area of Nongkhai, and so on.

The peoples of both Ban Nong Twn and Ban Tae are similar in belonging to the dominant ethnic group of the region, the Lao (or Thai-Lao or Thai-Isan). In being Lao, they contrast not only with the Thai of central Thailand but also with the Khmer and closely-related Khmer who are concentrated in the southern part of the region in Sisaket, Surin, and Buriram provinces. They also contrast with such other Tai-speaking peoples as the Phi.Thai who are found primarily in Nakhon Phanom, Kalasin, and Udon provinces. Like nearly all peoples in northeastern Thailand, the peoples of both Ban Nong Twn and Ban Tae consider themselves to be Buddhist.
This rubric, however, subsumes some significant variations in religious practice that derive not only from ethnic differences, but also from religious changes of the past seventy-five years that have been differentially felt throughout the region. It will not be possible in the space of this report to give much attention to such religious variations. It is worth noting, however, that whereas almost two-thirds of the households in Ban Nông T’un have at least one adult member who considers himself to have been "ordained in the Dhamma" (buat tham), that is to be a member of a little-known but widely followed northeastern Buddhist cult movement, only a couple of households in Ban Tae have members of this movement. Those who adhere to this movement not only observe distinctive ritual practices, but also observe a number of ethical principles, such as total abstinence from alcohol and raw meat, that have some important social and economic implications. It should be stressed that those who become members of this cultic movement do not cease being Buddhists; rather, they tend to intensify certain Buddhist beliefs and practices.

While there are some similarities in the economic infrastructure throughout the northeastern region, there are some significant differences in villages that stem
from their accessibility to markets. Prior to 1960 the railways were far more important than roads or waterways in linking parts of the region with market centers. Between 1900 and World War II, two rail lines were extended from Khorat (Nakhon Ratchasima), the one going north to Khon Kaen and eventually to Nongkhai on the Mekong and the other going east to Ubon. Villages that lay in rather close proximity to one of these two lines had economic opportunities not available to those lying in the hinterland. Ban Tae lies on the Khorat-Ubon line and has had a station since 1928. Ban Tae villagers to this day continue to travel to local and more distant markets by means of the cheap trains. Ban Nong Tum villagers, who live 70 kilometers from the nearest railhead--Ban Phai on the Khorat-Nong Khai line--have made little use of the railway. During the 1960s an excellent system of roads was built throughout the Northeast, most of which having been financed by the U.S. government. While this road network was created primarily for security reasons, it has had a marked effect on the economy and society of the region (For a recent analyses of the effects of roads in northeastern Thailand, see Louis Berger International, Inc., 1979, Moore, et al. 1980, and Thung 1972). The village of Ban Nong Tum lies two and a half kilometers distant from a major highway linking
not only the nearby market and administrative centers of Mahasarakham and Roi-et but also serving as a major artery on which buses and trucks travel between Ubon, Khorat, and, ultimately, Bangkok. Ban Tae is not so close to a major highway. While only 4 km. away from the district center of Uthumphonphisai, this town has only a secondary road that connects it with the provincial capital of Sisaket, 34 km. to the east. And Sisaket itself is not on the major highway between Ubon and Khorat. The railway remains a more important communicational link for Ban Tae than does the highway system. The access to the marketing system of the Northeast that Ban Nong Tuen and Ban Tae have through the highway system and the railways is not unusual. A majority of rainfed agricultural villages in the Northeast today probably have similar access. Those villages that could still be considered truly "remote" (kandan) lie primarily on the periphery of the region—in the northeast corner in Nakhon Phanom and Nongkhai provinces, in the southern border areas near Cambodia, and in Loei province. Even once "remote" areas of hilly portions of Sakon Nakhon and Kalasin provinces have been linked into the system through an elaborate system of feeder roads built under the Accelerated Rural Development program.

Ban Nong Tuen and Ban Tae share with all villages
in the region a similar political-administrative context since the Thai polity is highly centralized and local administration to the level of the district (amphoe) is in the hands of civil servants of the state rather than of some locally governing body. There are some variations in "local" politics as relates to the lives of the villagers in the two communities, but since tambon councils (sapha tambon) and tambon headmen (kamnan), provincial councils (sapha cangwat), and even national assemblymen (phuthaen ratsadon) hold very minimal powers, these differences are relatively insignificant.

The field research in Ban Nong Twn and Ban Tae was structured around a questionnaire on social and economic conditions and on the role of government-sponsored programs in the villages (an English-version of the questionnaire is given in Appendix A). This questionnaire was constructed to include most of the same questions that had been asked in surveys carried out in Ban Nong Twn in 1963. The intent was to gather data that would permit identification of changes that had occurred in Ban Nong Twn in the intervening seventeen years. The questionnaire was also expanded to include questions that, on the basis of contacts with the village and of societal-level changes, were known to be relevant. While the instrument thus devised still proved to have
some defects for the purposes of the study, it can be justly claimed that it was constructed with a sensitivity to known local conditions.

The questionnaire was based upon questions that in the 1963 surveys had been written in Thai. The new form was drafted in English and then translated into Thai by the two Thai research assistants and on the basis of this translation, a final English version was prepared. Then a Thai interpretative translation was prepared as a guide to use in the research. In the context of the actual interviews, this guide was made the basis of questions asked in Lao.

Respondents to the questionnaire include at least one member of every household in each of the two villages. This application permitted a census of the villages for some types of data that could be aggregated by household. For those questions in which informants were asked to provide personal information or to express opinions, the survey constituted a sample of representatives of all households in the village. In this latter regard, it should be noted that there tends, since most informants were male heads of household, to be a skewing of the sample in favor of older males. It is not felt that this skewing has created any serious distortion in the resulting analysis.
The aggregated statistical data resulting from the administration of the questionnaire are not allowed to "speak for themselves." All statistics have been interpreted with reference to knowledge of the local situation in both villages obtained through intensive participant-observation fieldwork and through in-depth unstructured interviews with selected informants. In the case of the data from Đan Ngông Tần, the statistics obtained from the 1980 study have been juxtaposed with statistics from the study made in 1963 and variations have been interpreted with reference to knowledge of processes that have impinged upon the village in the intervening period. This knowledge has been obtained, in part, through continual contact with the village and, in part, from reading of other studies carried out in similar communities in northeastern Thailand. Finally, all data from the two villages have been interpreted with reference to what is known from government reports and macro-level studies about the larger political and economic contexts in which the two villages are located.
FOOTNOTES

1Support for this research was provided by a grant from the United States Agency for International Development, Grant No.AID/DSAN-6-0213. The research personnel for the project consisted of the author as principal investigator and Mssrs. Suriya Smutkupt and Paitoon Mikusol as research assistants. Mr. Suriya spent eight months in the field and concentrated his attention on the village of Ban Tae. His work on this project was combined with research for his Ph.D. dissertation in anthropology at the University of Washington. Mr. Paitoon, a member of the faculty of Sri Nakharinwirote University in Mahasarakham and also a graduate student in anthropology at the University of Washington, assisted me in the research in Ban Nong Tun. Most of this work was carried out in the space of two months. More field research time was devoted to the work in Ban Tae since I had already carried out extensive research in Ban Nong Tun on previous occasions.

2I will present a study of the "ordained-in-the Dhamma" movement in another context.

3Three surveys were carried out in Ban Nong Tun in 1963. I was in the village when census takers for the Agricultural Census of 1963 interviewed villagers. I accompanied the census takers in late April and early May 1963 when they made their interviews and made copies of the data collected by them. This census left out households that were not engaged in agriculture. The census takers also missed several households located in the neighborhood (Khum Non Khwao Noi) that was eventually to hive off and become a separate village. Since data from this neighborhood are excluded in making most comparisons between 1963 and 1980, the absence of these households causes little problem. In July 1963 I carried out a census of the village in conjunction with a survey designed to elicit information on household composition, kinship connection, social and physical mobility, living conditions, and attitudes toward family planning. Finally, in January-February 1964, I carried out a survey of all households designed to elicit information on income,
investments, land transactions and expenditures. Since the information was retrospective for 1963, the resultant analyses are identified as being from that year.
II. The Bases of Production in Rainfed Agricultural Communities

1. Socio-spatial Characteristics of the Village

The socio-spatial characteristics of villages in northeastern Thailand reflect the adaptation that northeasterners have made to the ecological context within which they live, the cultural ideas that they hold regarding what constitutes a village (ban), and the administrative divisions of the populace instituted by the government. In the gently undulating land that constitutes most of the land area of the Khorat Plateau, villagers have typically chosen to settle on those slightly elevated tracts—called non or don (words found in the names of many villages)—that rise above lands that are inundated by the annual flood waters. Since there is little or no rainfall on the Khorat Plateau during the dry season, villagers have also tended to settle in relatively close proximity to watercourses, ponds and swamps as well. Most rural northeastern communities are nucleated settlements, consisting of a sizeable number of houses congregated together. Nucleation reflects the ideas held by northeasterners irrespective of whether they are ethnically Lao or Kui or Thai Khorat that a "village" is a collectivity of households that share a common
place. In most villages, this idea also finds expression in the existence of a shrine (called buban, "navel of the village," or lak ban, "village axis mundi") that situates the village within a cosmic framework and of another shrine dedicated to the guardian spirit of the village (phi puta or tapu, "maternal/paternal grandfather spirit"). Not all villages have their own shrines, but may share these with a contiguous village; a few villages—particularly ones established since World War II—are not associated with any shrines at all.

Since the overwhelming majority (more than 95%) of northeastern villagers are Buddhist, they also define their local identities with reference to what might be termed their "parish" temple-monastery (wat). It is typically the case that a village will have a wat, but in some larger villages, and in some villages where both the larger Mahanikai and the stricter and smaller Tham-mayutnikai are represented, that there will be more than one wat in a village. Some smaller and some newly founded villages do not have their own wats, but share a wat with another, nearby village.

Since the institution of the provincial reforms at the end of the last century, the populace of northeastern Thailand (like the populace of the country at large) has been grouped into administrative villages
(mu or muban), each with its own headman (phuyaiban). For the most part in the Northeast, the government has utilized indigenous settlement patterns and existing parish boundaries in determining what constitutes an administrative village. Thus, the typical village in northeastern Thailand is at once a nucleated settlement, a ritual community associated with both a shrine of a village guardian spirit and a Buddhist temple-monastery, and a unit of local administration.

These characteristics were often taken into account in the determination made by the government in determining the boundaries of the population to be served by basic primary school (rongrian prathom). It is often the case that a local primary school district will coincide with the village defined in other terms. However, owing to the fact that not all villages have equal population and that there have been many administrative divisions instituted since school districts were formulated, there are also many cases where a village school will serve more than one community.

The socio-spatial distinctiveness of the northeastern village contrasts markedly with the character of rural communities in Central Thailand, and particularly in the central plain. In this latter region, there are not the hillocks and rises in land that have
been obvious choices for settlements. Rather, it is more typically the case that the central Thai village will consist of a linear distribution of houses located along some waterway--rivers, streams, canals. As in northeastern Thailand, central Thai villagers also tend to think of themselves as belonging to distinctive local ritual communities, ones centered primarily on local Buddhist temple-monasteries. These ritual communities often do not, however, correspond with geographically distinctive collectivities of households. And when the government instituted the system of local administration, including dividing the rural populace into administrative villages, natural ritual boundaries were typically ignored, thus resulting in administrative boundaries that cross-cut these other boundaries. When compared to rural society in Central Thailand, it can be easily understood why rural society in northeastern Thailand is much more definable in terms of constituent villages.¹

Both Ban Nong Tum and Ban Tae are nucleated villages, although one is struck by the rather more openness in Ban Nong Tum than in Ban Tae, a function of ecological conditions to be discussed below. In addition to spatial boundaries, both Ban Nong Tum and Ban Tae are administratively demarcated, both being
recognized as muban with their own headmen. Neither, however, are self-contained ritual communities. Ban Nong Tum shares both its wat and the shrine to the village guardian spirit with the nearby village of Ban Non Khwao Nqi. This latter village constituted a "neighborhood" (khum) of Ban Nong Tum when the village was studied in 1963-1964. In 1967 the then headman of Ban Nong Tum successfully petitioned the district officials to have Ban Non Khwao Nqi recognized as a separate muban. In addition to remaining ritually integrated with Ban Nong Tum, the villagers of Ban Non Khwao Nqi also continued to send their children to the Ban Nong Tum school. Ban Tae villagers belong to a ritual community that includes households in several other nearby villages in the same Tambon. In fact, the whole tambon of Tambon Tae is much more an integrated community, a function of the physical closeness of all villages, than is typically the case in northeastern Thailand. Ban Tae households also send their children to a school that is attended by children from several other villages.

Although ritual boundaries do not correspond exactly with spatial and political boundaries in the case of either Ban Nong Tum or Ban Tae, villagers still have a sense of identity with local communities subsum-
ed under these names. For the concerns of this report, the political definition of the villages is a privileged definition since government programs are constructed with reference to administrative villages rather than with reference to ritual communities.

2. Environmental Setting and Ecological Constraints

Agriculture dominates the lives of people in Ban Nong Twn and Ban Tae just as it did their forebears and just as it does today for the vast majority of people in northeastern Thailand. In their efforts to wrest a living from the lands that surround their communities, Ban Nong Twn and Ban Tae villagers are constrained to adapt their productive efforts to the environmental conditions that impinge upon their lives.

Of the factors of production, water is the one most likely to be first discussed by villagers anywhere in the Northeast. The marked alteration between the half of the year in which the rains fall and the floods come and the other when drought-like conditions prevail defines significant parameters within which agriculture is practiced in the Northeast. The rains, brought by cyclonic storms over the South China Sea, begin in late April, reach their heaviest in August and September, and end by late September or early October. For a month
or so after the rains, flood waters first reach a peak and then rapidly recede. Then, between November and April, the absence of rain and the intensity of the sun, particularly in March and April, leaves the land parched.

While all villages in the Northeast are subject to this annual oscillation of rains/floods and drought, there are differences in the way in which the pattern is manifest in different micro-climatic zones. Areas lying in the rainshadow of the mountains dividing the northeast and northern parts of the country receive significantly less average amounts of rain (1,146 mm.) than do the areas in the Mekhong Valley (1,586 mm.) (Donner 1978:569). Ban Nong Tyn and Ban Tae lie in areas in which the total rainfall for the northeast. For example, in 1979 annual rainfall for Sisaket Province was 1,400 mm. while for Malaneawabham in the same year the total rainfall was 1,300 mm. (Thailand. National Economic and Social Development Board, Northeast Regional Development Center, Regional Planning Division 1980). 3

Not only is rainfall a variable throughout the region, but it also is a variable from year to year in the same places. These differences determine whether or not enough water is available at the time when crops are being planted and whether or not there
will be too much flood water at the end of the cropping cycle. Von Fleckenstein in a study made of a village in Roi-et, located also in the Chi River Valley and in the same micro-climatic zone as Ban Nong Tjun, has written of the devastatative effects that a variable rainfall pattern can have. He observed that in 1966 heavy rains began in May as usual, but then June and July were almost as free of rain as was the dry season month of March. Villagers were unable to plant their higher fields and had to plant new nursery beds in August. As a consequence, "only a very short-season rice variety can be grown." (von Fleckenstein 1971: 65-67). In other years in other villages, heavy rains concentrated at the end of the rainy season can result in floods that literally drown the rice plants. While both Ban Nong Tjun and Ban Tae are far enough away from rivers to escape from most disastrous floods, both villages do experience from time to time the destructive effects of late rains. 1979 was a good year for these villagers and the figures on income earned from the sale of rice must be seen in this light. In 1980 when field work was being carried on, there was great concern among villagers in both communities that the rains were going to be late, as early July was quite dry. But by the end of July the rains did come and
normal cropping patterns were followed.

With the end of the floods, northeastern villagers must confront a long period of dryness. The water table begins to drop and the swamps, ponds and other catchment areas begin to dry up as a result of high evaporation. Most villagers confront an increasing shortage of water that not only precludes agricultural activity but also creates problems for villagers in meeting their needs for water for drinking, cooking and bathing. They have to think, moreover, not only about their own needs, but also of those of their animals--and particularly of their water buffalos and cattle. By March many villagers throughout the region face serious shortages of water. There also exist by this time, if not earlier, few places where fish, the main protein source in the northeastern diet, can be caught.

Prior to the 1950s, efforts to overcome the constraints associated with water were undertaken almost exclusively by villagers themselves. Initial settlement in the region had been in those parts of the valleys of the major rivers (Mekong, Chi, Mun) and their main tributaries that were least vulnerable to flooding. Villages were also situated, insofar as possible, near permanent, or near-permanent sources of water--rivers, streams, ponds and Nong Han lake.
Villagers dug their own wells, expanded ponds and built tanks, albeit ones that rarely held water throughout the dry season. So long as population in the region remained rather low, villagers were not forced to settle in marginal areas where village efforts to control water would prove to be inadequate. But, as the population expanded and as villagers increased their involvement in the market economy, many villagers began to confront serious difficulties in controlling water resources sufficient to meet productive and/or consumption needs.

Beginning in the 1950s, the Thai government began to use public revenues to fund projects to improve water conditions for northeastern villagers. One major effort was directed toward construction of wells that would ensure sufficient supplies of water for consumption by villagers during the dry season. Although well projects have sometimes been inefficient and have been subject to the same problems of corruption that have plagued and continued to plague all public works projects in Thailand, the fact remains that during the 1960s and 1970s, many, if not most villages throughout the Northeast experienced a marked improvement in the supply of water for home consumption as a consequence of having wells that had been dug by
by those working for or contracted by one government agency or another.

The changed situation is well illustrated by what has happened in Ban Nong Tün. In 1963-1964 when research was first carried out in this village, there was only one well from which water could be drawn for the entire dry season and one other that provided water for part of the dry season. Both of these wells had been dug by villagers themselves. Villagers also made use of water jars and oil drums that held several gallons of rain water, but these were always emptied within a few weeks after the rains stopped. During the period between 1964 and 1979, four concrete lined wells and two pump wells were constructed with government aid, the latter two being the major source of water during the dry season for perhaps a majority of households in the village. In addition, owing to increased cash income, several villagers had also constructed private wells and the villagers as a collectivity had contributed 20,000 baht to build a quite sophisticated block and concrete rain water storage tank at one end of the preaching hall (salawat) in the grounds of the temple-monastery. The point had been reached by 1979 that government investment in additional hand-dug concrete lined wells was no longer reasonable
in Ban Nong Tun; nor, I suspect was it in most other villages in the Northeast. Despite this, the inertia of the original endeavor remained, and significant monies, such as those allocated under the Provincial Development Program (krongkan phatthana cangwat) have continued to be spent for what are today inadequate wells (see Keyes 1979 for more details). Ban Tae has fared less well than Ban Nong Tun as even some of the pump wells installed in the village do not provide water throughout the dry season. One drilled well that was to provide pump water was a total failure, a function of a clear case of corruption. Ban Tae villagers are more dependent than Ban Nong Tun villagers upon rain water stored in large containers. These facts notwithstanding, even Ban Tae villagers have, like most villagers throughout the Northeast, benefited to some degree from the efforts of the government to improve the water supply for home use in villages in the Northeast.

Beginning in the 1950s the government also initiated projects that would make possible the irrigation of land so that crop production could be expanded. The first government-supported irrigation projects resulted in the creation of a series of small tanks and diversion dams distributed throughout the region.
The impact of these efforts was not very significant. As Platenius, writing in 1963, reports: "The majority of the diversion dams and tanks did not give the expected results and only 38 of the 132 tanks built have sufficient storage capacity to justify the construction of a farm distribution system" (Platenius 1963:10). In the 1960s, with considerable support from external agencies, the Thai government entered into a far more ambitious program involving the construction of several major dams, the most important of which being the Nam Pong Dam on a tributary of the Chi in Khon Kaen Province. Yet, today, even the major irrigation schemes have permitted villagers to expand cultivation on only a very small portion of the land. In 1978/79 only 7.2 percent of all cultivated land throughout the Northeast is now irrigated (Thailand. National Economic and Social Development Board, Northeast Regional Development Center, Regional Planning Division, 1980). While this percentage will increase as the projects are extended, it is unlikely that the percentage will rise above ten percent before the end of the century.

Some land in both Mahasarakham and Sisaket has also been irrigated with waters from one of the government-sponsored projects. Sisaket, with 3.7 percent of its land under irrigation, has one of the
lowest percentages of irrigated land in the Northeast (only three provinces have less land under irrigation); Mahasarakham is the median range with 7.4 percent of the cultivated land in the province under irrigation (op. cit.). Neither Ban Nong T’un nor Ban Tae are among those villages in their respective provinces that lie within the area of an irrigation project. Moreover, given their situation relative to rivers and significant streams, it is unlikely that they will ever benefit from one of the major irrigation schemes.

In the past few years, there appears to have been a shift in policy away from an emphasis on the large and very expensive irrigation schemes toward small-scale projects that can be constructed through cooperation between the government and villagers. Such a shift may well mean that villagers in many parts of the Northeast will gain more control over their water resources than they have had to date. As of this writing, however, it would appear that Ban Nong T’un and Ban Tae will remain among the majority of villages in the Northeast that will continue to be constrained to adapt to water conditions that are still a function primarily of the natural processes.

Ban Nong T’un villagers are close enough to a tank (Nong Krathum) in the same tambon and a recently-
constructed reservoir (Mae Aeng) in a neighboring tambon to use these bodies of water as a source for fish. Ban Nong Tun villagers to this day catch most of the fish that they consume, supplementing their own catches with fish obtained through barter with villagers who live near the Chi River (Ban Nong Tun villagers rarely fish in the Chi themselves). There are no nearby tanks or reservoirs where Ban Tae villagers can fish and as they are also too far away from the river to make it a usual place to fish, they have become dependent upon the local market in Uthumphonphisai for the fish that constitutes an important part of their diet.

While the soil conditions do vary throughout the Northeast, those of Ban Nong Tun and Ban Tae are presumptively the same since the classification of soil types for the two provinces reveal the same characteristics (op. cit). These are alluvial soils consisting of fine sandy loam on the surface with clays below. According to Donner, these soils "are characterized by generally poor drainage in the lower levels and have a moderate fertility for rice production with high contents of calcium, magnesium, and potassium, but low contents of phoserous, organic matter and nitrogen. Acidity ranges from moderate to slight, but is somewhat higher in swampy areas" (Donner 1978:575).
There is rather more swampland around Ban Nong Tun than Ban Tae and on the basis of brief inspection it would appear that there is more laterite in the soils of Ban Nong Tun than in the soils of Ban Tae.

The soils of the two villages, like those throughout the Northeast, are inherently much less fertile than silt loams that are found in temperate zones or the soils of the alluvial areas of Southeast Asia. Not only are the soils of the Khorat basin not well-suited to rice cultivation, they also define significant limitations for the cultivation of any crops. The limiting nature of the Khorat soils has been described in one source as follows:

*The Korat fine sandy and related soils . . . are generally infertile, being characteristically sandy, acidic, low in available phosphorus, available potash, and organic matter. High yields of crops cannot be maintained without measures to improve soil fertility.*

Being sandy and having a low organic matter content, the soils have a low moisture holding capacity (Regional Planning and Area Development Project 1979:19; also see p. 77).
The characteristics of the soils in which Ban Nong Tvn and Ban Tae, as well as other northeastern villagers, plant their crops, while not known in technical terms, constrain strongly their agricultural efforts.

Both Ban Nong Tvn and Ban Tae are situated in the Korat basin, that part of the Northeast consisting of the areas drained by the Mun and Chi rivers, in which the topography is relatively undifferentiated. There are, however, local topographical differences that give the two villages a significantly different character. Ban Nong Tvn is located in gently undulating land in which portions rise to altitudes sufficient to make them relatively unsuitable for rice cultivation. The village itself is located on a large stretch of such elevated land and villagers have built their houses amongst gardens, stands of trees and bamboo and a few fields with such upland crops as kenaf. Other higher lands in the vicinity have, until quite recently, been heavily wooded. Only as population pressures have become intense, mainly in the last twenty years, have these wooded areas been converted into terraced fields. Yet even today, Ban Nong Tvn appears to be surrounded by woods when compared with Ban Tae.

Ban Tae is located in an area that is much flatter than the area around Ban Nong Tvn. Because
so much of the land had proven suitable for rice cultivation, houses have been crowded together with little space in between. The area surrounding Ban Tae is much more a continual field than is the case in Ban Nông T.vn.

These differences in topographical situation have lent themselves to somewhat different patterns of adaptation in the two villages. Around Ban Nông T.vn there has been sufficient uncultivated land to use for grazing and in Ban Nông T.vn there are significantly larger holdings of buffalo and particularly cattle than there are in Ban Tae (for figures see Table below). Ban Nông T.vn villagers have also been able to make use of woods in a way that is not possible for Ban Tae villagers. Charcoal production and production of woven bamboo matting and walling are significant enterprises in Ban Nông T.vn whereas they are not in Ban Tae. Given the rapid reduction in the wooded areas around the village, however, it is unlikely that Ban Nông T.vn villagers will be able to maintain the level of output of charcoal, and perhaps even bamboo matting and walling, that they have in the past.

The ecological adaptation that Ban Nông T.vn and Ban Tae villagers, like that of the overwhelming majority of their fellow northeasterners past and present, have made in the environments in which they
live has been shaped primarily by the production of wet-rice. All other traditional productive activities—fishing in the rivers, streams and other bodies of water, collecting of wild plants from the forests and ponds, cultivating gardens of vegetables and fruits, husbanding of buffalos, cattle and chickens, fashioning of implements, manufacture of cloth, have been articulated with the dominant concern with the production of rice. Even as other productive activities have begun, mainly in the past two or three decades, to assume significance, rice production has still remained dominant. The preeminence of rice in the productive lives of villagers throughout the Northeast has been maintained in the face of natural conditions that are not nearly so well suited for such purposes as are conditions elsewhere in tropical Southeast Asia or temperate East Asia (see, in this regard, International Bank for Reconstruction and Development 1959:7). Northeastern villagers have not been irrational in continuing to concentrate on the producing of rice since such production provides them with the basic food in their own diet, since the market for rice has been strong and since they have a sophisticated knowledge for cultivation of rice. Yet, the fact remains that the ecological conditions in most of the Northeast, including
those in Ban Nong Twn and Ban Tae, are less than ideal, particularly when compared with those in the fertile Central Plain or the Chiang Mai Plain where irrigation is much easier. The predominance of rice cultivation in the mode of ecological adaptation found in northeastern villages, and particularly in such rainfed agricultural communities as Ban Nong Twn and Ban Tae, is a significant contributing factor, but by no means the sole one, to the conditions of underdevelopment that prevail throughout the Northeast.

3. Population Growth and Expansion of Cultivated Land

The problems generated by the adaptation of wet-rice growing practices to the environmental conditions that exist in northeastern Thailand have been exacerabated by the marked population growth in the region. The 1911-12 census showed the Northeast with a population of 2,624,120 out of a total population in the Kingdom of Siam of 8,266,408 (Thailand. Ministry of Finance 1921:22, Table 4). In the 1970 census, the total population of the region had risen to 12,025,140 out of a total population of the kingdom of 34,397,374 (Thailand. National Statistical Office, Office of the Prime Minister, n.d.:1-2). In other words, the population of the region had grown by 358 percent in this
60 year period while the population of the whole country had grown by 316 percent. The population of the Northeast as a percentage of the total population of the country had grown from 31.7% in 1911/12 to 35.0% in 1970. Estimates of the population in 1979, being 15.8 million for the Northeast and 46.1 million for the whole country, would indicate a slight decline in the percentage of the population found in the Northeast (i.e., 34.3%), but whether or not this was the case will only be known when the figures from the 1980 census are available.

The Northeast has experienced high population growth rates since the 1920s, albeit with a decline during the war. For the decade prior to 1920 the rate of growth was approximately 2.0% per annum; it rose to 2.7% per year for the period of the 1920s and increased again to 3.3% for the decade between 1930 and 1940. During the 1940s, the rate declined to 2.9% and then rose again to 3.1% in the 1950s and 3.4% in the 1960s. The rate has continued to be high in the 1970s, although the figure given in Table I is somewhat deceptive as it is based upon population estimates for 1979 and upon unrevised figures for the 1970 census. Another source (Khana Phucattham, Warsan Setthakit lae Sangkhom, n.d., 4) has given the rate of population growth for the

<table>
<thead>
<tr>
<th></th>
<th>1960</th>
<th>1970</th>
<th>1979a/</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tot. Pop. % Agric.</td>
<td>Tot. Pop. % Agric.</td>
<td>% Increase</td>
<td>Tot. Pop. % Increase</td>
<td></td>
</tr>
<tr>
<td>Northeast Region</td>
<td>8,991,543 88.3</td>
<td>12,025,140 78.9</td>
<td>3.4</td>
<td>15,792,825 3.5</td>
<td></td>
</tr>
<tr>
<td>Mahasarakham</td>
<td>499,373 92.0</td>
<td>612,832 87.0</td>
<td>2.3</td>
<td>751,657 2.7</td>
<td></td>
</tr>
<tr>
<td>Sisaket</td>
<td>601,356 93.5</td>
<td>796,295 85.9</td>
<td>3.2</td>
<td>1,066,287 3.4</td>
<td></td>
</tr>
<tr>
<td>Whole Kingdom</td>
<td>26,257,916 74.6</td>
<td>34,397,374 62.9</td>
<td>3.1</td>
<td>46,100,000 e/</td>
<td></td>
</tr>
</tbody>
</table>


Notes: (a) For 1960, percentages were calculated with reference to "population residing in agricultural households."
(b) For 1970, percentages were calculated with reference to statistics given on numbers of agricultural households.
(c) Percentage increase in population per year for decade between 1960 and 1970.
(d) Figures for 1979 are estimates.
(e) As total population figure for the kingdom was derived from a different source than those for the Northeast, comparison is somewhat misleading and percentage increase in population per year was not calculated.
Northeast for the period of 1969-1974 as 2.8, declining to 2.1 for the period between 1975 and 1979. Recent data from other sources (Thailand. National Economic and Social Development Board, Northeast Regional Development Center, Regional Planning Division, 1980) support the finding that there has been a marked decline in population growth rate in the Northeast during the last part of the 1970s. The population of the Northeast was estimated to have grown only 1.9 percent in the year from 1978 to 1979 and only 2.1 percent for the previous year (1977-1978).

That birth control programs have begun to have significant dampening effect upon population growth in the Northeast is well illustrated by the case of Ban Nong Tun. In a survey carried out in 1963, I discovered that not only did no woman in the village practice any form of birth control, but that no one in the village had any knowledge of birth control methods other than a highly dangerous form of abortion. By the late 1960s some birth control programs had been instituted in the Northeast but I found no evidence of their impact in Ban Nong Tun on visits there in 1967 and 1968. By 1972 when I next spent some time in the village, I discovered that birth control practices had achieved considerable popularity. In the survey
made in 1980, I found that in 82 out of 127 households there was at least one woman practicing birth control or someone (usually a woman, but sometimes a man) who had been sterilized. That some form of birth control had been adopted by 64.5% of the households in the village is a remarkable figure, particularly when it is recognized that many of those households in which birth control practices have not been instituted are ones in which a young couple has not yet had as many children as they desire to have. I also found that most younger couples that I talked to had determined to have no more than four children and many have restricted to have only two children.

The data from Ban Tae do not show as high a percentage of households in which birth control was being practiced--42% or 55 out of 117 households. The difference is probably not significant, given the smaller average household size in Ban Tae in 1980 as compared with Ban Nông Twn in 1980 (see Table II). Moreover, the data for Ban Tae still clearly indicate that birth control practices have also been widely accepted in that village.

The institution of birth control practices in the rural communities of the Northeast is too recent to have had any positive economic impact. Indeed, the
TABLE II: Population, Number of Households, and Average Household Size, Ban Nong Tyn, Tambon Khwao, Amphoe Myang, Mahasarakham and Ban Tae, Tambon Tae, Amphoe Uthumphonphisa1, Sisaket

<table>
<thead>
<tr>
<th>Village</th>
<th>Population</th>
<th>No. of Households</th>
<th>Average Hsebld. Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ban Nong Tyn (w/o BNKN)</td>
<td>828 (822)</td>
<td>129</td>
<td>6.4</td>
</tr>
<tr>
<td>Ban Nong Tyn (w BNKN), 1980</td>
<td>1,094 (1,088)</td>
<td>174</td>
<td>6.3</td>
</tr>
<tr>
<td>Ban Nong Tyn (w/o KNKN)</td>
<td>537 (532)</td>
<td>88</td>
<td>6.1</td>
</tr>
<tr>
<td>Ban Nong Tyn (w/ KNKN), 1963</td>
<td>705 (700)</td>
<td>119</td>
<td>5.9</td>
</tr>
<tr>
<td>Ban Tae, 1980</td>
<td>705 (684)</td>
<td>117</td>
<td>5.8</td>
</tr>
</tbody>
</table>

Sources: Surveys carried out in Ban Nong Tyn (and Ban Non Khwao Nqi) in 1963 and 1964 and in Ban Nong Tyn and Ban Tae in 1980.

Notes: (a) In 1963 the village of Ban Nong Tyn included a "neighborhood" (khum), Khum Non Khwao Nqi, that in 1967 became a separate administrative village, Ban Non Khwao Nqi.

(b) Figures in parentheses represent the populations of the villages excluding the residents of the temple-monasteries. These figures are used in calculating average household size.
rapid population growth of the previous two decades has resulted today in an expanded labor force and an increased number of women of child-bearing age. It will take as much as two generations more before the present implementation of birth control programs will begin to have significant effects. In the meantime, the populace of the Northeast must still adapt to a situation in which there are six to seven times as many people living in the region as there were in 1911/12.

Some of the social implications of this rapid expansion of population can again be well illustrated by the case of Ban Nong Tün. The village of Ban Nong Tün was first founded in about the middle of the 19th-century (for discussion of how this date was determined, see Keyes 1976:49n). It then grew steadily, albeit slowly, with some born in the village leaving each year following marriage or to homesteads elsewhere in the region. By the late 1930s the population may have grown to between 800 and 1000 people. At this point, pressures on the land resources available to the village must have begun to become acute. It appears that like the neighboring village of Ban Iat, the fertility of the soil declined as the amount of labor relative to the land increased (Thavorn Koomalayavisai 1967:4). From the 1940s, there was a
significant out-migration of villagers; school records from Ban Nong Tun show that 131 school-aged children "migrated away from the village with their parents" during the period from 1935 to 1963. Allowing for the fact that some of these children were of the same parents and that others returned to the village at a later date, there were at least 75 families who left the village permanently. How many couples left before they had school-aged children could not be determined, but the number would most likely not have been insignificant.

Although the birth rate was high in the 1950s, the population of the village appears to have stabilized at around 700-750 for most of this period. Then, following the population explosion of the 1960s, the village began to expand once again. In a survey made in 1963 there was a total of 537 people living in the 88 households of the three neighborhoods (khum) and one institution (the wat) that today constitute the village of Ban Nong Tun. In the survey made in the summer of 1980 it was found that the population of Ban Nong Tun had grown to a total of 828 people living in 129 households and the wat. This represents a 54.2 percent increase in population over the 17 year period, or a growth rate of 3.2% per year for the period. The pressures generated from this increase
are reflected in the increase of average household size over the period: since households are the basic economic units of the community, it is clear that in 1980, households were having to support more people than they were in 1963.

Comparable data are not available on the population dynamics of Pan Tae. If one assumes, as is likely given the growth rates for the province, that the growth rate in Ban Tae has been as high as it has been in Ban Nong Tvn, then the fact that Ban Tae has today a significantly lower average household size than Ban Nong Tvn (see Table II) suggests that there has been a higher rate of out-migration in Ban Tae than in Ban Nong Tvn.

Throughout the Northeast, the increase in population has led to an increase in demand for productive land. This demand has also been fueled by the potentiality that northeastern villagers have perceived lies in producing for the market. The high demand for agricultural land has led to a steady conversion of land classified as “forest and scrub” into fields planted to various crops. Speaking of the country as a whole, the World Bank report based on statistics obtained in 1976 reports that:

The key factor in the growth of Thailand in the 1960s and early 1970s has been the
increase of nearly 45 per year in the area under cultivation. As a result, areas under forest have been reduced from 56% of the total land area in 1963 to 40% in 1973. This process of expansion obviously cannot continue indefinitely and the approaching end of the land frontier has been a matter of concern in Thailand for some years. (International Bank for Reconstruction and Development 1978:71).

Nowhere in Thailand has the shift in land utilization been more dramatic than in the Northeast. In 1956, 61.5% of the total land of the northeastern region was classified as forest land (Pendleton 1962:135; this same figure is repeated in Platenius 1963:6 with a misleading indication that it is for 1961). By 1965 the figure had dropped to 38.6% (statistic calculated from Donner 1978:72-3). In 1973 the total had declined to 27.2% and by 1977 the figures stood at 15.8% (Thailand. National Economic and Social Development Board, Northeast Regional Development Center, Regional Planning Division 1980). The decline in land classified as forest and scrub land has been associated with a commensurate increase in land under cultivation.
One study shows that the area planted to rice alone increased for the Northeast as a whole at a rate of 3.2% per year for the period from 1963 to 1977 (Regional Planning and Area Development Project 1979:64). The land frontier would appear to have nearly disappeared in the Northeast; the World Bank reports that by 1975 the percentage of forest and scrub land, taken as a percentage of holdings available for cultivation, stood at 9%, lower than the comparable figure for any other part of the country (International Bank for Reconstruction and Development 1978:71).

The rapid expansion of cultivated land in the Northeast has been accomplished primarily by villagers who have homesteaded in areas where villages previously did not exist. But even in some established villages, significant, even dramatic expansion of the land base has occurred. Ban Nong Tun is one such village.

Ban Nong Tun was found to have a rather smaller land base, given its population, when the agricultural census of 1963 was carried out. (See Table III) The average land holdings in Ban Nong Tun in 1963 (10.1 rai per holding) was significantly less than the average per holding (25.0 rai) for the whole of Nakhasarakham province as revealed in the report of the 1963 census (figure calculated from data reported
TABLE III: Land Base, Ban Nong Tyn, Tambon Khwao, Amphoe Myang, Cangwat Mahasarakham, 1963 and 1980

<table>
<thead>
<tr>
<th>Type of Land</th>
<th>1963</th>
<th>1980</th>
<th>Percentage Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Land</td>
<td>No. holdings</td>
<td>% total holdings</td>
</tr>
<tr>
<td>Paddy</td>
<td>605.0</td>
<td>75</td>
<td>85.2%</td>
</tr>
<tr>
<td>Upland</td>
<td>52.5</td>
<td>13</td>
<td>14.8</td>
</tr>
<tr>
<td>Garden and House land</td>
<td>130.8</td>
<td>76</td>
<td>86.4</td>
</tr>
<tr>
<td>Total land</td>
<td>788.3</td>
<td>78</td>
<td>88.6</td>
</tr>
</tbody>
</table>

Sources: Census of Agriculture, 1963 (data recorded in Ban Nong Tyn); Survey carried out in Ban Nong Tyn in 1980

Notes: (a) Total number of households included in the neighborhoods of Ban Nong Tyn that would later constitute the village without Ban Non Khwao Npi = 88.
(b) Total number of households included in survey = 128 (all but one household).
in Thailand. National Statistical Office, Office of the Prime Minister 1965:12). At the time I suspected that the village had converted into fields all available land in the vicinity that was suitable for cultivation and that the low figure represented existing population pressures.

It was rather startling, then, to discover that in 1980 average holdings had increased dramatically (by 102.2% for total holdings) despite a marked population increase. Inquiries were made as to how this transformation had occurred. It was pointed out by one informant that much land, higher in elevation than the then existing paddy fields, that had been wooded in 1963 had now been converted to terraced rice fields. This same informant also pointed out a tract of "several hundred rai" that had contained the village cemetery (pa saːː) in 1963 and that now had only a few rai of woods left. Another major source of land for Ban Nong Tăn villagers was found in a large tract of public land (thi satharana), the use of which had become a matter of considerable dispute between villagers and the government (see below). Even allowing for some error in the 1963 figures, it is still apparent that Ban Nông Tôn villagers have succeeded in effecting a dramatic increase in the
cultivable land available to them. Like their counterparts in many other villages in the Northeast, this expansion has had its costs. Ban Nong Tun villagers not only must look to sources other than nearby woods for the materials to build their houses (they are restricted in this regard not only by the availability of materials but also by rather strictly enforced laws), but they are also finding it difficult to locate the wood necessary to maintain significant charcoal production. No longer are there nearby woods where villagers can find many wild plants and small animal life that they have long used as part of their diet. They also now have considerable difficulty in locating sufficient pasturage for their animals. And in their efforts to bring new land under cultivation, they have come into conflict with government authority.

The dramatic increase in the land base of Ban Nong Tun may not be atypical of Mahasarakham province for this province showed the highest rate of increase of area planted to rice—9.6% per year—of any province in the Northeast for the period between 1963 and 1977 (Regional Planning and Area Development Project 1979:64). Sisaket, by way of contrast, showed the lowest rate of increase—1.6% per year (loc. cit.).

Even though Ban Nong Tun villagers have increased
the average size of holdings, they still are below the regional average for 1974 of 25 rai (International Bank for Reconstruction and Development.1978:39; the same source gives the mean for the same year as 31.7 rai--p. 35). Ban Tae appears to be even less well off as regards land holdings, with an average of 17.1 rai per holding. As in Ban Nong Tun in 1980, almost every household in Ban Tae owns some land (114 out of 117 or 97.4%). The statistics suggest that Ban Tae villagers may have reached the end of the land frontier in the vicinity of their village some time back; this assumption finds confirmation in the low rate of increase in area under paddy cultivation in Sisaket during the period from 1963-1977.

Villagers in both communities, as in other villages throughout northeastern Thailand, are constrained in gaining access to productive land not only by population pressures on existing land resources. Access to land is also determined by customary patterns of land tenure, by government laws and political acts, and by market forces.
4. **Social Organization of Production**

The basic productive and resource-owning unit in the northeastern Thai village consists of a group of kinsmen, usually those still residing within the same "household" (langkhahwan, literally, "roof-house"). Based upon analysis of data gathered in Ban Nong Tum in 1963, and already published elsewhere (Keyes 1975a) as well as upon other studies (see Amyot 1964, Kickert 1960, Kirsch 1967, Klausner 1972, Lefferts 1974, Lux 1962, 1969, Madge 1957, Mizuno 1968, 1971, Prajuab 1971, and Yatsushiro et al. 1965, 1967; also cf. Keyes 1975b) made in various parts in the Northeast, it is possible to identify a structure of such units that is common to all Lao-speaking communities in the region. Although a detailed analysis of data collected in Ban Nong Tum and Ban Tae will not be presented here, it can still be concluded that these data are consistent with this structure. In other words, there is a marked continuity to the present day in the type of kin group that functions as the basic economic unit of rural Thai-Lao society in northeastern Thailand.

A villager becomes a member of a domestic group first by birth. A few children may change their group affiliation before they get married if they are given as "foster children" (lükliling, literally, "child who is nourished [by another]") to another family, one in which
the senior couple are typically the grandparents or includes siblings of the actual parents of the child. "Foster children" are found in households in which the couple themselves have been unable to have children or have few children in comparison to their siblings. Children are also sometimes left to be fostered by others when their parents have left the village in search of better economic opportunities elsewhere. While sometimes foster children will be accorded the same rights as real children, formal adoption appears to be rare in rural northeastern Thailand (cf. Keyes 1975a: 283). In some cases, it is difficult to determine whether a child living with other than his or her own parents is a foster child or a servant. Very poor families with a large number of children sometimes feel constrained to ask better-off relations to accept a child as an economic dependent in return for the child performing domestic and agricultural services for the recipient family.

A child might leave his family temporarily, or even permanently, in order to follow non-agricultural pursuits. For example, a young boy might become a novice (nen, samanen) in the Buddhist Sangha or monkhood. While most novices only spend a brief time in the order, usually in the local village wat, some spend a number of years in monastic schools in northeastern towns or even in
Bangkok. A family that is committed to providing a child with an education beyond that available in his or her home community may send the child off to a nearby town to live with more distant relatives or even non-relatives for the school year (for a poignant telling of the experiences of one such child who was exceptional in the 1950s in obtaining schooling outside of her natal village, see Prajuab, 1971:71 et passim). During the past three decades, that is during the period when Thailand's economy has been expanding and diversifying, it has been very common for young northeastern villagers, girls as well as boys, to leave their families and home communities before they marry in order to seek employment in Bangkok and other economic centers. While most such villagers eventually return to settle down in their home communities, and thus to exercise their rights as members of kin-based economic groups, some find permanent jobs outside of their home communities. (Occupational changes will be further discussed at length below.)

It is marriage that leads to most shifts in kin group affiliation. When a marriage occurs, it is the custom for the groom to leave his parents' household and to move into the household of his wife's parents. Most villagers throughout the rural Northeast have observed this pattern, although in some cases particular reasons
have led to other forms of post-marital residence. A family without any daughters, for example, might persuade a son to bring his wife to live with them; a woman whose parents have died before she has married might set up an independent household with her husband; and so on. While a couple lives in the same household as the wife's parents, they remain totally integrated into the domestic economy of that household.

Most young couples do not remain forever as part of the households of the wife's parents. After they have had a child or before the marriage of the wife's younger sister, the couple will move out and form an independent household. The only exceptions to this pattern occur with the youngest daughter who remains in her parents' household until their death and, on that occasion, inherits, with her husband, the physical structure that they have shared with the wife's parents. When a couple moves out of the household of the wife's parents, it does not mean that the economic binds that hold the two families together are necessarily broken. Most couples, after having moved out of the household of the wife's parents, will construct a new house on land belonging to the wife's family. If, however, the wife's family lacks sufficient agricultural land to support all the members, a couple may not only leave the parental
household, but also leave the village altogether in order to find agricultural land elsewhere. Those families that do remain in the village usually continue to be part of an economic unit headed by the wife's parents until the surviving parent dies or one or both parents "retire."

So long as the members of daughter households continue to cooperate in common economic endeavors with the parental household, they form a distinct kin group. I have called such groups "uxori-parentilocal extended families" (Keyes 1975a) because they have been formed as a consequence of a pattern of postmarital residence whereby the husband comes to live within the domain of the wife's parents. Within such kin groups, constituent households may have a considerable degree of economic independence, but they do not become fully separate until the parental estate has been finally divided.

Rights in land are not accorded to individuals in Thai-Lao communities in rural northeastern society; they are accorded rather to married couples. An individual who never married and who does not take on another occupation (e.g., as a monk) remains economically dependent upon his or her parents or siblings for life. On the other hand, all couples who reside near the parents of one of their members are entitled to receive, eventually, an equal portion of the parental estate. Since residence,
as already noted, is by custom and by usual practice uxorilocal, the right to inherit land is usually exercised through the wife. There are, however, also cases where the right has been realized through the husband, even in rare cases when the husband has sisters who have married. In other words, a villager establishes a right to inherit land by marrying and by affiliating with and residing in proximity to the extended kin group of his or her parents or of the parents of his or her spouse. Some villagers relinquish this right by moving away permanently from their home communities before or after their marriage in order to follow other economic pursuits, in some cases agricultural and in other cases non-agricultural.

For any family in which there is more than one couple who has the right to claim a part of the parental estate, the exercise of such rights will lead to a splitting of the estate. In villages for which the land frontier has already been closed, the fragmentation of estates can lead to the emergence of economic units that are not viable because they do not have enough land to produce sufficiently for the needs of their members. This threat has been consciously recognized by villagers in established communities where most available land has long since been claimed by existing kin groups. In
such communities, subtle, and sometimes not so subtle, pressure is brought to bear on couples who have the potential right of inheritance to move elsewhere in search of land that can be homesteaded. In both Ban Nông Tấn and Ban Tae, as already noted, a significant number of villagers have in each of the past several generations moved out of their communities in search of new land. As the land frontier is being reached throughout the northeastern region, this strategy is becoming less possible; one can predict as a consequence that there will be an increase in conflict and dispute over inheritance rights in northeastern society.

The threat of fragmentation also tends to mediate against the division of an estate before both parents have died. On the other hand, junior couples, particularly when they have been married for a long time and have an established family, often are anxious to receive their part of an estate and to become economically independent. The result of these two counter-directional tendencies is a process whereby an estate is divided piecemeal through time. This process of kin group fissioning takes on different colorations in different cases depending upon the outcome of negotiations and the resolution of internal tensions that occur within particular kin groups.
Although rights to land are gained primarily through women, Thai-Lao custom dictates that if possible men should be the heads of households and the heads of extended kin groups. Only when a husband has died or a woman has been left by her husband who has gone off to work elsewhere or to remarry do women become heads of households. That males are the recognized heads of kin groups does not, however, imply that women have a subordinate role in the economic affairs of the kin groups to which they belong. Interviews and observations in both Ban Nong Twn and Ban Tae reveal that adult women engage fully in determining how the productive labor of their kin groups should be deployed, what investments should be made, and how cash income should be expended. There are, however, some significant differences in the roles played by males and females in the articulation of the domestic economy of kin groups with the larger economy of the society.

In northeastern villages, men tend to predominate in the marketing of such cash crops as rice, kenaf, and cassava, although when women are heads of households they may take a part in this trade. The trade in large animals—water buffalos, cattle, horses, and pigs—is almost exclusively a male affair. Women, on the other hand, have taken charge of most marketing of vegetables and fruit.
In Ban Tae, for example, one will find the rail station very crowded in the early morning during the season when melons, cucumbers, vegetable marrows and some other types of vegetables are being produced. Women come, sometimes accompanied by men to help lift the large sacks and baskets, to take the local trains to Utumphonphisai and even more distant markets to sell their produce. They return home each afternoon or evening, having used some of their money to buy other foods and other goods for family use. In every market-place throughout the Northeast—as throughout Thailand, and indeed, throughout all of Southeast Asia—most of the sellers will be women.

Women also are the primary—indeed, the almost exclusive—producers of marketable cloth and while men predominate in the production of rattan implements, tools and such specialized implements as the khaen, the polyphonic mouth organ that has become a distinctive symbol of northeastern culture. A highly structured sexual division of labor is to be found in those few villages scattered throughout the region that specialize in the production of pottery for sale. In such villages as Ban Mø, located in the same tambon as Ban Nøng Tøn in Mahasarakham, women make the pots, transmitting their skills to their daughters within domestic groups; the adult men, mainly the husbands of the producing women,
take the pots and peddle them throughout the surrounding countryside and take them to be sold in nearby markets. In Ban Tae where a number of women are involved in a silk-producing cooperative, marketing is also handled by women.

While there is some degree of sexual division of labor in rural Thai-Lao society, economic decision making is made not by individual males or individual females; rather it is made by husbands and wives together as co-members of households, and by them together with parents or married children and children-in-law who belong to the same extended kin groups. The basic role played by domestic groups in the economy of rural northeastern Thailand often does not receive proper attention by planners and implementers of official development programs or by analysts who have tended instead to focus on the fact that men predominate as heads of households or to employ rational-actor theories that presuppose the independent decision-making of individual (males).

While there is a structural similarity in the domestic groups found in all Thai-Lao communities, these groups are differentiated in terms of the productive resources that they control. The most significant of such resources is, of course, land. Rural northeastern Thailand today, as in the past, consists of a populace
of small-holders. As can be seen from Table IV, as of 1973 only a little over three percent of all agricultural land in Northeastern Thailand was being rented, a very low figure for most of Asia and even for Thailand. Indeed, the Northeast contrasts strongly in this regard with Central Thailand where nearly thirty percent of all agricultural land was, by 1973, being rented. From this same table it can also be seen that the percentage of households renting in land in Northeastern Thailand—averaging 8.7% for the region as a whole—is also very low. Whereas tenancy has become a significant issue for Central Thailand and also for the Chiang Mai valley in northern Thailand (the area that accounts for the high percentages of agricultural holdings rented and agricultural households renting in for the northern region), it is not an issue, except in scattered pockets, in the northeastern region. Only the provinces of Chaiyaphum, Buriram, and Nakhon Ratchasima (Khorat) have areas in which renting in has reached significant proportions.9

In both Mahasarakham and Sisaket provinces, the provinces in which the two villages studied for this report are located, the percentage of area of agricultural holding rented is somewhat below the average for the region as a whole. Mahasarakham has a somewhat higher than average percentage of agricultural households
<table>
<thead>
<tr>
<th>Province or Region</th>
<th>% of Land in Agricultural Holdings</th>
<th>% of Area of Agricultural Holding Rented</th>
<th>% of Agricultural Households Renting In</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mahasarakham</td>
<td>77.37</td>
<td>2.45</td>
<td>10.98</td>
</tr>
<tr>
<td>Sisaket</td>
<td>46.84</td>
<td>2.34</td>
<td>6.67</td>
</tr>
<tr>
<td>Kalasin</td>
<td>49.25</td>
<td>2.02</td>
<td>5.40</td>
</tr>
<tr>
<td>Khon Kaen</td>
<td>49.85</td>
<td>2.20</td>
<td>5.66</td>
</tr>
<tr>
<td>Chaiyaphum</td>
<td>37.99</td>
<td>5.82</td>
<td>17.38</td>
</tr>
<tr>
<td>Nakhor Phanom</td>
<td>31.42</td>
<td>1.35</td>
<td>5.58</td>
</tr>
<tr>
<td>Nakhon Ratrasima</td>
<td>48.07</td>
<td>5.56</td>
<td>14.30</td>
</tr>
<tr>
<td>Nong Khai</td>
<td>39.46</td>
<td>2.07</td>
<td>8.95</td>
</tr>
<tr>
<td>Buriram</td>
<td>61.02</td>
<td>7.34</td>
<td>17.84</td>
</tr>
<tr>
<td>Yasothon</td>
<td>57.12</td>
<td>1.39</td>
<td>n.a.</td>
</tr>
<tr>
<td>Roi Et</td>
<td>61.08</td>
<td>2.06</td>
<td>5.24</td>
</tr>
<tr>
<td>Loei</td>
<td>10.60</td>
<td>0.51</td>
<td>1.51</td>
</tr>
<tr>
<td>Sakon Nakhon</td>
<td>40.88</td>
<td>1.45</td>
<td>3.55</td>
</tr>
<tr>
<td>Surin</td>
<td>57.51</td>
<td>3.56</td>
<td>10.96</td>
</tr>
<tr>
<td>Udorn Thani</td>
<td>47.49</td>
<td>3.17</td>
<td>5.86</td>
</tr>
<tr>
<td>Ubon</td>
<td>42.06</td>
<td>1.95</td>
<td>5.25</td>
</tr>
<tr>
<td>Northeast Region</td>
<td>45.86</td>
<td>3.27</td>
<td>8.68</td>
</tr>
<tr>
<td>Central Region</td>
<td>42.20</td>
<td>29.27</td>
<td>41.31</td>
</tr>
<tr>
<td>Northern Region</td>
<td>21.83</td>
<td>15.74</td>
<td>26.71</td>
</tr>
<tr>
<td>Southern Region</td>
<td>31.20</td>
<td>4.42</td>
<td>17.48</td>
</tr>
<tr>
<td>Thailand</td>
<td>35.16</td>
<td>12.25</td>
<td>20.84</td>
</tr>
</tbody>
</table>

who rent land in while Sisaket has a lower than average percentage; but in neither case does the incidence approach significant proportions. As can be seen from Table V in the two villages the situation is the reverse of that of the two provinces. In 1980 in Ban Tae, 15.4% and in Ban Nong Tun 8.7% of all households rent land in. Those who do rent in land in the two villages are not only land poor families seeking enough land on which to support their families. While the average size of holding of renting in families in both villages is lower than the average for the villages as a whole, nearly 73% of those households renting in land in Ban Nong Tun, and 44.4% of those renting in land in Ban Tae own more than 10.9 rai. The figures suggest, and observations made in the two villages support the conclusion, that while a few families in each village are dependent upon tenancy arrangements to maintain subsistence, such arrangements do not necessarily entail such dependency. Patterns of tenancy in Ban Nong Tun and Ban Tae would appear to accord with the general proposition, asserted in the University of Wisconsin's Regional Planning and Area Development Project's report on northeastern Thailand: "In almost any agricultural economy some renting of land contributes to improved economic welfare of both owners and tenants" (Regional Planning and Area Development
TABLE V: Patterns of Renting-In of Agricultural Land in Ban Nong Tyn, Amphoe Myang, Mahasarakham and Ban Tae, Amphoe Uthumphonphissai, Sisaket, 1980

<table>
<thead>
<tr>
<th>Village</th>
<th>Ban Nong Tyn</th>
<th>Ban Tae</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. Households Renting In</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>% Households Renting In</td>
<td>8.7%</td>
<td>15.4%</td>
</tr>
<tr>
<td>Ave. Size Holding of Households Renting In</td>
<td>17.2 rai</td>
<td>11.8 rai</td>
</tr>
<tr>
<td>Ave. Size of Holding Rented In</td>
<td>6.8 rai</td>
<td>7.6 rai</td>
</tr>
<tr>
<td>% of Renting In Households Owning More than 10.9 rai</td>
<td>72.7%</td>
<td>44.4%</td>
</tr>
</tbody>
</table>
Of more significance to villagers in both Ban Nong T.vn and Ban Tae than tenancy in distinguishing between the economic characteristics of households is the size of land holding that is owned. Table VI shows the distribution of total land holdings (including paddy, upland, garden, and house land) owned by villagers in Ban Nong T.vn in 1963 and again in 1980 and in Ban Tae in 1980. What is notable in the two villages in 1980 is the rarity of households that are landless (households owning less than 1 rai of land can be assumed to own only the land that their house is built on). What is even more striking is that in the case of Ban Nong T.vn, landless households have markedly decreased since 1963 when the original research was undertaken. Households that in 1963 were landless as well as households that might have become landless if the land base had remained stable, have clearly benefited from the efforts to bring land in the vicinity of the village under cultivation. Land poor households have also benefited by this expansion of the land base; the figures reveal a significant skewing upwards of the percentage of households owning more than 10.9 rai, a figure taken somewhat arbitrarily since soil and water conditions of land holdings were not taken into account to be the minimal holding necessary for a

<table>
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<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Households</td>
<td>% of Total</td>
<td>Number of Households</td>
</tr>
<tr>
<td>0.0-0.9 rai</td>
<td>11</td>
<td>12.5</td>
<td>1</td>
</tr>
<tr>
<td>1.0-5.9</td>
<td>30</td>
<td>34.1</td>
<td>10</td>
</tr>
<tr>
<td>6.0-10.9</td>
<td>18</td>
<td>20.4</td>
<td>12</td>
</tr>
<tr>
<td>11.0-20.9</td>
<td>22</td>
<td>25.0</td>
<td>50</td>
</tr>
<tr>
<td>21.0-30.9</td>
<td>6</td>
<td>6.8</td>
<td>29</td>
</tr>
<tr>
<td>31 and over</td>
<td>1</td>
<td>1.3</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100.1</td>
<td>126</td>
</tr>
</tbody>
</table>

Note: (a) One household excluded because of the inaccurate reporting of data.
family to maintain itself. In 1963, 67.0 percent of all households in Ban Nông T.vn owned less than 11 rai whereas in 1980 only 18.2 percent of households had such small holdings. In Ban Tae where, as we have already noted, the land base appears to have been more stable than it has been in Ban Nông T.vn, the percentage of land poor households in 1980 is significantly higher (accounting for a total of 35.1 percent of all households) than it is in Ban Nông T.vn.

The percentage of households with holdings that are large enough to necessitate their owners hiring labor beyond that available within the households themselves also increased significantly in Ban Nông T.vn between 1963 and 1980. Even if one were to assume that in 1963 holdings of 21 rai or more were of this type, only 8.1 percent of households held property of this magnitude. By 1980, there were 24 households, or 19.0 percent of the total, with holdings of 31 rai or more, and 42 percent of households had holdings of 21 rai or more. In Ban Tae, the percentages were somewhat lower than those for Ban Nông T.vn--11.1 percent with holdings of 31 rai or more and 29.9 percent with holdings of 21 rai or more—again reflecting a smaller and stable land base for the village. The largest holding in Ban Tae—72 rai—was, however, slightly larger than the largest for Ban Nông
Villagers in both communities are conscious of the differences in the holdings of the households in the village. In Ban Nong Tун, for example, I was told by villagers that certain families had a very difficult time because they had so little land while other families were well-off because they had large holdings. Such comments did not, however, reflect ideas of class differentiation. Indeed, even in referring to a family as "rich" (mi[ngoen] or luai from Thai ruai) or "poor" (con), considerations other than ownership of productive land were taken into account. A land poor family could still be considered to be reasonably well-off if other endeavors such as craft production or off-farm work brought in a significant amount of cash income. Those families in Ban Nong Tун deemed by their fellow villagers as being the richest were ones that either were successful in the trade of water buffalos or cattle or else that operated such non-agricultural enterprises as a rice mill or a store. There exists a sense of relative equality amongst all who are "rice-farmers" (sao na) no matter the size of land holding they may have.

Whereas within the village a family's claim to the status of being a "rice-farmer" is clear so long as the family has sufficient paddy land to raise rice for
its own needs, this status may not be so secure insofar as government recognition of rights in land is concerned. Until quite recently, few northeastern villagers had full legal title to the land they cultivated and considered to belong to them. Until the 1970s, the issuance of full titles to land had apparently not been considered a pressing concern by the Government except for those areas, mainly in the Central Plains, where a significant market in land had developed. Ingram, writing of the late 1960s, says that "only about 12 percent of total farm land holdings are under a full title deed, and most of this acreage is in the Central region (Ingram 1971:266; also cf. Yano 1968). In 1963 Hans Platenius, an advisor to the Thai National Economic Development Board, reported in his study of the conditions of northeastern Thailand that no land in the region was under full title and that only about 10 percent was under certificate of utilization (N.S:3),¹⁰ that is under titles that in the absence of actual measurement of land served as the equivalent of full title (Platenius 1963:48). A survey made in 1963 in Khon Kaen province found that 81 percent of land was recognized only by initial titles (S.K.-l) that merely recorded that land was being occupied and conveyed no legal rights of ownership. Only nine percent of all those in the Khon Kaen sample in 1963 had certificates

As land available for cultivation declined radically and as a commensurate market for land has grown, even in the Northeast, the government has moved to improve the title status of land being cultivated. During the 1970s and continuing to the present, the Ministry of Interior has implemented a program of issuing certificates of utilization based upon aerial photography and upon assertion by peasants of what are recognized among themselves as their established rights. Today, most of the cultivated land in northeastern Thailand, as in other parts of the country, is now under such titles. Land so recognized is not, however, sufficient to meet the demands of peasants. Throughout the region, villagers work some land in which they have minimal or no legal rights. Such land cannot be bought and sold and may be subject to confiscation without compensation by the government.

In both Ban Nong Tun and Ban Tae, most (70.6 percent in Ban Nong Tun and 91.6 percent in Ban Tae) cultivated land is held under certificates of utilization (see Table VII), and in Ban Nong Tun, some farmers have obtained full title for their land (accounting for 15.6% of all cultivated land). While the bulk of these holdings are secure, villagers in both communities still use some
TABLE VII: Land Titles, Ban Nong Tyn, Amphoe Myang, Mahasarakham and Ban Tae, Amphoe Uthumphonphisai, Sisaket, 1980.

<table>
<thead>
<tr>
<th>Title by Type of Land</th>
<th>Ban Nong Tyn</th>
<th>Ban Tae</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amt. of Holdings (rai)</td>
<td>No. of Holdings</td>
</tr>
<tr>
<td>Paddy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full</td>
<td>356.0</td>
<td>32</td>
</tr>
<tr>
<td>Certificate of Utilization</td>
<td>1,476.0</td>
<td>110</td>
</tr>
<tr>
<td>Preliminary Titles</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Public Land</td>
<td>61.0</td>
<td>7</td>
</tr>
<tr>
<td>No Information</td>
<td>7.5</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>1,900.5</td>
<td>125</td>
</tr>
<tr>
<td>Upland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full</td>
<td>31.0</td>
<td>4</td>
</tr>
<tr>
<td>Certificate of Utilization</td>
<td>98.5</td>
<td>30</td>
</tr>
<tr>
<td>Preliminary Titles</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Public Land</td>
<td>287.5</td>
<td>80</td>
</tr>
<tr>
<td>No Information</td>
<td>4.0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>421.0</td>
<td>81</td>
</tr>
<tr>
<td>Garden and House</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full</td>
<td>2.25</td>
<td>5</td>
</tr>
<tr>
<td>Certificate of Utilization</td>
<td>212.0</td>
<td>116</td>
</tr>
<tr>
<td>Preliminary Titles</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Public Land</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No Information</td>
<td>8.25</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>227.5</td>
<td>123</td>
</tr>
<tr>
<td>Total</td>
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<td></td>
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<tr>
<td>Full</td>
<td>394.25</td>
<td>36</td>
</tr>
<tr>
<td>Certificate of Utilization</td>
<td>1,792.25</td>
<td>122</td>
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<td>Preliminary Titles</td>
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<td>Public Land</td>
<td>331.0</td>
<td>56</td>
</tr>
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<td>No Information</td>
<td>21.75</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>2,539.25</td>
<td>126</td>
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</tbody>
</table>

Notes: (a) Certificate of utilization titles (N.S.3) serve as legal titles pending actual measurement of holdings.
(b) Preliminary titles (in the case here, S.K. 1, B. T. 6, and S.Th.5-6) recognize that a piece of land has been occupied, but no title has yet been issued.
(c) The public land in question here was land owned by the government and used without any official permission by villagers.
land for which they do not have clear title. In Ban Tae, 8.1% of all cultivated land is worked under only preliminary titles; the situation is even worse in Ban Nong Tum where 13 percent of cultivated land actually belongs to the government. Moreover, this land accounts for two-thirds of all upland cultivated by villagers. The public land in question has recently been requisitioned by the government to be used to construct what is known as the "villagers' college" (witthavalai chaoban) that will provide adult and extension education courses for people in the surrounding rural area. It is quite likely that if this project goes through, villagers will be deprived of most of their upland crop areas and also the land on which they pasture their cattle and water buffalos (the dispute with the government about this land will be discussed at greater length below).

Land is not the only necessity for agricultural production; the type of productive system employed by villagers throughout rural northeastern Thailand requires the use of power that is beyond that which humans can supply themselves. Today, as in the past, most northeastern farmers plow and harrow rice fields with the added strength of water buffalos. Although tractors have begun to appear in some rural areas of northeastern Thailand, and even more so in Central and northern Thailand, villagers in
Ban Nong Tun and Ban Tae, like villagers in most rainfed agricultural communities in the Northeast, make no use of tractors. In 1980 in Ban Nong Tun, 94.5 percent and in Ban Tae 90.6 percent of all households owned at least one buffalo that was used for agricultural work (see Table VIII). The importance of buffalos for agricultural production can be seen in the fact that there was an increase in the percentage of households—from 78.4% to 94.5%—owning work buffalos in Ban Nong Tun between 1963 and 1980. This increase would suggest that as Ban Nong Tun villagers have acquired additional capital, they have chosen to invest some in the purchase of buffalos.

Ban Nong Tun villagers are rather better situated to raise buffalos than are Ban Tae villagers since in the latter community there is little common land or even neighboring upland that can be used for grazing. This difference is reflected in the fact that herd size in Ban Nong Tun in 1980—an average of 3.3 head per owning household—is significantly larger than that—2.5—in Ban Tae. The slight decline in herd size in Ban Nong Tun between 1963 and 1980—from 3.5 to 3.3—is not statistically significant.

Water buffalos are not always a dependable source of power. Not only do they age and eventually die, but they can also be afflicted by debilitating diseases. In
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Owning</td>
<td>% all Households</td>
<td>No. Owning</td>
</tr>
<tr>
<td><strong>Buffalos</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>80.7%</td>
<td>247</td>
</tr>
<tr>
<td>Female</td>
<td>70</td>
<td>79.5%</td>
<td>169</td>
</tr>
<tr>
<td>Male</td>
<td>48</td>
<td>54.5%</td>
<td>78</td>
</tr>
<tr>
<td>Male/Worked</td>
<td>69</td>
<td>78.4%</td>
<td>125</td>
</tr>
<tr>
<td><strong>Cattle</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>50.0%</td>
<td>211</td>
</tr>
<tr>
<td>Female</td>
<td>42</td>
<td>42.8%</td>
<td>136</td>
</tr>
<tr>
<td>Male</td>
<td>26</td>
<td>29.5%</td>
<td>75</td>
</tr>
</tbody>
</table>

Notes:  
(a) Total number of households in Ban Nong Tyn in 1963 was 88.  
(b) Total number of households in Ban Nong Tyn in 1980 was 127.  
(c) Total number of households in Ban Tae in 1980 was 117.  
(d) That is, animals used for plowing, harrowing and other agricultural work.
the summer of 1980, hoof-and-mouth disease was rampant throughout the Northeast. The disease rendered many animals incapable of performing at the levels desired by villagers; in Ban Ngng Twn villagers were particularly troubled by the effects of the disease as it struck when many farmers were still using animals for plowing and harrowing. Hoof-and-mouth disease is endemic to the region and there has yet to be a sustained effort to eradicate it. Disease and death notwithstanding, buffalos still are preferable to tractors in the eyes of most northeastern villagers. If a tractor is purchased, one is required to lay out a very large sum of initial capital; moreover fuel and repairs require additional expenditures of cash. And if a tractor is hired one still needs a considerable amount of cash. Buffalos, by way of contrast, can reproduce once one acquires an adult female; in both Ban Ngng Twn and Ban Tae, females account for 67.5% and 71.7% of all buffalos owned.

Water supplied during the dry season and pasturage throughout the year constrain the expansion of herds of buffalos in rainfed agricultural communities. Ban Tae appears to be somewhat worse off in this regard than is Ban Ngng Twn since the former village often experiences severe shortage of water at the end of the dry season and pasturage is in short supply. Buffalos also must
compete with cattle for the same food and water.

In both Ban Nong T'un and Ban Tae, as in most villages in northeastern Thailand, there are significant holdings of cattle. In Ban Nong T'un 60.6 percent of all households own cattle, an increase from 50.0 percent of households in 1963. In Ban Tae, even with its more restricted sources of food and water, 44.4 percent of households own cattle. Herd size in 1980 was roughly comparable to that of water buffalos, being an average of 2.3 head per owning household in Ban Tae and 3.6 head in Ban Nong T'un.

Wile oxen have been used in rural northeastern Thailand to pull carts, this usage has been rapidly disappearing in recent years. In Ban Nong T'un, for example, ox carts were ubiquitous in 1963. Even then, villagers had opted overwhelmingly to use motorized transport to move their agricultural products to market instead of carrying them by ox cart as had long been the custom. In 1963 the ox cart was mainly used to move grain from the fields to the granary and to carry other things—such as water from the well and kenaf from retting ponds—within the village. By 1980, the ox cart had disappeared from Ban Nong T'un; in the survey only one informant reported owning a cart and even this cart had been disassembled and stored underneath the house. In the interim,
villagers had replaced the ox cart for intra-village use by a push cart mounted on bicycle wheels. This push cart (called lot-cak, "wheeled vehicle," in Ban Tae and lo--the Lao word for cart or wheel--in Ban Nong Twn), a wooden frame mounted on bicycle wheels, had become a property of nearly every household. In Ban Nong Twn, 92.9 percent of all households owned at least one push cart. In Ban Tae, the percentage of households owning push carts was somewhat lower--83.8%--and the ox cart had not entirely disappeared as 20 households (17.1%) still owned them. On the basis of visits to the area in 1980, it was observed that ox carts remain in regular use in the poor villages in southern Sisaket and Surin, villages inhabited primarily by peoples speaking Khmer-related languages such as Kuñi.

That the disappearance of ox carts from villages like Ban Nong Twn without a commensurate decline in cattle production points to the fact that even traditionally cattle were not raised primarily to supply oxen to draw carts. In northeastern rural society prior to the advent of commercialized agriculture, the main mark of the wealth of a family was the size of the herd of cattle that it owned. Such cattle not only symbolized a family's economic status but also served as a living bank account; cattle could be converted into other goods desired by a family
through barter or sale. Trade in cattle took many northeasterners far afield each dry season; some travelling in groups with other herders to the central plains or to the Tonle Sap region of Cambodia. Cattle from the Khorat Plateau—i.e., northeastern Thailand were traded even as far away as the Shan States in Burma. The man—and so far as I can ascertain from available sources it was always a male—who demonstrated his ability as a shrewd trader of cattle would garner the title of *hoi,* bestowed upon him by his fellow villagers.

The motivation to acquire cattle in order to establish the economic status of a household within a northeastern community remains high, although the data from Ban Nong Tyn suggest that it may be waning somewhat. As can be seen from Table VIII, there has been significant reduction in average size of herds owned by families, from 4.8 head per household in 1963 to 3.6 head in 1980. What is even more striking is what might be termed the "democratization" of cattle ownership over this period. Whereas in 1963 50.0 percent of households owned no cattle at all, by 1980 non-owners accounted for 39.4% of the households. Moreover, in 1963 there were 7 households (or 8 percent of all households then) who were clearly set apart from the *hoi polloi* by having herds containing 10 or more head; in 1980 only 3 households (2.4% of the total)
had such large herds (see Table IX for detailed comparison)...
These three households had been among the seven large cattle owners in 1963. Ban Nông Tẩn villagers, as well as many other northeastern villagers, continue to attach particular value to the ownership of cattle, a value that reflects traditional ideas of what constitutes investment of surplus wealth. But today this value does not hold the privileged position it once did; households with surplus wealth now must decide amongst a range of possible investments.

<table>
<thead>
<tr>
<th>Size of Herd</th>
<th>1963</th>
<th>1980</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Households</td>
<td>% of all Households</td>
</tr>
<tr>
<td>0</td>
<td>44</td>
<td>50.0</td>
</tr>
<tr>
<td>1-5</td>
<td>30</td>
<td>34.1</td>
</tr>
<tr>
<td>6-9</td>
<td>7</td>
<td>8.0</td>
</tr>
<tr>
<td>10-</td>
<td>7</td>
<td>8.0</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100.1</td>
</tr>
</tbody>
</table>
FOOTNOTES

1 For further discussion of the contrasts between central and northeastern Thai villages see Keyes (1976b).

2 Because the division of Ban Nong Tum occurred following the field work in 1963-1964, statistical comparison has been somewhat complicated. Insofar as possible, statistics from 1963-1964 have been disaggregated so that data on Khum Non Khwao Nqi could be excised.

3 Data on rainfall when given by province do not reveal all significant variations since micro-climactic zones do not correspond with provinces. For purposes here, however, the data are adequate since both villages lie in the same micro-climactic zones as their respective provincial capitals in which the data were generated.

4 Population figures used for calculating these percentages have been taken, in part, from Lefferts (1974:62).

5 The questions I asked about family planning in 1963 caused some villagers to realize that less dangerous methods of birth control existed. My wife and I began to be sought out for information about such methods. However, as inexpensive devices were not then on the market and the pill had not yet become available, we did not, in fact, become the first agents of family planning in Ban Nong Tum.

6 In a previous publication it was suggested that the population may have grown from about 200 in 1900 to 800-1000 in 1940 (Keyes 1976b:55). The figure for 1900 is clearly too low.

7 If the present village of Ban Non Khwao Nqi, which split off to become a separate village from Ban Nong Tum in 1967 is included in the calculations, the percentage of increase is not significantly different. Utilizing data provided by the headman of Ban Non Khwao Nqi,
the total population of Ban Nong Twn and Ban Non Khwao NQi can be calculated as being 1,094 people in 174 households and the wat. In 1963, the total population of Ban Nong Twn, then including Khum Non Khwao NQi, was 705 people in 119 households and the wat. This would mean that the two villages together increased 55.2% over the same period, or an average of 3.2% per year. Although Ban Nong Twn today contains 129 households, survey data were obtained for 127 households. The reason for this was that while 129 interviews were conducted, it was discovered when the data were analyzed in Seattle that in two cases husbands and wives from the same households had been accidentally interviewed on different occasions. For this reason, too, the figure for the total population of the village may be off by + 2 or 3 since an estimate of 7 persons per household was used for the two non-interviewed households. This variance has little significance for the calculation of change in population since 1963 nor for the comparison of Ban Nong Twn's population with that of Ban Tae.

8 I accompanied the census-takers in Ban Nong Twn in April-May 1963 and was allowed to make copies of their records. It is possible that my presence may have led to under-reporting although I did not think so at the time and have no way of checking this possibility at this time. I must admit to being struck by the significantly lower average land holdings than were found for the province as a whole in 1963.

9 Insofar as I have been able to find, there are no studies that explain why these three northeastern provinces should have such a relatively high incidence of tenancy. It is reasonable to suppose that there is a greater demand for land in these provinces because production for the market is more profitable; these three provinces are the closest of all northeastern provinces to Central Plains and thus to the national marketing center of Bangkok.

10 Insofar as the government takes cognizance of an interest in cultivated land, it issues one of four types of land registration certificates: (1) bai cap cong (literally, "certificate [recognizing]
APPENDIX A:  Questionnaire Used for Socioeconomic Survey Carried out in Ban Nông Tvn, Amphoe Muang, Cangwat Mahasarakham and Ban Tae, Amphoe Uthumphonphisai, Cangwat Sisaket, Northeastern Thailand, July and August 1980.

In accord with the requirements of the Human Subjects Review Committee at the University of Washington, the following statement was prefaced to the questionnaire:

We (I) should like to ask you some questions about your family. The questions concern the composition of your household, your land holdings and other assets, investments, household income, household expenditures, contacts that members of your household have outside of the village, health practices and birth control practices, and attitudes toward economic changes that have taken place within the village. These questions are being asked in order that a true understanding of the economic conditions and other characteristics of this village can be obtained. A report on these conditions and characteristics will be made to the National Economic and Social Development Board and to the United States Agency for International Development to help these agencies in their implementation and evaluation of development programs.
in northeastern Thailand. In addition, we (I) will also write studies so that other people in Thailand and America may know more about life in rural northeastern Thailand. These reports and studies will include only summaries of information obtained in the survey; there will be no specific mention of your name or of your family's name or of the number of your house in the reports and studies. You do not have to answer any question that you do not feel happy about answering. We (I) would, however, very much appreciate your cooperation. With your consent, I should now like to ask you these questions.

Questionnaire

Prefatory information

1. Date of interview
2. Household number
3. Name and surname of person interviewed
4. If not head of household, relation to same
5. Number of people living in the household

i. Head of household

1. Name and surname
2. Sex
3. Age
4. Place of birth
5. If not born in this village, how long has s/he lived here?
6. For each spouse of head of household, give name and whether marriage is still extant or, if dissolved, whether dissolved by divorce or death.
7. How many children (both living and dead) has s/he had by each spouse?
8. Present occupation of head of household (self-definition)
9. Previous occupations of head of household
10. Is s/he able to read and write Thai?
11. How many years of schooling did s/he have?
12. (for males only) Has he ever been ordained?
   a. As a novice?
   b. As a monk?
   c. How long was he a member of the Sangha?
   d. What wat did he reside in while in the Sangha?

II. Spouse of head of household (if still living)
1. Name and surname
2. Age
3. Place of birth
4. If not born in this village, how long has s/he lived here?
5. For each previous spouse of this person, give name of previous spouse and whether marriage was dissolved by divorce or death

6. How many children (both living and dead) has she had by each previous spouse?

7. If not now living in this household, where is s/he living?

8. Present occupation of spouse of head of household (self-definition)

9. Previous occupations of spouse of head of household

10. Is s/he able to read and write Thai?

11. How many years of schooling did s/he have?

III. Children

(For each living child of head of household and/or spouse of head of household, please answer the following questions:)

1. Name and surname
2. Sex
3. Age
4. Current place of residence
5. Marital status
   a. Never married
   b. Now married (give spouse's name)
c. Previously married, spouse died (give spouse's name)
d. Previously married, divorced (give former spouse's name)

6. How many years of schooling did s/he have?

7. Present occupation

8. (for males only) Has he ever been ordained?
   a. As a novice?
   b. As a monk?
   c. How long was he a member of the Sangha?

IV. Other Members of Household

(if there are other people living in this household, in addition to head of household, spouse and children, please answer the following questions for each such person:)

1. Name and surname

2. Sex

3. Age

4. Relationship to head of household (e.g., son-in-law; kinsman of a relationship x; adopted child, no kin relationship)

5. Reason for residing in this household (e.g., to live with wife; because parents are dead; to be a servant)
6. Marital status
   a. Never married
   b. Now married (give spouse's name)
   c. Previously married, spouse died (give spouse's name)
   d. Previously married, divorced (give former spouse's name)

7. How many years of schooling did s/he have?

8. Present occupation

9. (for males only) Has he ever been ordained?
   a. As a novice?
   b. As a monk?
   c. How long was he a member of the Sangha?

V. Land Holdings, Utilization and Transactions

1. How much land of each type does this household own?

<table>
<thead>
<tr>
<th>Type of land</th>
<th>Number of Parcels</th>
<th>Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paddy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. How much land does this household rent in?
   (Specify type of land, amount rented and rent paid.)
3. How much land does this household rent out?  
(Specify type of land, amount rented and 
rent paid.)

4. During the past five years have you or your 
household purchased any land?  Yes____ No____
If yes, specify type of land purchased, 
amount purchased, from whom purchased and amount 
paid per rai:

5. During the past five years have you or your 
household sold any land?  Yes____ No____
If yes, specify type of land sold, amount 
sold, to whom sold and amount received per 
rai.

6. For each parcel of land that you own, specify 
the land title that you have for that parcel.

7. Last year, how many rai of land did your 
household plant to rice and how many rai of 
land planted to rice did your household harvest? 
   a. Planted _____ rai   b. Harvested _____ rai

8. Last year, how much land did your household 
plant to crops other than rice? 

<table>
<thead>
<tr>
<th>Crop planted</th>
<th>Amount of land planted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenaf</td>
<td></td>
</tr>
<tr>
<td>Cassava</td>
<td></td>
</tr>
</tbody>
</table>
Tobacco
Watermelons
Other*

*(Specify type after each number; for example, chilli peppers, shallots, garlic, bananas, egg plant, beans, groundnuts, etc.)

VI. Tree and Animal Holdings

1. How many of each of the following types of trees are owned by this household? For each type, please indicate the number that produce fruit.

<table>
<thead>
<tr>
<th>Type of tree</th>
<th>Total number owned</th>
<th>Total number producing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coconut</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mango</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lime</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tamarind</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jack fruit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Betel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kapok</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Papaya</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (Specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. How many of the following types of large animals does your household own? For each type, indicate
the number of male and female and the number used for work.

<table>
<thead>
<tr>
<th>Type</th>
<th>Male</th>
<th>Female</th>
<th>Number used for work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water buffalo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horses</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. How many pigs does your household own? Specify how many are under six months of age and how many sows you have.
   a. Total number of pigs____
   b. Total under six months in age____
   c. Total number of sows____

4. How many of the following types of fowl does your family own?
   a. Chickens____
   b. Ducks____
   c. Turkeys____

5. Does this household own any fish ponds? Yes____
   No____ If so, how many does it own and what kind of fish do you stock in the pond?

VII. Capital Investments

1. Does this household own a rice mill? Yes____
   No____ If yes, how much do you calculate that
the mill is worth? ____ baht

2. Does this household own a shop? Yes__ No__
   If yes, how much do you calculate that your average inventory is worth? ____ baht

3. Does this household own a vehicle used for transporting goods or people to market?
   Yes__ No__
   If yes, for each vehicle specify type and how much you calculate that it is worth:

VIII. Household Income

1. Estimated Income
   a. During the past year what would you estimate was the total cash income of this household?
      ____ baht

2. Sources of Income
   Could you please estimate your income during the past year from the following sources:
   a. From sale of agricultural produce
      (1) Rice ____________ baht
      (2) Kenaf ____________ baht
      (3) Cassava ____________ baht
      (4) Kapok ____________ baht
      (5) Watermelon ____________ baht
      (6) Vegetables ____________ baht
All

(7) Tamarind__________________ baht
(8) Sticlac____________________ baht
(9) Cotton (raw)_______________ baht
(10) Other (specify)___________ baht

b. From sale of animals and animal products

(1) Fish_______________________ baht
(2) Ducks______________________ baht
(3) Chickens___________________ baht
(4) Turkeys____________________ baht
(5) Pigs_______________________ baht
(6) Horses____________________ baht
(7) Cattle_____________________ baht
(8) Buffalos___________________ baht
(9) Eggs_______________________ baht
(10) Other (specify)___________ baht

c. From sale of other products

(1) Charcoal___________________ baht
(2) Bamboo walling______________ baht
(3) Basketry___________________ baht
(4) Cloth products______________ baht
(5) Tools______________________ baht
(6) Prepared foods______________ baht
(7) Other (specify)______________ baht

d. From rental of land or property_______ baht
e. From wage labor

(1) From wage labor within village (specify type of labor and how much earned according to each person who worked)

(2) From wage labor outside of the village (specify type of labor and how much earned according to each person who worked)

f. From commerce

<table>
<thead>
<tr>
<th>Type of commerce</th>
<th>Amount received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation of rice mill</td>
<td></td>
</tr>
<tr>
<td>Sales from shop</td>
<td></td>
</tr>
<tr>
<td>Transport of others' products to market</td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
</tr>
</tbody>
</table>

g. From other sources (specify)

IX. Household Expenditures

1. Please specify amount spent by your household during the past year for the following production expenses.

<table>
<thead>
<tr>
<th>Type of Expenditure</th>
<th>Amount Expended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice seed</td>
<td></td>
</tr>
<tr>
<td>Other kinds of seed</td>
<td></td>
</tr>
</tbody>
</table>
Chemical fertilizer
Tools
Other production expenses (specify)

2. During the past year did your household hire any labor? Yes  No . If yes, specify the purpose for which they were employed, the number of workers employed and the total wages paid.

3. During the past year did you purchase any animals? Yes  No . If yes, specify type purchased, how many of each type purchased, and total amount paid for each type:

<table>
<thead>
<tr>
<th>Type of animal</th>
<th>Number purchased</th>
<th>Total amount paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffalo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pigs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkeys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chickens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ducks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. During the past year did your household pay any taxes? Yes  No . If yes, please indicate type of tax and amount paid for each type.
5. Please specify amount spent by your household during the past year on each of the following social expenditures:

<table>
<thead>
<tr>
<th>Type of Expenditure</th>
<th>Amount Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education (specify for which person)</td>
<td></td>
</tr>
<tr>
<td>Treatment by doctors or nurses (specify for which person)</td>
<td></td>
</tr>
<tr>
<td>Purchase of medicines</td>
<td></td>
</tr>
<tr>
<td>Sukhuan (specify for what reason)</td>
<td></td>
</tr>
<tr>
<td>Song khro ('Dispelling Fate')</td>
<td></td>
</tr>
<tr>
<td>Ordination of son or relative</td>
<td></td>
</tr>
<tr>
<td>Wedding of child</td>
<td></td>
</tr>
<tr>
<td>Funeral</td>
<td></td>
</tr>
<tr>
<td>Ao bun hwan (tham bun ban)</td>
<td></td>
</tr>
<tr>
<td>(house blessing)</td>
<td></td>
</tr>
<tr>
<td>1. For own household</td>
<td></td>
</tr>
<tr>
<td>2. For neighborhood (hlum)</td>
<td></td>
</tr>
<tr>
<td>Caek bun (tham bun hai khom tai)</td>
<td></td>
</tr>
<tr>
<td>(memorial rite for the dead)</td>
<td></td>
</tr>
<tr>
<td>Other ao bun (tham bun) (specify)</td>
<td></td>
</tr>
</tbody>
</table>

X. Consumption

1. Does anyone in this household own the following?
   a. Sewing machine    Yes__ No__
b. Radio  Yes___ No___
c. Bicycle  Yes___ No___
d. Motorcycle  Yes___ No___
e. Ox cart  Yes___ No___
f. Pushcart  Yes___ No___
g. Truck (or car)  Yes___ No___
h. Gun  Yes___ No___

2. When electricity comes to the village, do you plan to have it connected to your house?  Yes___ No___ If yes, what electrical products do you plant to acquire?
a. Lights  Yes___ No___
b. Stove  Yes___ No___
c. Refrigerator  Yes___ No___
d. TV  Yes___ No___
e. Other (specify)  Yes___ No___

3. Condition of the house
a. When was this house built?  

b. What type of roof does this house have?
   (1) Leaf___
   (2) Thatch___
   (3) Corrugated iron___
   (4) Other (specify)___

   c. What type of walling does this house have?
      (1) Thatch___
XI. Outside Contact

1. Has anyone in this household ever been in the army? Yes__ No___. If yes, specify whom, where he was stationed and how long he served.

2. For each member of the household who has had work experience of one month or more in a place outside the village, please give the following information—name of person, places worked, length of time worked.

3. How many times a month do you go to market?____
   Usually why do you go to market (e.g., to buy food, to see movies, to visit relatives, etc.)

4. Do you attend cinema or watch TV more than once a month? Yes__ No___. If yes, what type of films do you like to see?

5. What kind of programs do you like to listen to on the radio (e.g., นุ่ม ลำ ไม้, นุ่ม ลำ ชอง, ผ่าแงง ลูก ทุ่ง, ข้าว, etc.)?

6. If you or a member of your family is sick, do you seek treatment from any of the following?
### XII. Birth Control Practices

1. How many children do you think that it is ideal for a family to have?

2. Do any of the married women in this household practice birth control? Yes___ No___ If yes, please specify for each woman what type of birth control practice (loop, pill, sterilization,
3. How did these women learn about the birth control methods that they practice?

XIII. Attitudes toward Change

1. What do you think are the best ways for villagers in this community to increase their cash income?

2. What do you think are the best ways for your family to improve its standard of living?

3. What do you consider the most important changes to have occurred in this community during the past ten years?

4. During the past twenty years or so, the government of Thailand has instituted a number of programs that have been designed to improve life in the rural areas of the country. Could you please tell me whether you think the following programs have improved conditions in this village, have had no effect on the village or have not really been implemented in this village.

<table>
<thead>
<tr>
<th>Program</th>
<th>Improved Conditions</th>
<th>No Effect</th>
<th>Not Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program</td>
<td>Improved Conditions</td>
<td>No Effect</td>
<td>Not Implemented</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>---------------------</td>
<td>-----------</td>
<td>-----------------</td>
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<tr>
<td>Accelerated Rural Development</td>
<td></td>
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<tr>
<td>Cooperatives</td>
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<tr>
<td>Tambon Development</td>
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<tr>
<td>Provincial Development</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Agricultural Extension</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mobile Development Units</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
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</table>
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SOCIOECONOMIC CHANGE IN RAINFED AGRICULTURAL VILLAGES IN NORTHEASTERN THAILAND

PART II
ORDER AND SOCIAL ACTION IN NORTHEASTERN THAI VILLAGE CULTURE

by Charles F. Keyes

University of Washington
Department of Anthropology
Thailand Project
Seattle, Washington 98195

June 1982

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III. Order and Social Action in Village Culture

1. Religious Sources of Knowledge

The economic life of villagers in northeastern Thailand is conditioned not only by the social world in which they live and by the environmental factors that impinge upon them; it is also shaped by their ideas of the order of the world within which they are situated and by the cultural values that orient their actions in that world. These ideas and values—what anthropologists term "worldview" and "ethos"—are not simply "there" in the village; rather they are acquired through participation in cultural activities and exposure to a variety of cultural media. The culture that villagers acquire includes both elements that have long been a part of the Thai-Lao tradition and elements that have been more recently introduced.

Northeastern villagers first begin to learn the culture they use in making sense of the world and in orienting themselves toward action as members of family units. Mothers have the most influential role in the socialization of the child, male as well as female, in northeastern villages. But children also learn how to act in the everyday world of the village, including how to carry out farming tasks, from their fathers, their
older siblings, their grandparents, and from other relatives living in the same compound.

From a very early age children are also taken along by members of their family--again, often by their mothers--to rituals held at the local Buddhist temple-monastery, the wat, and they will continue to attend such rituals as they grow older. Although custom specifies that there are rituals in every lunar month--collectively known as hit sipsong, the "twelve rites"--only a few of these are especially marked: bun pha wet, the ritual at which the story of the Vessantara-jataka is read en toto; pi mai, traditional New Year, bun bong fai, the rocket festival; bun khao phansa, the ritual held on the first day of Buddhist lent; bun ok phansa, the ritual closing lent and thpt kathin, the ritual at which new robes are presented to the members of the Sangha living in the temple-monastery. In Ban Nong Tum in 1963-1964, representatives from nearly every household--often women--participated in these rites. In 1980, I was told, there had been a decline in ritual attendance, a decline that was evident at the rite held at the beginning of Buddhist lent that I was present for. Open-ended interviews carried out in Ban Tae also elicited volunteered comments by several informants that ritual attendance had declined. Such declines notwithstanding, the ritual cycle remains
important as a source of cultural knowledge for all villagers in northeastern Thai communities.

In addition to the wat-centered rites that draw their participants from the community as a whole, many northeastern villages also have annual rites honoring the ancestral spirits (phi วต or tapu, literally, paternal and maternal grandfather spirits) and/or village spirits (phi บัน). In Ban Nong Tun, these rites were as important in 1980 as they were in 1963, but in other villages in the Northeast, as in Ban Tae, they have been reduced to insignificance, or, as in a village in Khon Kaen that I visited, totally eliminated.

Of greater importance throughout the Northeast are the family-centered rites that are attended by members of a sponsoring family and their guests. Some of these family-sponsored rituals—notably ordination (buat nak) and house-blessing (ao บุน หีน)—are Buddhist in that they require the participation of monks. Other rites, performed for those who have been afflicted by an illness or are going through a status change, are officiated at by lay specialists who secure the "vital essence" (khua..) of a person or who propitiate or exorcise various types of spirits (phi). In Ban Nong Tun in 1980, only rites involving spirits had declined in importance since 1963, although they were still practiced by many villagers.
The calling of the vital essence (su khuman) rite is so ubiquitous in all northeastern villages, associated with every major change that a person goes through in life, that it is something of a hallmark of Thai-Lao culture.

The rite of ordination holds a prominent place in northeastern culture because it has long been the ideal that every male should become a member of the Sangha for at least a temporary period of time. This ideal has probably never been realized by all males, but it continues to be significant for a large part of the male population of the rural northeastern Thailand. In 1963 I found that 69.9 percent of all men 21 years of age and over had spent sometime in the Sangha. In 1980, the figure—-70.3 percent—was practically the same. In other words, over two-thirds of all males in Ban Nong Tun continue to realize the ideal that they should be ordained and spend a period in the Sangha. There was a decline, however, between 1963 and 1980 of those who had been ordained as novices. In 1980, only 24.5 percent had been ordained as novices as compared with 38.6 percent in 1963 (in both years, many who had been novices were also ordained as monks). This decline probably continues a trend of diminishing importance of the novitiate that followed upon the introduction of compulsory primary education. Before the government school system was
introduced, most who undertook any formal study did so as novices under the tutelage of monks. Today, the novitiate attracts mainly boys from poor families who cannot afford to maintain their sons at home. While those who become novices may spend several years as a member of the Sangha, those who become monks typically—at least in Ban Nong Tum and, I suspect, the pattern is probably general—spend only one lenten period (three months during the rainy season) or a little more (to remain in the monkhood for the important rite of *thot kathin* that follows lent) as members of the Sangha.

Some men do spend a longer period of time as members of the Sangha; in Ban Nong Tum about a third of all who had been in the Sangha spent two or more years (the period of monastic experience ranged from seven days to nine years). Those who spent but a single lent in the monastic order had the opportunity to learn little more than how to chant the Pali liturgy used in the major rituals. Moreover, they would only memorize the chants without learning the Pali language. Those who spent a longer period may have taken the opportunity to study the traditional texts kept in monasteries that would qualify them to be lay ritual specialists later on. Others may have studied the standardized religious curriculum taught in some larger monastic centers (monks from
Ban Nong Tun must go to the village of Ban Khwao, five kilometers away, or to Mahasarakham, fifteen kilometers away), thereby obtaining some knowledge of the systematic theology introduced early in the twentieth century. In Ban Nong Tun, as in most northeastern villages, there is a small handful of men whose longer experience as members of the Sangha sets them apart as having specialized ritual or religious knowledge.

While women are barred from membership in the Sangha, they do have the capacity, not possible for men, to nurture in their womb one who will one day become a monk. When a man is ordained, it is said that the merit is gained also by his parents, and especially by his mother. Giving birth to a child, even if not to a male child, has also been understood in northeastern culture as having yet another religious significance. The act of giving birth serves to bring to the consciousness an intense awareness of suffering and of the tenuousness of life. It is the custom among most northeastern village women to "lay by the fire" (yu fai) following birth, that is to recuperate for several days by lying near a hot fire (one that often causes burns on the woman's skin) and to consume only the medicinal soup that cooks in a pot over the fire. Villagers also call this practice yu kam, "being in karma," thereby designating the
religious significance that is attached to the act. In Ban Nong Tun in 1980, I asked a dozen young women who had recently had a child whether or not they had followed the custom of lying by the fire; all, including two who had had children in the provincial hospital, answered that they had. The custom still holds, I suspect because of its deeper religious connotations, an important place in northeastern village life.

Villagers in northeastern Thai communities have not been totally isolated from religious changes that have been occurring in the larger society over the past century. Few villagers in the Northeast, to be sure, have turned away from Buddhism and embraced another religion; Catholic and Protestant (mainly Christian and Missionary Alliance) missionaries have made very few conversions among northeastern villagers and there has been no Islamic missionary activity in the area. While almost all (over 95 percent) of all northeastern villagers claim "Buddhism" as their religion, this "Buddhism" is not anywhere the same type of religion. Most significant of changes in Buddhism have been the reforms that were begun by King Mongkut when he was still a monk and continued by his son, Prince Wachirayan, who became Patriarch of the Sangha late in the reign of King Chulalongkorn. Reformed Buddhism is most evident in those wats where a
monastic school exists at which the curriculum instituted by Prince Wachirayan is taught, or where the abbot has been well-educated in this curriculum and as a proponent of the new way of thinking, or where the monks follow the stricter discipline of a "forest monastery" affiliated with the Thammayut order. Forest monasteries are most commonly found in northeastern Thailand and some, particularly those associated with the famous ascetic, Acan Man, or his disciples have achieved renown throughout Thailand and even beyond the borders of the country. Most such forest monasteries are located in areas in or near the Phu Phan mountains, areas that are relatively sparsely populated compared with the Chi and Mun River valleys. While villagers living in the Phu Phan area may have close relations with forest monks (cf. Kirsch 1967), villagers in neither Ban Nong Tun nor Ban Tae have regular contact with forest monasteries, although they are aware of their existence. Monastic schools are more common than forest monasteries, although there is rarely more than one in a tambon and some tambons lack any at all. Ban Nong Tun and Ban Tae villagers are thus more typical in living in communities that lack monastic schools (Ban Tae does have a limited school for temporary monks but if more formal training is required, monks must commute to Sisaket). Abbots of wats, in those cases where
permanent monks are available to serve as abbots since many wats are without permanent monks, are also as likely to be specialists in magical practices (saiyasat) or in wat-building as they are to be committed proponents of reformed Buddhism. Ban Nong Tum long went without any permanent abbot at all, having acquired the first one in about thirty years only in 1979. Moreover, this man was ordained late in life and while he is respected for his rather strict adherence to the discipline, he is not especially knowledgeable. Ban Tae has a much more colorful abbot whose entrepreneurial activities have won him some followers, but have also drawn the disapproval of a number of his parishioners. There are, of course, villages with highly respected abbots, but Ban Nong Tum and Ban Tae are not exceptional in lacking a senior monk who seeks to instill in villagers a more systematic and reflective approach to Buddhism.

Over the past twenty years, the Sangha, with government support, has sponsored a type of "moral rearmament" program known as thammathut, "dhammic ambassadors." Educated monks, drawn mainly in the early stages of the program from the monks' universities and from urban wats, were sent as teams into villages to instill messages concerning the salience of Buddhism to the pursuit of economic and political goals. Many villagers throughout the North-
east, and especially those in "security sensitive" areas, have had some contact with thammathut monks. While there are probably exceptions, the lack of sustained connections between thammathut monks and specific communities has resulted in there being little lasting effect of this program. Certainly, in neither Ban Nong Tum nor in Ban Tae has the program been of any importance.

In villages like Ban Nong Tum that lack the guidance of a strong abbot, villagers are rather more open to cultic movements that are centered on charismatic figures, often lay persons. There is a long history of charismatic movements in the Northeast (see Keyes 1977 for some discussion) and such movements continue to be important to the present day. In 1972 I first became aware of a charismatic movement, known as mu tham, "the dhammic group," that had acquired a considerable following in Ban Nong Tum as it had in many other villages in the Northeast. In 1980 this movement was very strongly established in Ban Nong Tum and would appear to be, I suspect, the most popular charismatic movement in the Northeast in recent times. Some rather casual questioning of people from different parts of the region suggests that its followers are concentrated in the central Chi River valley provinces of Mahasarakham, Roi-et, Yasothon, and Khonkaen and the more northerly provinces of Udão and Nongkhai. If Ban
Nông Tùn is at all typical, there may be many villages in the region where as much as a third to a half of the adult population has "been ordained in the dhamma" (buat than), rather the equivalent of being a "born-again Christian." In Ban Nông Tùn in 1980 I found 58.2 percent of all households to have at least one member of the movement.

While this is not the place to provide a full description of the movement (something I plan to do in another context), certain features of the movement are relevant to our effort to sketch the culture within which northeastern villagers construct their ideas of the world within which they live. The ostensible purpose of the cult is to gain access to the power of the dhamma (tham) for purposes of curing afflictions (particularly emotional afflictions) and ensuring physical well-being. To gain this power, rituals are held at which people claim to be suffused by the dhamma in much the same way that adherents of certain Pentacostal sects believe that they are vessels filled by the Holy Ghost. The dhamma in this sense thus takes on a meaning rather different to that traditionally associated with it in Buddhism as being the teachings of the Buddha, the way that he taught to obtain salvation. For those who are members of the dhammic cult, the dhamma is an immanent sacred
Those who become suffused with the dhamma are said to speak foreign languages (Chinese, English) much in the same way, once again, as those in Pentecostalism believe that with the power of the Holy Ghost they are given the gift of tongues. To attain the power of the dhamma, adherents to the cult are led in ritual practice by a "teacher" (acan), a man (and so far as I can tell all are men) who has gained his position by being a disciple of another "teacher," the line ultimately being traced back to the founder of the movement, a layman identified to me as Can Man (but not the same as the monk, Acan Man, the renowned saint). A "teacher" proves himself by performing an apparently miraculous cure.

Those who join the movement not only engage in the collective rituals held weekly (at which there is extended chanting, much of which is in pseudo-Pali) and perform daily rites in their own home, but also commit themselves to a rather stricter moral code than is observed by most lay villagers. Dhammic cult members either give up drinking entirely or else consume very little so as not to become drunk; they stop killing even small animals (although they still eat meat); they avoid eating raw meat, a delicacy at traditional Thai-Lao feasts; and they refuse to gamble.

Dhammic cult members do not give up their con-
nection with their local parish wat. This said, the movement does have a strong lay-centered character to it in contrast to the Sangha-centered traditional Buddhism found in the villages. In this sense, the dhammic cult movement echoes the changes in Thai religion in urban environments where lay persons have come to play increasingly important roles.

2. **Popular Culture and Secular Influences**

Adherents to the dhammic cult movement are no different to their fellow villagers in their enjoyment of the stories recounted in traditional forms of poetic song or less traditional forms of folk opera, most of which are designated by the term mālam (literally, "skilled singer"). The performance of mālam to the ubiquitous accompaniment of the khaen, a polyphonic mouth organ, is yet another distinctive hallmark of Thai-Lao culture, recognized by northeasterners and non-northeasterners alike. Mālam performances are still today found in association with major ritual events, including those sponsored by families. There has, however, been some shift away from hiring live performers in favor of "canned" music broadcast over a hired PA-system. In 1963 there were two amateur mālam mu (literally, "group mālam," i.e., folk opera groups) troupes in Ban Nong Tun; in 1980 there were none. And when villagers did hire
mplam performers, they had to go to other communities or, more often, to nearby towns to find them.

Mplam is also performed on the radio and radios are today a possession that few families, even poor families are without. For Ban Nông Tôn, the access villagers had to radio programming can be traced with some preciseness. In July 1963, I found that there were only six sets in the village, most of which having been purchased within the previous year. By mid-1963, cheap radios (300-700 baht) became increasingly available and as villagers acquired some additional cash, they often used it to buy a set. By January 1964, the number of sets had increased to 17, each owned by a different household. Thus, by that time, 14.0 percent of all households owned a set. Between 1964 and 1980 more and more families acquired radios so that by July 1980 when a survey was done, it was found that 120 out of 127 households (94.5 percent) owned radios. Ban Nông Tôn is probably typical of northeastern communities in this history; that is, as of 1980 only a very small percentage of villagers would not have access to radio programming.

In the survey done in 1980, none of the informants, including those in households that did not possess radios, reported that they never listened to the radio. In 1964, nine out of 119 informants reported not listening and an additional seven reported that they had no radio
preferences, all sixteen informants being in households where radios were not owned. It is interesting in this regard that even in 1964, 86.6% of informants reported having radio-listening preferences even though only 14.0 percent lived in households having radios.

In 1964 68.1 percent of all informants (or 73.6 percent of all who had preferences) gave molam as their first choice of programming. Indeed, I observed in 1963-1964 that when the evening molam performance (molam song tum, "eight o'clock molam") came on, every set had a large number of people gathered round it. By 1980, when more villagers had control over what they listened to, preferences had markedly changed. While nearly half (49.2 percent) of the 128 informants listed molam as one of their preferences, a much larger percentage (83.6 percent) listed "news" as preference (informants typically gave more than one preference). "News" (khao) includes, in villager's categorization, government and local news and market reports. Moreover, nearly a third of informants (32.6%) in 1980 gave "songs" (phleng) as a preference as compared with only a handful (7.6%) in 1964. And in 1980, a number of informants (15, or 11.7%) mentioned soap operas (niyai, literally, "storie ") as something they listened to. This type of programming was not even mentioned in 1964. In short, the radio has
brought villagers increasingly into contact with a secular national culture as distinct from the more traditional popular culture that they had known before its arrival (for more details on radio programming preferences, see Table X).

While the radio has been influential in this regard, TV and cinema have been far less important, at least until recently. TV sets are almost never purchased by villagers until a community has electricity. Thus, in July 1980 there were still no TV sets owned by Ban Nong Tun villagers although following the electrification of the village in August 1980 at least one set was purchased. In villages like Ban Tae where electricity has been available for several years, a few TV sets are owned by villagers and a larger number watch some programming. As TV sets become more common in villages, it is predictable that TV programming will have an increasing influence on village culture. What form that influence will have is yet to be determined. To date few villagers (mostly male, although it is becoming increasingly common for cinema parties of teenagers or young unmarried adults to include girls) attend more than one or two films in a year's time. Such sporadic attendance has little lasting effect.

Newspapers add to the quantity of "news" avail-
### TABLE X: Radio Program Preferences, Ban Nong Yun, Amphoe Muang, Mahasarakham, 1964 and 1980

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<td>%</td>
<td>%</td>
<td>%</td>
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<tr>
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<td>-- 22</td>
<td>-- 45</td>
<td>-- 119</td>
<td>-- 128</td>
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<td>-- -- 11 24.4</td>
<td>-- -- 15 11.7</td>
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</tr>
<tr>
<td>Sermons</td>
<td>-- -- 0 0</td>
<td>-- -- 1 2.2</td>
<td>-- -- 1 0.8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: (a) Many informants expressed more than one preference; this was especially true of informants in 1980.
(b) In 1964, informants consisted of a representative, usually the head, of every household in the village; in 1980, informants were similarly chosen, although fewer were heads of household. In both cases, all informants were above 20 years of age.
(c) Traditional Thai-Lao folk music.
(d) News could refer to local, national, or market news.
(e) Songs referred in 196 mainly to Thai popular songs; in 1980 this category also included a type of popular song that had evolved from traditional northeastern folk music, phleng luk thunS, "songs of the children of the fields."
(f) In 1964 advertisements took up a much larger part of the programming.
(g) Niya!, literally "stories."
able to villagers, although the degree to which such news is read and discussed has yet to be studied adequately. In Ban Nong Tvn, newspapers were in 1980, as in 1963-1964, conspicuous by their absence. Although the village was supposed to have a communal "library/reading center," no reading material was to be found in the building set aside for this purpose. A few newspapers did occasionally find their way into the village and when they did they were likely to be passed around among several people. In Ban Tae, in marked contrast to Ban Nong Tvn, newspaper reading was widespread. Not only did Ban Tae have a well-supplied reading center, with new newspapers regularly added, but the train also brought daily newspapers from Bangkok to the village.

Far more important than mass media in introducing non-local culture into northeastern villages are the public schools. Since the 1930s (and even earlier in some places), the world of northeastern villagers has been shaped not only by rituals and traditional cultural forms but also by formal education whose curriculum has been determined at the national level. The school system has become more effective over the nearly fifty years that it has existed in rural northeastern Thailand. Before about 1960 most schools were inadequately staffed and many of the teachers were poorly trained. The
facilities were also very poor. Since the early 1960s, the government has allocated significant sums of money to upgrade and improve village schools. The history of Ban Nong Tvn school is rather typical. The school had first been opened in 1934 and for the first six years, few students made it through the fourth grade. In the 1940s there was some improvement in the quality of teachers and more effective enforcement of school attendance, but the school facilities remained very poor. Even in 1963 the 106 school children went to classes held in the assembly hall of the wat (sala wat) that had no permanent room divisions and knelt in front of rough hewn low benches that they used as desks. Only three teachers taught the four grades during the 1963-1964 school year. Few students owned their own school books and had to copy daily lessons from the blackboard where they were laboriously written out by the teachers.

But by 1963 changes were also in the wind. Villagers themselves had determined to build a new school. Land (12 rai) was donated by a couple and a fair was held to raise money towards the costs (estimated to be 25,000 baht for the materials) of a new building. While the fair netted far less than was hoped for (about 5,000 baht), the money was used (after considerable controversy) to buy the cement piles for the new building. When my
wife and I left the village in April 1964, construction had begun. By 1967, when I paid my first return to the village, the new school had been in operation for several years. Moreover there were now four teachers for the four grades. But the most dramatic changes have come in the past three years. In 1978 another, much more fancy school building was constructed at a cost of 300,000 baht paid for by the government and villagers also constructed yet another, smaller open building in 1979. The school buildings were more over, much better equipped with teaching materials; during 1980 the school received 7,000 baht worth of materials. Textbooks were also being distributed free each year to all students. By 1980 the school was considerably better staffed: ten teachers, most of whom having higher qualifications than those of the teachers at the school in 1968, taught the 254 students at the school. This meant that there was an average of 25.4 students per teacher in 1980 as compared with an average of 35.3 students per teacher in 1963. In 1980, a janitor (a local villager) was also hired for the Ban Nong Tum school, thus following a plan instituted throughout rural Thailand. In 1963 any janitorial work done at the school had been carried out by students. In 1963, as in years previous, it was extremely rare for any villagers to go on beyond the
required four years of schooling. And those few who did, almost never returned to the village to live. There were only two adult villagers—both males in the 41-50 age cohort—in Ban Nong Tun in 1963 who had more than a fourth grade education; both of these men had completed six years of schooling. Several people from the village (perhaps three or four, all male) had gone on beyond primary school and with their more advanced education had found non-farm jobs as policemen and teachers. There were also two young men who were in secondary school at the time, neither of whom intended to return to the village to be farmers. Ban Nong Tun villagers at the time, like the villagers in a community in Khon Kaen province studied by Holmes in 1972-1974, viewed education beyond the compulsory four years as leading to non-agricultural jobs. As Holmes has written: "In every decision to send a child further than prathom 4 [the fourth year of primary schooling] is the hope or expectation that he [sic] will continue through at least M.S. 3 (10th grade) and that he [sic] will subsequently get the prestigious and salaried jobs which require that certificate" (Holmes 1973:110, also see p. 81). Mutatis mutandis, this conclusion remains true today for most villagers throughout northeastern Thailand. Today, most children will complete six rather than four years
of primary education, but a decision to go on to matthayom-
(secondary) school still implies that the student will
eventually qualify for a non-agricultural position.

In Ban Nông Tun there has been a marked increase
in the number of children going on to secondary school,
mainly in Mahasarakham town. In 1980 there were 23
village children between 12 and 19 who were studying in
secondary or even tertiary (3 students) institutions;
nearly half of these students (11) were female. In 1980,
eight out of the 25 students (32%) who completed the
sixth grade in Ban Nông Tun school went on to secondary
school in Mahasarakham. Yet, despite this very marked
shift toward continued schooling on the part of Ban Nông
Tun children, it still remained the case that only three
adults who could be said to have determined to pursue
productive work within the village context had more
than a fourth grade education; two of three had some
secondary schooling, but had not completed the equivalent
of the tenth grade (matthayom 4 in the new system or
matthayom suksa 3 in the old system).

In short, insofar as villagers' understanding
of the world in which they live have been altered by
formal education instituted through the government-
sponsored system of education, the changes have come as
a consequence of what villagers have learned in the
primary schooling that they have been required to attend. As can be seen from Table XI, in 1963 nearly 20 percent of adult villagers (16 years of age and older) had never had any formal education; most of those who were without education were women over the age of 41. By 1980, only 4.2% of all adult villagers had had no education. But in 1980, as in 1963, those adults who had been educated had with extremely rare exception, gone no higher than the fourth grade.

In addition to formal primary schooling, some villagers in northeastern Thai communities, like their counterparts elsewhere in the country, have obtained supplementary vocational training through programs instituted by the government or through connections with private firms. Ban Nong Tun villagers have had little opportunity to participate in any government vocational education program, although presumably they will have that opportunity when a projected "Villagers' College" is constructed on land bordering on the village. In Ban Tae, vocational training in new agricultural techniques, dress making, and mechanics was made available to a few village youths. In Ban Nong Tun, there were several village women who had studied clothes making at firms in the nearby town on Mahasarakham and were putting these skills to use for their families and, in one case,

<table>
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<th>Age Cohort</th>
<th>1963</th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>none</td>
<td>P1-P4</td>
<td>P5+</td>
</tr>
<tr>
<td>16-20 m</td>
<td>30</td>
<td>0</td>
<td>--</td>
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</tr>
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<td>f</td>
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<td>--</td>
<td>100.0</td>
</tr>
<tr>
<td>total</td>
<td>79</td>
<td>0</td>
<td>--</td>
<td>100.0</td>
</tr>
<tr>
<td>21-25 m</td>
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<td>0</td>
<td>--</td>
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<td>f</td>
<td>15</td>
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<td>--</td>
<td>100.0</td>
</tr>
<tr>
<td>total</td>
<td>39</td>
<td>0</td>
<td>--</td>
<td>100.0</td>
</tr>
<tr>
<td>26-30 m</td>
<td>12</td>
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<td>8.3</td>
<td>11</td>
</tr>
<tr>
<td>f</td>
<td>17</td>
<td>0</td>
<td>--</td>
<td>17</td>
</tr>
<tr>
<td>total</td>
<td>29</td>
<td>1</td>
<td>3.4</td>
<td>28</td>
</tr>
<tr>
<td>31-40 m</td>
<td>27</td>
<td>2</td>
<td>7.4</td>
<td>25</td>
</tr>
<tr>
<td>f</td>
<td>25</td>
<td>6</td>
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<td>19</td>
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<td>8</td>
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<td>44</td>
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<tr>
<td>f</td>
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<td>15</td>
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<td>5</td>
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<td>16</td>
</tr>
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<td>5</td>
</tr>
<tr>
<td>f</td>
<td>11</td>
<td>10</td>
<td>90.9</td>
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<td>21</td>
<td>15</td>
<td>71.5</td>
<td>6</td>
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<td>61+ m</td>
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</tr>
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<td>f</td>
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<td>0</td>
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<tr>
<td>Total</td>
<td>125</td>
<td>17</td>
<td>13.6</td>
<td>106</td>
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<tr>
<td>f</td>
<td>142</td>
<td>36</td>
<td>25.3</td>
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<tr>
<td>total</td>
<td>267</td>
<td>53</td>
<td>19.8</td>
<td>212</td>
</tr>
</tbody>
</table>

Notes:
(a) P1-P4: prathom 1 - prathom 4; first four years of primary education, compulsory for all those of school age.
for others for a price as well. Ban Tae was also rather exceptional among northeastern villages in having an adult education program designed to build on knowledge first acquired in primary schooling.

Through formal education, and to a considerably lesser extent vocational education, northeastern Thai villagers have gained knowledge of modes of action that were not available to them through traditional culture. Such knowledge has also come to a significant segment of the rural populace of northeastern Thailand through off-farm work experience, especially experience in the national capital of Bangkok. Temporary migration in search of off-farm work has been a marked pattern in rural northeastern Thailand since at least the 1950s and has its roots in the pre-war period (see Klausner 1972; Prajuab 1958 and 1971; Lightfoot 1980). Klausner wrote in 1960 that "many villages have almost their entire youth group, from fourteen or fifteen to twenty, outside the village" (Klausner 1972:105). From a survey I carried out in Ban Nông Twn in 1963, I found that nearly a third (27.8 percent) of all villagers over the age of 20 had spent some time working in off-farm jobs, mainly in Bangkok. Most of those who had had such experience were males in the age group 20-30: 83.8 percent of all villagers who had had non-farm
work experience were in this grouping and 71.3% of all those in this grouping had had some non-farm work experience. While women from other northeastern villages had already begun to make their way to Bangkok in the 1950s and 1960s, few from Ban Nong Tун had yet done so by 1963; only one woman then living in the village had worked in Bangkok and three more were then living there.

In 1980 I included questions about non-farm work experience on the survey administered in Ban Nong Tун. The results (see Table XII) suggest that there was decline in incidence of non-farm work experience among males, although an increase among females. Whereas in 1963 I had found that 56.1 percent of all males over the age of 20 had had non-farm work experience, in 1980 the data indicated that only 43.2 percent of males over the age of 21 (aggregation was done differently for the two sets of data) had had such experience. The fact that the questions regarding off-farm work experience were not highlighted in 1980 as they had been in 1963 most probably resulted in a significant underreporting of such experience. The extent of underreporting can perhaps be estimated by comparing data from Ban Nong Tун with those obtained in interviews in six villages in Atsamat district in Roi-et, villages similar in many respects to Ban Nong Tун (see Lighfoot 1980). In that study, it was
<table>
<thead>
<tr>
<th>Age Group and Sex</th>
<th>Total in Age Group</th>
<th>1963</th>
<th>1980</th>
<th>1963</th>
<th>1980</th>
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<tr>
<td></td>
<td>In all Centers</td>
<td></td>
<td></td>
<td>In all Centers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>20s m</td>
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<td>16.7</td>
</tr>
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<tr>
<td>50s m</td>
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<td>f</td>
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<td>60s+ m</td>
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<td>8</td>
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<tr>
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</tr>
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<td>277</td>
<td>77</td>
<td>27.8</td>
<td>65</td>
<td>23.5</td>
</tr>
</tbody>
</table>

Notes: (a) Data for 1980 are known to underestimate the actual incidence of off-farm work.
(b) Data for 1963 were aggregated by age groupings of 20-29, 30-39, 40-49, 50-59, 60+; those for 1980 were aggregated by age groupings of 21-30, 31-40, 41-50, 51-60, 61+.
(c) In 1963, most who worked in places other than Bangkok had worked in Vientiane, Laos. Others worked in Khonkaen, Kalasin, Ubon, Udorn, and Khorat, all towns in the Northeast. In 1980, those few who had worked in places other than Bangkok had also mainly worked in Vientiane, although before the change in government in 1975. Others had worked Mahasarakham town and several other northeastern centers.
found that 46 percent of those (both male and female) in the age group 15-29 "had spent at least part of the previous year in Bangkok" (op. cit., p. 7). The survey data from Ban Nong Tun in 1980 reveal that 23.2 percent of those (both males and females) in the age group 16-30 had previously worked in Bangkok. The figures from Ban Nong Tun are probably not understated by a factor of two, but they should not be taken as definitive.3

Even understated, the data from 1980 do reveal a marked increase in off-farm work experience among women in Ban Nong Tun. Whereas in 1963 there had been only three women (all in the age group 20-29) who had had off-farm work experience, thus accounting for only 0.7 percent of all women over the age of 20, the data for 1980 show there to have been 28 women, accounting for 17.3 percent of all women over the age of 21 who had had such experience. This change reflects changes in temporary migration patterns throughout the rural northeastern Thai population. As Lightfoot has reported, a rapid increase in the participation of women in off-farm employment, especially in Bangkok, has taken place during the past twenty years (op. cit., p. 9). Indeed, since a survey made in the late 1970s shows that 64 percent of all migrants from northeastern Thai villages to Bangkok were women, Ban Nong Tun would appear to be
exceptional in that male migrants from the village appear to have outnumbered females by 2 1/2 to one.

Taking into account only the non-farm work experience in Bangkok, the major center attracting not only Ban Nong Tun villagers but the greater proportion of all northeastern migrants, the average length of time spent by villagers in non-farm work in 1980 was 1.9 years, up slightly from the average of 1.8 years in 1963. In 1980 the average length of time spent by men in Bangkok was longer—2.1 years—than the average time spent by women—1.6 years. In several cases, the time away had been very long—10.5 years being the longest for any woman and 13 years being the longest for any man.

Most Ban Nong Tun villagers (62.0 percent of all migrants, male and female), like most villagers from other communities in northeastern Thailand, take only unskilled laboring jobs in Bangkok. Most of those who do not work as unskilled workers in construction and other similar jobs, take service jobs in households, in restaurants, and in other situations; in Ban Nong Tun 29.0 percent of migrants, most of whom (27.0 percent) being women, worked in service positions. While some northeastern women do take jobs as masseuses and prostitutes (although no one from Ban Nong Tun was reported to have done so), they are significantly less
likely to do so than are village women from northern Thailand. Only a few villagers--most of whom spend several years in Bangkok--take employment in factories (only six of those Ban Nong Tun villagers with off-farm work experience in Bangkok); factories tend to recruit primarily from rural populations living in the vicinity of Bangkok and from permanent residents of Bangkok. In a similar vein, few northeastern villagers obtained skilled jobs in Bangkok; two Ban Nong Tun villagers had worked as carpenters and bricklayers and one had learned to be a truck driver.

Not all those who go off from northeastern villages to work in Bangkok or at off-farm jobs elsewhere return to settle down in their home communities. There are no adequate estimates of the proportion of migrants from northeastern communities who take up permanent residence in Bangkok, but there are indications from a study made of census data from Muang district Khonkaen and Muang district Kalasin (Sternstein 1979) and from my own unsystematic inquiries in Ban Nong Tun, that this proportion has been increasing. In 1963-1964 it was the expectation of Ban Nong Tun villagers that everyone living in Bangkok (and other centers) would eventually return to settle in the village. By 1980, many villagers talked about relatives who they now accepted as having
permanently moved away to live in Bangkok. The relatively low number of temporary migrants who have held skilled laboring jobs or jobs in factories points to the fact that those who obtain such employment are less likely to return back to their home communities whereas those in unskilled labor or service positions are more likely to do so. While permanent migration to Bangkok or elsewhere where off-farm employment can be found is one possible mode of adaptation made by some from northeastern villages to the economic world in which they live (see below), the point that needs stressing here is that most migrants to Bangkok do return to settle down in their home communities (or in nearby communities where they live after getting married). Moreover, given the very high incidence of temporary migration and the relatively long time that migrants spend in Bangkok, the experience of having worked in Bangkok has become a significant factor in shaping the understanding that many northeastern villagers have of the world in which they live.

Yet another secular influence that has some influence on village culture is what might be termed political "dramas" or "rituals." While villagers today, as in the past, rarely participate in the national holidays associated with the King's Birthday (December 5),
Constitution Day (December 10), or Chulalongkorn Day (October 23), they do participate in the ritualized (and sometimes dramatic) events associated with elections. Elections for provincial and national assemblies—the only significant elections in which villagers have participated—have been rather irregularly held in Thailand since the establishment of a constitutional monarchy in 1932. They have, however, become more common since 1973 when the then military dictatorship under Field Marshal Thanom Kittikachorn was overthrown. While elections, at least recent ones, are not without real political significance, they have a greater impact on villagers in inculcating in villagers a knowledge of a language of participation in political entities larger than the village.

For about the past twenty years, the Communist Party of Thailand has worked to introduce a very different political language into the villages of northeastern Thailand. While the CPT and its associated groups has garnered the support of some northeastern villagers, particularly those living in communities in the vicinity of the Phu Phan mountains, what is striking is the fact that the influence of the CPT has rarely extended beyond the Phu Phan area (cf. Caldwell 1973:308). Moreover, even at the time of its greatest support, following the
coup of October 1976, the CPT probably had a following of no more than 50,000 villagers in the Northeast, that is, less than one percent of the adult population. What Caldwell wrote in 1973 has remained true: "the case can be argued, on the basis of the Party's published doctrine, that the CPT, and the revolutionary movement it has been trying to promote for over a decade, has yet to define a revolutionary strategy which can be implemented in Northeast Thailand" (op. cit., p. 163). Villagers in Ban Nong Tum and Ban Tae, like the vast majority of villagers throughout northeastern Thailand, have been almost totally unresponsive to the revolutionary message of the CPT and its associated front organizations. 7

The political culture of most northeastern villagers has been formed not by contact with revolutionary ideology but through their education in government schools, their exposure to government propaganda (given out at meetings, through the mass media, and in the form of specially created posters), the "news" communicated on the radio and through newspapers, and the rituals of elections.

3. **Worldview and Cultural Identities of Northeastern Thai Villagers**

From the various cultural sources, secular as well as religious, that have had a significant role in
the lives of northeastern villagers, people in these communities construct their ideas of the world in which they live and act. Villagers first learn to see themselves as "villagers" (sao ban) and "paddy-rice farmers" (sao na). These identities are given as a consequence of being born into rice-farming families living in villages and of learning during childhood the patterns of behavior appropriate to these identities. While some born in northeastern villages will later acquire identities that are substituted for that of villager/paddy-rice farmer, their ability to do so is constrained by the fact that they have begun with this identity.

From rituals, from the school, and from the other cultural media to which they are exposed, northeastern villagers also learn to see themselves as being situated within a cosmological framework and within a social order that extends well beyond the fields surrounding their home villages. The cosmic order that villagers come to know, primarily through their participation in rituals, is one predicated ultimately on the Buddhist "law of Karma" (kot haeng kam). The law of Karma constitutes the ultimate ordering principle of existence. Karma refers, on the one hand, to the force, set in tow by actions with moral consequences that have been performed in previous lives, that determines the place that
a sentient being occupies on a hierarchy of relative well-being (khuamsuk) and suffering (khuamthuk). In the thought of Thai-Lao villagers, as in popular Buddhist thought more generally, the sentient beings distributed along this hierarchy include not only humans (khon) in their various statuses (male and female, royalty and commoner, and so on), but also animals (sat), spirits (phi), and deities (thewada). The Law of Karma is not, however, equivalent to a Calvinistic idea of predestination for within the generalized constraints of the position one occupies on the moral hierarchy, one has a freedom, indeed a responsibility, to act in morally positive ways that will yield merit (bun) and to avoid the morally negative modes of behaving that will yield demerit (bap). Karma, in the guise of merit and demerit, thus refers to moral responsibility as well as to cosmological determination. By devoting oneself to acts that "bring merit" (ao bun) and avoiding acts that "garner demerit" (dai bap), one will ensure that in a future existence, or perhaps even in this life, one will attain a higher place on the hierarchy. The equal importance accorded to moral responsibility as to cosmic determinism in popular Buddhist notions of Karma belies the assertion sometimes made by proponents of social change in Thailand that the religious worldview of northeastern villagers con-
duces to a passive fatalism. Villagers, some more than others, do accept that previous karma constrains their ability to act; but they also, again some more than others, act under the assumption that they control their religious destiny.

Northeastern villagers do gain from rituals, sermons, and other sources, some understanding of the Buddhist notion of Nirvana, that is, ultimate escape altogether from the realm of sentient existence as ordered according to the law of Karma. But Nirvana is a goal to which extremely few villagers in northeastern Thailand—indeed, few adherents of Theravada Buddhism anywhere—consciously aspire. Rather villagers see themselves as bound to sentient existence indefinitely and, thus, as being capable of improving their lot insofar as they can through merit-making and ethical action.

In practical terms, rural northeastern Thai do see their having been born as villagers/children of paddy-rice farmers as a legacy of their previous karma. But even if they remain villagers, they do not see themselves as occupying fixed statuses. Any male, for example, may become a monk, the highest among all human statuses. And in northeastern village culture, even those who have been only temporary monks, continue as laypersons to carry titles that indicate the length of
time spent and the religious attainments acquired in the monkhood. Any woman, although barred by her sex from becoming a monk, can alter her status from that of maiden (sao) to mother (mae). A poor village man may, through shrewd dealings in cattle and buffalo or, today, in other forms of commerce, become rich, thereby justifying the use of the title hoi. An ignorant man can, through learning, become a ritual specialist (mp). Yet, while the social order that is most meaningful to northeastern Thai villagers, and especially to village women who tend to confine their activities more than men to the village context, is that found within the local communities, villagers do also see themselves as part of a larger social order. Moreover, this order is not abstractly known, but actually impinges upon their lives at various times. And some villagers, a few probably from every community in the region, have been able to leave behind their status as villagers and to take on other, non-village statuses.

Historically, the most important non-agricultural status to which a (male) northeastern villager could aspire was that of monk. While most who joined the Sangha in the past, as today, stayed in the order only temporarily and remained at their local village temple-monastery for the duration of their time in the yellow
robes, a few would move to monastic schools where they could acquire a deeper knowledge of the Buddha-dhamma, the teachings of the Buddha. And some of these men would eventually become distinguished monks, known by the title of khruba or acan, titles indicating their roles as teachers of the dhamma. Since the institution of the modern system of clerical education early in the century, northeasterners have been over-represented in monastic schools including schools in Bangkok. As northeasterners moved to take advantage of clerical education, the attraction of religious careers was sharply diminishing for the upper classes in Bangkok. The outcome of these two patterns has been that an increasing number of the high-ranking positions on the Thai Sangha in both the Mahanikai and Thammayut orders have been filled by northeasterners. That the Thai Sangha has such a high proportion of northeasterners has given villagers in the region a major reason for seeing themselves as part of a larger Thai order. This is especially true in those communities with a native son high in the Sangha hierarchy.

In addition to high-ranking positions in the Sangha, the role of ascetic monks—today so highly regarded by people from all strata of Thai society—has also been disproportionately filled by northeasterners.
The meditation wat first became important in the Northeast as a result of the actions of disciples of the saintly Acan Man and today most of the famous meditation centers in Thailand are still located in the region. Villagers in the region also take pride in the high respect shown to locally-born meditation masters. Again, this is especially the case for those villagers who are kinsmen or fellow villagers of those who have become meditation masters and for those who live in close proximity to meditation wats.

Thus, while most members of the Sangha belong to a village-based social order, functioning to perpetuate the ritual tradition at the local wat, there are some who link villagers to a larger social order. At one level, this order is that coterminous with all of Thai society; at another level, it is equivalent to society in general, being the samsaric realm that the meditation masters are seeking to transcend and to help others transcend. But, I suspect, for most villagers, this second level is only understood through a glass darkly. Far more real is the society of Thailand that they also come to know through other means as well.

The formal schooling that villagers receive, the news they receive via various means, the interactions they have with officials and merchants, and the experiences
they have in working outside of their home communities open up to villagers a world that they tend to talk about under the rubric of the "Thai nation" (sat/chat Thai; the differences in the first word depends upon whether Lao rather than Thai is used). The dominant symbol to villagers of the Thai nation is the Thai monarch (phra maha kasat, or colloquially, nai luang). The Thai monarchy did not always figure so significantly in the conceptions of the world held by Thai-Lao villagers. Prior to the 1890s, villagers in northeastern Thailand saw themselves as living within the "domains" (muang) of local lords (cao muang) with rather weak ties to the Thai monarchy. The provincial reforms of the 1890s led to the replacement of the cao muang by officials who were directly responsible to the Siamese crown. Initially, villagers in many parts of the Northeast resisted, sometimes violently (Keyes 1977), the radical change in political order that the Siamese government imposed upon them. But the new order was backed by superior military force and was provided a legitimacy by the support given the Siamese government by the leaders of the Buddha Sangha in the Northeast. Subsequently, the introduction of compulsory primary education served to communicate a Thai civic ideology to villagers and the communication of such an ideology
continues to dominate the curriculum in the contemporary system of compulsory education.

The civic ideology promoted by the Thai governments that were in power between 1932 when the constitutional monarchy was established and 1957 when Phibun Songkram was overthrown, accorded the monarchy only a rather limited role in the legitimation of power. Since 1957 the monarchy has been promoted as a pillar of Thai national identity and this notion has been intruded strongly into primary school curriculum. The renewed importance of the monarchy in Thai civic ideology from 1957 was a product of the combined efforts of Sarit Thanarat who staged the 1937 coup and who was Prime Minister from 1958 to his death in 1963 and of King Phumiphon Adunladet, the first adult king Thailand had known since the abdication of King Prachatipok in 1935. While King Phumiphon had acceded to the throne in 1946 following the mysterious death of his brother, King Ananda, he had remained outside of the country for his education until 1950. By 1957, the then thirty year old king had begun to take an active role in defining the place of the monarchy in modern Thailand. Sarit attempted to capitalize upon the growing popularity of the King and his Queen, Sirikit, to legitimate his own power and to mobilize the populace to attain the
national goals of economic development and internal security that he promoted. It is worth noting that it was during Sarit's regime that the King made his first trips to the northeastern region, trips that brought him immense popularity among the Thai-Lao populace, a popularity previously unknown by any Thai king.

By 1963 when I first undertook research in Ban Nong Tyn, the school curriculum very strongly reflected the tenets of the prevailing civic ideology that the foundation upon which Thai national identity was based was a Buddhist monarchy. The close link between monarchy and religion was also manifest in the symbolic juxtaposition of the picture of the king and an image of the Buddha that were centrally positioned on an altar at the school. Students were made especially conscious of these symbols at periodic rituals held at the school on such occasions as opening day and "respect for teachers day" (wan wai khru). While the civic ideology message was reiterated for villagers in news broadcasts and in government propaganda, in 1963 these other sources of the message were of very minor importance as compared to the school.

For northeastern villagers, the civic ideology that rested upon a Buddhist monarchy made sense within the cosmological frame of reference that had been con-
structured for them in rituals and in the legends oft depicted in molam. The king was viewed as the human who occupied the highest rung of the moral hierarchy, a rung also occupied by the Sangha. Yet, while the Sangha consisted of men who had achieved this rung through their own efforts to realize religious goals, the king was there because he was born as king. As such, he was a being who, in village terms (as well as in terms meaningful to most people in Thailand), "had merit" (mi bun), that is, was endowed with an extremely high positive karmic legacy from past existences. In the past, the Siamese king was too remote and his actions too isolated from the vision of Thai-Lao villagers to stimulate them to judge him as being a "man of merit" (phu mi bun). Rather, they looked closer to home for such men and when the traditional political order had been radically altered by the administrative reforms of the 1890s, they rallied around local phu mi bun in a large-scale uprising against the authority of the Siamese court (Keyes 1977). By 1963, when the Thai king had become an everyday reality for villagers through the constant reiteration of his name, his works, and his image in school and in other media, he alone qualified as a "man of merit" for them.

In the past, villagers looked to "men of merit"
to translate their virtue into real power that could be used for the benefit of the many. Villagers were aware, by 1963, that King Phumiphon did not possess the equivalent power to that exercised by Sarit and they had recent memories of the power exercised by Phibun who was also not a king. Thus, the idea of the Thai king as a "man of merit" took on a rather un-traditional significance in that he was seen as being separate from the actual holders of power, but as exercising a superior moral constraint upon the exercise of power. This recognition, in the eyes not only of Thai-Lao villagers but also of Thai generally, that the king as a morally superior being had the authority not to exercise power directly but to define the parameters within which the actual power-holders acted set the stage for the wide acceptance of the king's action in 1973 of withdrawing legitimacy from the then ruling coterie of Thanom Kittickachorn, Praphas Charusathien, and Narong Kittikachorn. In 1973 the King moved from being a passive (to villagers in any case) provider of legitimacy to an active definer of who held legitimate power.

The only alternative source of political legitimacy in the Thai context—the constitution (ratthathammamun) both as symbol and as charter—has little
significance to Thai-Lao villagers; indeed, they scarcely recognize the term for constitution. While there were some efforts, mainly on the part of student groups, during the 1973-1976 period to "teach democracy" to villagers, these efforts were not especially successful. Interviews that I carried out in 1974 in a number of villages in Northeast (in Udorn, Mahasarakham and Roi-et provinces) and again in Ban Nong Tum in 1980 suggest that the interactions between students (especially urban-bred students) and villagers often produced more friction and misunderstanding than any change in ideological orientation. More successful, in the wake of the events between 1973 and 1976, has been the creation of what can only be called a popular royalist movement. The "village scout" (luk sua chao ban) movement, whose patron is the king, has through the efforts of some bureaucratic officials acquired a membership in most villages in northeastern Thailand. In Muang District Mahasarakham in 1979 there were 48 associations with 1,632 members; with 12,279 households in the district, this meant that about 13 percent of households had one member of the village scout movement. In Ban Nong Tum there was a small association with eleven members. A similar pattern of membership can probably be found throughout much of rural northeastern
Thailand. What the village scout movement does, I believe, is to reinforce for adults the messages regarding the Buddhist monarchy being the foundation of the national social order that children learn in school.

The social order that encompasses villagers and Thai king also includes other elements that hold significance for villagers in northeastern Thailand. Of particular importance to villagers in the category of "king's servants" (kha ratchakan), that is, those who work for the government. This category is not undifferentiated; villagers tend to distinguish "teachers" (khru) and "policemen" (tamruat) from other civil servants as teachers and policemen have distinctive relationships with villagers. Moreover, while clerks, low-level functionaries, and even the school janitor have "been received as servants of the king" (rap ratchakan), their roles signify little for villagers unless they are kinsmen who enjoy the benefits of the salaries they earn. The officials who are important are those considered to be cao nai (literally, 'lords'), that is, officials who have been vested with the authority to control some set of regulations and/or programs that directly impinge upon the lives of villagers. Most cao nai with whom villagers have contact are employees of the district office, but some
also find themselves constrained to deal with police officials higher in rank than those who have regular contact with villagers, with judges and other members of the provincial courts, with the occasional provincial official, or even with touring officials from Bangkok.

By virtue of the authority they wield, cao nai receive, and not rarely demand, the respect of villagers. The deference they are shown may be as minor as the use of an elevated language, or as major as providing the cao nai with food, drink, presents, and cash payments. Not all those whose positions entitle them to be recognized as cao nai insist upon deference being shown to them by villagers, but such persons are the exception and until evidence has been produced to the contrary, villagers will expect that they will have to act deferentially toward any cao nai.

Villagers in northeastern Thailand, as also villagers in other parts of Thailand, have probably always resented having to show deference to those who insist on their cao nai status. Villagers today, as in the past, grumble amongst themselves about the costs incurred in having to interact with officials. They engage, again today as in the past, in "foot dragging", that is, being deliberately slow in complying with the orders of some officials. And there have
always been jibes pointed at officials in popular songs, folk operatic performances, and even at some festivals (such as the "firerocket" festival). During the past decade or so, villagers have also become more openly critical of those officials who, in villagers' eyes, use their cao nai positions to take advantage of villagers or to deny them the pursuit of what they consider to be their rightful interest. Villagers do not expect, nor with rare exception work for, a revolution that would result in the total elimination of cao nai; after all, officials are, at base, "servants of the king," and the legitimation of the monarchy remains unquestioned. Yet, the king also symbolizes the nation of which villagers are a part and some villagers draw the conclusion that in serving the king, officials should also be serving the nation. It is likely, barring the reinstitution of draconian rule as it existed in the year (1976-1977) when Tanin Krawichian was Prime Minister when there was indiscriminate arrest of villagers who crossed cao nai under the vague charge of "endangering society" (phai sangkhom), that villagers will express their displeasure with some actions taken by cao nai even more often than they have done so in the past. Although it is sometimes said that villagers see themselves existing in a social order consisting
of only two basic types, villagers/rice farmers (chao ban/chao na) and officials/"lords" (kha ratchakan/cao nai), there is in fact a third category that has increasingly become significant for villagers, that of merchant/trader (pho kha/hoi). Those who become wealthy through trade in cattle and buffalos have long been important in rural northeastern Thai society and it is for such people who have gained wealth through such other kinds of trade as shopkeeping and rice milling who are also known as hoi. The term taokae, a term whose basic meaning in Thai and Lao is go-between in marriage negotiations, is also heard in reference to traders or merchants because it is close in sound to a Chinese word carrying this meaning. In contrast to officials, merchants/traders do not call forth any deferential behavior on the part of the villagers who deal with them. On the contrary, villagers are inclined to haggle with even relatively rich merchants over the price that they are being asked to pay for something they want or for something that they are trying to sell. Moreover, whereas the language villagers are expected to use with cao nai is Thai, it is much more likely that the language used by villagers in interactions with traders, even when such people are of Chinese descent or well-educated in Thai, is Lao.
The contrast between official and merchant could not be more clearly drawn than it was in the case of two men who came to Ban Nong Toun in connection with the electrification of the village in 1980. The first, a young man dressed in white shirt, dark expensive trousers, and highly polished shoes, came as a representative of the government's electrical authority. He asked that a meeting be convened of representatives of all households to work out the removal of trees and branches that would interfere with the electrical wires. During the whole meeting, he constantly sniffed at an inhaler, symbolically indicating his distaste for the village ambience. At the meeting he also maintained a clear spatial separation between himself and villagers to demonstrate that he was the cao nai. And when he spoke, he did not even make the effort to use the Thai officialese that most representatives of the government long at their posts in the Northeast use. Rather, he spoke rapidly in colloquial Bangkok Thai. But even if villagers did not understand everything he said, they could not miss the arrogance with which he delivered his talk. The second man, a rather plump thirtyish Sino-Thai, dressed very casually in a shirt loose at the waist, well-worn trousers, and sandals, came to Ban Nong Toun to sell villagers electrical
fitments. Although he had only arrived in Mahasarakham a short time previous, he made every effort to talk with villagers using what words of the local language he had acquired; villagers, in turn, felt no compunction about using Lao to speak to him, although they sometimes had to find a Thai word to make themselves fully understood. Instead of maintaining spatial distance, he squatted down among villagers along the side of the road or in their compounds. Villagers had been annoyed by the official's orders to cut down many old shady trees along the road, but they said nothing directly to the official. In marked contrast, many villagers openly voiced their worries in front of the electrical fitment merchant that he was cheating them (most villagers still bought from him in the end).

The markedly different place that merchant/traders occupy in the Thai-Tao world in comparison to that occupied by officials stems, in great part, from the fact that merchant/traders must be responsive to the concerns and interests of villagers if they are to make their deals with them while officials, on the other hand, must be sensitive only to the expectations of their superiors, not to those of villagers. There is also a more fundamental reason for the difference; officials derive a legitimacy from a monarch who in turn
has an exalted place in the cosmic hierarchy; the position in this hierarchy of merchants/traders is much more ambivalent for while they enjoy the benefits of greater wealth, the means used to acquire their wealth is open to moral question.

The status of merchants/traders is even more ambiguous to villagers if, as is not rarely the case, a merchant/trader is ethnically distinct. This said, in northeastern Thailand, there does not appear to be marked hostility on the part of villagers towards traders/merchants who are of Chinese descent. On the contrary, locally born Sino-Thai often proclaim their solidarity with other locals over against interloping officials sent from Bangkok. While no study has been made, it is probably true that a significant percentage of members of provincial assemblies and even of the national assembly elected in northeastern constituencies are locally born Sino-Thai. In contrast to the case with Sino-Thai, one does hear overtly antagonistic remarks among northeastern villagers about merchant/traders who are of Vietnamese descent. The somewhat perjorative term kaeo is more commonly used with reference to Vietnamese than is the more polite yuan. While the negative view of merchants/traders who are of Vietnamese descent has some roots in a traditional antagonism
between the Thai and Lao on the one side and the Vietnamese on the other, it has been sharpened by more recent relations between Vietnam and Thailand. In 1954, following the French Indochina War, about 60,000 Vietnamese fled their country and settled in northeastern Thailand. These refugees, and their descendants, have never been allowed to become Thai citizens. The official efforts to control the activities of these refugees have also been extended to other Vietnamese who had been in Thailand much longer. Since 1975, and especially since the Vietnamese invasion of Cambodia in 1979, the open hostility between Thai and Vietnamese governments has been echoed by a very negative press in Thailand for all things Vietnamese. Yet despite the markedly negative image that has been created of Vietnamese, most Thai-Lao villagers seem willing to judge particular merchants/traders who are of Vietnamese descent on the basis of their particular actions rather than with reference to this image.

While northeasterners view themselves as a part of a Thai social order, they also see themselves as belonging to a distinctive ethnoregional sector of that order. There are many ways whereby northeastern villagers are made conscious of their ethnoregional distinctiveness: in school they are taught in Thai
about Thai ways rather than in Lao about Lao ways; with officials they hear comment upon and often disapproval
of Lao language and customs; via the radio they are made aware of a popular culture that is Lao and news that is Thai. But of all the different ways, probably none is more significant than the experiences that many northeastern villagers have had in Bangkok while there to engage in off-farm work. Those who go to Bangkok literally enter another world: a few choose to assimilate to that world, to become Thai; most, however, find common cause with others from the region and create enclaves—at temple-monasteries where many of the monks are northeasterners, at restaurants where northeastern food is served, at slum dwellings where most inhabitants are also from the northeast, at work situations where most who are employed are northeasterners, and so on—where elements of Thai-Lao culture are attached to an identity that is often labelled isan, a term used to designate the northeastern region. The term clearly indicates an identity that is situated within the framework of the Thai order and thus also sets northeasterners apart from the Lao of Laos with whom they share much the same culture.

Isan identity has also been promoted by many—probably most—politicians with constituencies in the
Northeast. Indeed, what is striking about northeastern politics is the way in which ethnoregional identity tends to bring together members of parliament who belong to political parties with very different policies (cf. Keyes 1967). It has also been accorded legitimacy by many northeastern monks who have achieved high rank or great renown that extends far beyond the region. And, most recently, it has begun to receive some attention in the teachers colleges and at Sri Nakharinwirote University, institutions whose students are drawn mainly from village backgrounds.

Insofar as they reflect upon it, northeastern villagers take their ethnoregional identity as being as much a given of their lives as being born as villagers and children of paddy-rice farmers. While it is possible to alter this identity, just as it is possible to take on a status other than farmer/paddy-rice farmer, these givens constrain the acts that lead to such a transformation. Most northerners do not, however, drop their Isan (or Lao as it is also called) identity when they cease being villagers or even when they take up permanent residence outside of the northeastern region. I ran across associations of northerners in the remote northern town of Mae Sariang, Mae Hong Son province and in Songkhla in the South and even in the U.S.
have met people with permanent residence visas who still retain their northeastern identity.

The worldview even of those who continue to spend most of their lives in northeastern villages as rice-farmers does not define a social order that is restricted to the village. This is true of women as well as men, although women are far more constrained than men in their ability to act in contexts outside of the village. The fundamental categories that villagers see as constituting the social order are defined in relationship to each other. Villagers/farmers form a class segment (as Boonsaoong 1969 has argued) of Thai society vis-à-vis officials and merchants/traders and all three of these class segments consist of laymen or householders vis-à-vis the Sangha. And all of these segments are situated in a national social order whose foundation is a Buddhist monarchy. While villagers do use other terms, such as "hired laborer" (khon rap chang in Thai), "worker" (kammakon), "construction worker" (khon ko sang), "servant" (khon rap chai), and so on when describing jobs held in Bangkok or, in the first instance, in talking about employment locally for others, these and other descriptive terms are not equated with those that label the basic distinctions of the social order. Moreover, these basic distinctions are far more meaningful
to villagers than are divisions based upon ownership of the means of production.

Somewhat cross-cutting the occupational classes are the ethnic distinctions that villagers also recognize as characterizing the social order within which they live. There is some link between occupation and ethnicity: villagers tend to talk as though merchants/traders are typically people of Chinese or Vietnamese descent, as though officials are typically Thai, and as though farmers and monks are typically *khon isan* ("northeasterner"). But these linkages have become far less appropriate than they used to be and villagers recognize that they no longer adequately describe the world as they know it. Most importantly, *khon isan* are today found in significant numbers in all classes. Small scale merchants/traders today are more likely to be northeasterners than Chinese or Vietnamese and even some rather sizeable enterprises are owned and operated by northeasterners. Moreover, many officials are today *khon isan* and, unlike those northeasterners who became officials in the past, most do not attempt to "pass" as Thai. What keeps *isan* a distinctive identity is not an ethnic division of labor within the northeastern region itself but the concentration of northeasterners in unskilled laboring jobs in Bangkok and, perhaps most
importantly of all, the use made by politicians of the cultural markers of *isan* identity (the Lao language, appreciation of *m*olam, preferences for distinctive food, and so on) and a history of underdevelopment and political neglect to rally support for political action vis-à-vis the central government.

The social order expressed in the worldview of northeastern Thai villagers makes sense to these villagers ultimately in terms of their cosmological ideas. While villagers recognize that being "northeasterners" implies experiencing greater suffering than being "Chinese," "Thai," or "Vietnamese," because northeasterners are typically poorer than are members of these other ethnic groups, this fact is not taken as meaning that "northeasterners" as a whole occupy a lower rung on the cosmic hierarchy. Rather, villagers are inclined to suggest the opposite because of the positive moral value they give to the ability that northeasterners are supposed to have more than others to "endure hardships" (*ot* *thon*), i.e., to be less driven by cravings for material well-being. In villagers' eyes, it is no accident that the most renowned ascetic monks in Thailand are mainly northeasterners. Villagers do grant that officials and merchants/traders do enjoy higher standards of living than those who till the land. But they also
maintain that those who hold official positions or who are successful in trade face greater temptations than do farmers to abuse power or take advantage of others for personal gain. Officials and merchants/traders do not, to villagers' way of thinking, automatically occupy higher places on the moral hierarchy; rather, the manner in which they act in their occupations will determine whether they do or not. It is because northeasterners believe that they are morally superior to members of other ethnic groups in not being so easily moved by crass motivations that they also tend to view more positively officials and merchants/traders who are northeasterners than those who are members of other ethnic groups. Of all the divisions of the social order, only monks and the king occupy an unequivocally high position on the moral hierarchy.

4. Cultural Values and Economic Action

When Thai-Lao villagers reflect upon the actions that they have performed or anticipate engaging in, they assess such actions with reference to a fundamental opposition as to whether they are "good" (đì) or "not good" (bo đì). Of course, most activities do not call forth such an assessment; they are simply carried out as part of daily routine. Yet statements that attach
positive and negative evaluations to actions are common in ordinary discourse and derive from more formal statements found in the various cultural sources known to villagers. When an act is commented upon as being either "good" or "not good," a moral judgement has not necessarily been made. Acts that are deemed "good" can be ones that are productive of consequences that enhance the material welfare of oneself or one's family, one's that effect a restoration of physical well being, ones that bring pleasure to oneself, as well as ones that are morally positive.

It is important to villagers to succeed in achieving productive results (dai phon) through one's labor (het ngan). If a family has succeeded in their agricultural pursuits and has been able to fill its granary to capacity this is certainly good. If a man has been a successful trader of cattle, and has won the title of ho, this too is good. If a family's income in cash gained through a variety of efforts has been sufficient not only to make possible the purchase of basic necessities, but also to allow for investments that make a qualitative difference in the life of the family, this too is good.

When productivity is insufficient to meet a family's needs, the situation is deemed to be "not good."
During my first field trip in Ban Nông Tẩn in 1963-1964, the unfortunate state of certain families were commented upon to me or within my hearing. I paraphrased one conversation (recorded on July 14, 1963) as follows:

Probably the worst and most humiliating status that a family can be in is that of having no rice nor the means to obtain it. Such a family is beyond the pale of the economic system as it has become dependent upon others. (Keyes, unpublished field notes, 1962-1964).

Such dependency may not be a consequence of non-productive action on the part of the family; it could be a situation into which the family had fallen because of circumstances beyond its control. Still, it would be deemed as "not good." The values attached to "having" (mi) a sufficiency for well being and "lacking" (ot) such finds expression in proverbs. "If poor," one proverb has it, "others will not speak well of one; if rich, they will call one kinsman and uncles and aunts will recognize one as a nephew or niece." Another proverb situates these values in a cosmological framework wherein beings are ranked vis-à-vis each other: "if rich, one is a human; if poor, one is a dog."14
Villagers sometimes—and more often than do townspeople—are beset by afflictions that not only inhibit their ability to work but also to enjoy life and to engage in meritorious acts. Such afflictions are unquestionably not good and they inspire efforts to effect their end. Data collected in Ban Nong Tum in 1980 revealed that households in that village spend, on average, nearly 1,000 baht per year on medicines, medical treatment, and curing rites (the actual figure was 993.24 baht per household). In Ban Nong Tum, as in most other northeastern Thai villages, local shopkeepers stock a wide variety of medicines, ranging from traditional herbal remedies, to patent medicines, to some of the most powerful modern drugs. Villagers also go to pharmacies in nearby towns where clerks often dispense medical advice along with the drugs that they sell.

There has been an increase in government-sponsored health-care facilities in the Northeast over the past year and most villagers have access to health stations and mid-wife facilities within the tambon in which they live. If they live near to towns, they can also avail themselves of the services of medical personnel affiliated with government hospitals; these services are not only offered at the hospitals but also at private clinics that doctors (and some nurses) run during their off-hours.
And villagers can still consult local practitioners (mq) who offer herbal remedies or who perform rituals designed to restore the "vital essence" (khuan) to the body or to placate spirits who have caused the affliction.

When villagers are not ill and when they are freed from productive activities, they are wont to engage in actions that bring pleasure (muan; sanuk), actions that are enjoyable in their own right because they "gratify the heart" (hai phọc'ai) and make one happy (sambai). Pleasure is to be found in those social activities that bring together people for feasting and ritual events. Pleasure is also realized by males (but almost never by women) who come together to drink rice wine or liquor. Again, for males, "going about in search of maidens" (pai thiao sao)--a statement that can be applied to a range of activities ranging from traditional courting within the village context to visiting a brothel or massage parlor in a town--is a pleasure that can be good.

When pleasure is not realized from acts that are motivated by desires to gratify the heart, then the acts may be deemed as "no fun" (bo muan; bo sanuk). I have heard villagers make such assessments following a performance of a local folk opera troupe (mplam mu) at which the acting was quite poor, with reference to
feasts at which the food and drink was insufficient or of poor quality, and to courting occasions ruined by a heavy rainfall. Much conversation amongst villagers turns on reflections on the relative pleasure gained or not gained from past events and anticipated to be forthcoming in future events.

Beyond the enjoyment that comes from pleasure, villagers are also concerned to attain a more lasting contentment (khuamsuk khuamsambai; note the use of the same word sambai here as with reference to more immediate happiness) that comes from leading a moral life. To attain this goal, villagers engaged in meritorious actions (ao bun) and attempt to control their base desires so that they will not acquire demerit (bap). Both making merit and avoiding acts that lead to demerit are defined fundamentally for villagers in the Buddhist rituals in which they participate; with these contexts, moral action is vested with the authority of Buddha as represented by the community he founded, the Sangha.

For villagers, most meritorious acts are those involving the offering of alms (thawai than) in the form to the "requisites"—food, clothing, shelter, and medicine—to members of the Sangha. Almost all rituals are structured around such an act. Buddhist rites are, in northeastern Thai villages as in villages in other Theravada Buddhist
societies, fundamentally collective activities and the expectation is that for the major calendrical rituals each household should be represented. While adult men do attend these parish rites, women assume primary responsibility for preparing the food that is offered to monks and women usually outnumber men at rituals. Women also tend to be rather more conservative than men in following the traditional customs at which alms-offering takes place. Many villagers do also make merit by contributing toward the construction of some new edifice within the wat grounds. Whereas in northern Thailand and in Burma, it was not uncommon for wealthy families to take it upon themselves to pay for the construction of a new wat or a new pagoda, in northeastern Thailand it is more likely that new religious edifices have been built through the contribution of labor and money from the community at large. In Ban Nong Tun, a new monastic residence (kuthi), a new assembly hall (salawat), and a water storage system at the wat had been built through such collective endeavor. The wat did also have a new bell tower erected by the wealthiest shopkeeper/rice miller in the village in honor of his mother-in-law who was killed in an accident involving his truck.

The ordination of a boy or young man into the Sangha as a novice or as a monk brings merit not only
to the person ordained but also to his sponsors who are most usually his parents. Moreover, all those invited to participate in the ordination festivities also have an opportunity to make merit through making a donation toward the costs of the event. As a majority of men, at least in Ban Nong Tyn, are ordained at least once in their lives, ordination is a common occurrence, several typically being held in every village every year. Unlike calendrical rituals, ordination rites are not community affairs but are sponsored by the families of the person being ordained. Nonetheless, most villagers will be invited to at least one ordination in the course of a year.

Like ordination, funerary rites permit merit to be transferred to someone other than the person performing the rite. In ordination rituals, merit is transferred by the male who is ordained to his parents and especially to his mother, as well as to his sponsors if they be other than his parents. In funerary rites, merit gained through the offering of alms by relatives of the deceased is transferred to the spirit of the deceased to help the spirit in the process of being reborn. Funerary rites are also sponsored by families rather than by the community as a whole; but again, like ordinations, others are invited to participate
Immoral acts leading to the acquisition of "demerit" are construed in popular Buddhist practice in northeastern Thailand, as elsewhere in Theravada Buddhist societies, primarily with reference to the "five precepts" (sin ha) to which lay persons commit themselves to follow at every Buddhist ritual. There is probably no villager above the age of ten or so who is not able to repeat the Pali formula that asserts that he or she will undertake to abstain from taking life, taking what is not given, engaging in improper sexual acts, telling lies, or imbibing or ingesting substances (such as alcohol or drugs) that cause heedlessness. Villagers also learn from sermons and folklore that the cardinal vices that lead one to the breaking of precepts are ignorance, anger, greed, and passion. Being aware of the desires that impel humans and consiously working to control them are themes that are greatly stressed in contemporary Buddhist thought. While few northeastern villagers are well versed in the sophisticated reflections of the Thai theologian Buddhadasa Bhikkhu, who is well known among urban Thai, or even in the teachings of such meditation masters as Acan Fan (who recently died) or Acan Bua living in forest wats in the Northeast itself, they have picked up something of this thought.
The "ordained-in-the-dhamma" movement in particular stresses adherence to the precepts to a degree not found in traditional village religion and the altered state of consciousness gained by those who are possessed by the dhamma can be seen as a direct counterpart to the trance-like "absorptions" attained by adepts in meditation.

A village man (but not a woman) truly intent upon the attainment of the religious good will not be content with normal acts of merit-making or even with conscious adherence to the precepts, but will remain a monk after ordination and devote himself to the strict practice of the discipline (winai, from Pali vinaya), perhaps even become an ascetic monk whose acts are ordered with reference to the "austerities" (thudanga, Thai thudong). Women do not have this choice because they are barred from becoming members of the order and to become a "nun" (mae si; mae chi in Thai) is to do no more than to be a strict layperson. Interviews that I carried out with villagers in Ban Nong Tum in 1964 about the relative ranking of acts of merit-making resulted in a consistent placing, by women and by men, of becoming a nun at the lowest rank. But even men who have the choice to work for their ultimate salvation as monks rarely choose to do so even though they may express great admiration for the man who becomes a strict
practitioner of the Dhamma.

Having chosen to live their lives as lay persons, northeastern villagers find themselves confronting a tension that arises in choosing amongst the various types of good that are culturally valued. This tension has been exacerbated by changes that have taken place in rural northeastern Thai society in the past few decades. In former times, village life was structured around a fundamental oscillation between work and ritual, the latter providing the occasion not only for making merit but also for having fun. The ritual cycle, moreover, served to mark changes in the work cycle. This rhythm was broken periodically by the intrusion of affliction, but even then such afflictions were confronted by yet other rituals.

Even in the wake of the winds of change that have swept through the countryside in recent years, the traditional pattern still remains very evident and many villagers continue to balance their pursuit of the different culturally-valued ends in terms of traditional patterns. Yet, if they do so today, they often are not simply acting in accord with deeply-rooted habits shared with most everyone else but are doing so as a consequence of conscious choice not to act in new ways open to them.
For our purposes here, I am primarily interested in the increased tension that obtains between religious and economic goals. Even in pre-modern times, some possibility, mainly in the trade of buffalos and cattle, existed for a few villagers to gain more wealth than other villagers. During the past twenty years or so, the growth in the Thai economy has created new economic opportunities for northeastern Thai villagers. While many have found these opportunities in Bangkok where growth has been concentrated, others have also found them in the Northeast itself where there has been some, albeit more limited, growth. During the same period, villagers have been strongly pressured by officials acting as the agents of various government-sponsored programs to give priority in their actions to the attainment of material ends, i.e., to work to "develop" (phatthana) the society. Northeastern Thai villagers have not responded to these economic changes by attempting to shelter themselves within closed moral communities; on the contrary, they have demonstrated an overwhelming willingness to take advantage of economic incentives. They have increased production of rice, other crops such as cassava and jute, animals, and crafts to take advantage of new market demand. In nearly every village there is typically at least one
villager who has become an entrepreneur, having built a mechanized rice mill, established a shop, or bought a truck. In massive numbers, northeasterners migrate to Bangkok or other centers to seek temporary, and in some cases permanent, non-farm work. Indeed, the disproportionate representation of people from northeastern Thai villages in the urban labor force in Bangkok strongly suggests that northeasterners have been more willing than have villagers from other parts of the country to take on non-traditional economic roles. It would appear, thus, that the tension between religious and economic values has not led to a conspicuous reluctance on the part of northeastern villagers to take advantage of new economic opportunities. To the contrary, it is my argument that many northeasterners have developed a work ethic that has a basis in Buddhist values and has been shaped by rather distinctive experiences.

By the time a northeastern Thai villager becomes an adult member of the work force, he or she has become sensitive to the possibility that productive acts may be immoral if they result in the infringement of the precepts incumbent upon all good Buddhists. Villagers are in basic agreement that traditional paddy-rice farming and other work such as the manufacture of cloth, utensils, matting, charcoal and so on rarely lead
to transgressions of the precepts. Since meat is a standard part of the diet, it is necessary for some villagers to take the lives of animals. In this instance, there is a clear division of labor between men and women; women typically collect the small aquatic life (snails, fresh-water shrimp) and insects that are eaten, but they do not fish nor slaughter animals. Almost all men, by way of contrast, fish, and few evidence any concern about the potential immorality of their acts. Moreover, few men even reflect that the killing of chickens for food brings demerit. Being a rather systematic inquirer, I once asked a village friend in Ban Nồng Tụn about whether he was acquiring demerit from killing a chicken. He laughed, and replied that he was probably reaping a little demerit, but then, he said, since he was a villager (implying that since it was his karma to be a villager) it was inevitable that some actions that were necessary for him to sustain he and his family should result in demerit. But, he would refuse to kill such a large animal as a pig, a cow, or a buffalo since that would bring much demerit. There were several men (no women) in Ban Nồng Tụn who were willing to kill large animals, but their behavior did lead other villagers to comment on the demerit that they thereby acquired. Even members of the
"ordained-in-the-dhamma" group did not refrain from killing chickens, although none of them were involved in the slaughter of large animals. In short, the precept against the taking of life has not had any significant dampening effect upon the consumption of meat, and the concomitant slaughter of animals to meet the demand for meat. Women do appear to be much more concerned than are men about the demerit generated from the taking of life of animals and the members of the ordained-in-the-Dhamma movement are somewhat more concerned than are non-members. Yet, even among these people, there is no reluctance to eat meat (although the members of the movement do not eat raw meat) and there is considerable tolerance for those who do take the life of animals to provide meat. In this regard, northeastern Thai—and Thai in general—differ from Burmese who do consume considerably less meat, in part, it would appear, as a function of a campaign "to be kind to animals by not eating them" launched under former Prime Minister U Nu.17

Prostitution unquestionably entails a violation of the precept against engaging in improper sexual activities. Within the context of villages, prostitution is essentially unheard of, although some village women (usually unmarried) have been enticed into having
or have initiated affairs with men to whom they are not married. But some northeastern village girls do go off to become prostitutes (often thinly disguised as masseuses, waitresses, and servants) in Bangkok and elsewhere. The morality of their actions receives little comment among the members of the communities from which they have come because these actions are not carried on within the village context and it may not even be known that a girl has become a prostitute. When an ex-prostitute returns to the village, little stigma appears to attach to them although such a person, as I found in one instance of a woman in Ban Nong Tun who was reputed to have been a prostitute, may be the subject of some gossip. Yet, insofar as an ex-prostitute conforms to the expectations of her fellow villagers while living in the same community, she is treated little differently to any other village woman.

Villagers in northeastern Thailand do evince awareness of the potential that some types of economic behavior can entail the bullying or taking advantage of others, thereby leading to a violation of the moral proscription against aggressiveness that conduces to anger or greediness. In Ban Nong Tun in 1963-1964, one man was referred to as a nakleng, a Thai term sometimes translated as "scoundrel" or "rogue," but which
also connects an especially masculine quality (the term does not appear to be used for women) of adventuresomeness. A nakleng is a man who achieves his ends by inspiring fear (Lao njan) in others. Based on observations made in 1963-1964, I described the nakleng of Ban Nông T.vn in these terms:

Mr. Thap (a pseudonym) through being the major money-lender of the village and the organizer of an illegal local lottery and most of the large gambling games in the village could upset a large number of village households merely by demanding payment in full for all debts owed to him. That he is capable of so doing has been demonstrated in the past when in fact he did press for the repayment of debts from families who could ill afford any cash outlay. He couples this fear-inspiring quality with a reputation for being unconcerned with the consequences of taking life. He controls most of the butchering of large animals, although most of the actual killing is done by his lackeys. Villagers comment on this by saying that Mr. Thap is accumulating much bap ("demerit") even though they appreciate
the possibility of procuring fresh meat. But far more damning than animal slaughter to his reputation is his willingness to take human life. When asked what would happen if someone reneged on a gambling debt to Mr. Thap, one informant responded: "If they don't pay or refuse to pay, they would probably be killed. There certainly couldn't be any appeal to the police because the debt is illegal anyway."

The successful flaunting of dominant moral values, while said to incur demerit, also serves as a sign of intrinsic power of an almost magical quality (cf. Thak Chaloumtiarana 1979:340), a quality that is presumptively a product of previous merit. Moreover, a nakleng, if he lives long enough, may make use of the position he attains to become a conspicuous follower of the dhamma. While Mr. Thap in Ban Nong Tun had not, in 1980, followed the example of a well known northeastern nakleng with a reputation for thievery and murder, described by Blofeld (1960:147-160), and become a monk, he had become, as I anticipated in 1964 he might, a conspicuous supporter of the religion. The nakleng, or one who acts aggressively in the pursuit of his own ends, is typically found in most every rural community
and some, like a former kamnan (commune headman) of a tambon bordering on the one in which Ban Nông T’un is located, may acquire considerable influence within a rather large area.

Moral ambivalence, somewhat comparable to that which surrounds the role of the nakleng, also is to be found expressed in northeastern villages towards the roles of those who demonstrate a marked ability to generate wealth through such entrepreneurial activities as rice-milling, shopkeeping, trucking, and brokering of the trade in agricultural and craft products. So long as middlemen were ethnically distinct from northeasterners, then their behavior was not (at least in villagers' eyes) subject to the values that guided their own lives. But when Thai-Lao villagers themselves became middlemen, as an increasing number have done over the past decades, then this bracketing of the morality of the behavior of those who gain their income in transactions with primary producers can no longer be maintained. The ambivalence toward such people can be illustrated by the case of the main entrepreneur in Ban Nông T’un, Mr. Bunthon (another pseudonym), who was born in a rather average farm family in a nearby village. He got his start into a new living not through the use of capital provided by his family but by working in
Bangkok for a total of about six years. After a period working in unskilled construction jobs, he eventually found himself a job in a Chinese noodle factory. He made relatively good wages at this factory and by resisting most of the temptations of the city, he saved enough to buy a small rice mill and open a very modest shop in Ban Nông Tewn. From this beginning in 1961, he expanded his enterprise so that by 1981 he had a much larger rice mill, a well stocked store, a truck that he used primarily for his middleman endeavors in the rice, charcoal, and kenaf trade, a large herd (70-100 at any one time) of pigs, and 22 rai of land (all of it purchased). By his own estimation, as well as by the estimation of most everyone in the village, he had become at the age of 45 the richest man in Ban Nông Tewn.

In 1963-1964 most adult villagers had used the title of thit with Mr. Bunthon thereby pointing to the fact that he had been ordained as a monk. By 1981, the most common title I heard used was that of hoi, a title that indexed his achievements in trade. He was greatly admired by many in the village for his diligence (man; khanjan from Thai khayan) and shrewdness (keng; salat). But many also saw him as one obsessed by seeking after wealth (ha ngoen), sometimes to the detriment of others in the village. I observed
some villagers in 1981 displaying an obvious coolness toward Mr. Bunthon, a function, it should be noted, not only of the economic position that he had assumed but also of his alignment with a village faction antagonistic toward the present headman and his faction.

Mr. Bunthon considered himself to still act within the framework of village morality. He could point in this regard to his support of the wat and the local Sangha and to his relatively generous gifts to those who invited him to the ordinations of their sons or relatives. But even in his merit-making, he had begun to set himself apart from other villagers. His was the one family in the village that had donated the entire sum toward the construction of a building in the wat—in this case, an elaborate bell tower. He probably sponsored more house-blessing rites, rites held at his home rather than at the wat, than did anyone else. In other words, while he and his family did continue to participate in communal merit-making rituals, he had begun to accord greater emphasis to religious endeavors whereby merit was generated primarily for himself or his family. Mr. Bunthon did demonstrate on numerous occasions respect for the Sangha, but he also clearly distinguished between learned monks and those who simply performed traditional rituals. He expressed considerable
admiration for those "ordained-in-the-dhamma" who had committed themselves to a stricter adherence than was traditional to the Buddhist precepts, but he was also openly sceptical of the significance of the charismatic rites performed by adherents to this movement. In sum, while he did not ignore the moral stances taken by his fellow villagers, he had come to see himself as the better arbiter in most circumstances of his own moral actions.

The case of Mr. Bunthon cannot necessarily be generalized, but it does serve, I believe, to point up the tensions that have emerged within northeastern villages in conjunction with the assumption by some villagers of distinctive middlemen roles. These tensions are not limited to relations involving middlemen alone, but are a consequence of a more general reorientation of many villagers towards production for the market. These tensions have generated something of a moral debate amongst northeastern Thai villagers. Echoes of this debate are to be found in responses to a question on what important changes have occurred in the village in the past ten years asked to representatives from the 117 households in Ban Tae. Most informants offered positive assessments of changes that had occurred in the past decade; moreover, increased
production of rice, vegetables, and silk for the market were overwhelmingly approved of. A few villagers (four) even went so far as to say that the ability of villagers to operate within the market economy was a definite boon. Typical of these four was one woman who said that villagers were "smarter because they have learned how to make a better living through the market system."

On the other hand, four respondents sounded a more negative note, commenting that villagers had become more selfish or less cooperative than before; and four also noted that there had been a decline in participation of villagers in rituals (and thus a decline in ritualized merit-making). One person who made both such observations said: "More villagers used to attend the religious rituals at the wat; now only a few attend regularly. The villagers used to be very close to each other. Now they have more disagreements and are not very close. Now they all fend for themselves."

In contrast, only one villager thought that villagers were more cooperative than in the past and one other thought that villagers made more merit (as evidenced in the new buildings in the wat) with the wealth they had gained. While these data are rather limited, they do reflect some unease about the degree to which moral values constrain the quest for increased cash income.
Yet this unease is not of the order that leads to any significant dampening of production for the market in agricultural or home enterprise pursuits.

It is important to note that the moral debate in northeastern Thai villages about the salience of the moral code that villagers derive from their understanding of the Buddhist precepts is carried on in a social context in which there are few punitive sanctions that can be brought against those who violate the code. Even in those cases where a presumed violation of the code has also been a violation of Thai law, the offender may still escape any immediate consequences because they may have the resources to buy off the police or other officials who have been made aware of the action. In theory, monks could refuse alms from one who is deemed unworthy to offer them; in practice such refusals are so rare as to be unrecorded in any literature that I know of. Short of taking the law into their own hands, something that is done extremely rarely, villagers must rely upon social esteem and disapproval as the main methods to use in ensuring compliance with the code.²² In this regard, Buddhist communities, such as those in northeastern Thailand, contrast with communities in some Islamic societies where punitive sanctions are administered by religious authorities.
or religiously-backed authorities. In northeastern Thai villages, moreover, esteem and disapproval are rarely unanimous. Only the learned permanent monk gains the unequivocal respect of those who live in the same community as he does. Cases where a person is totally ostracised do occur as with a monk I was told about by villagers who had been caught carrying on affairs with a number of women. But such cases are extremely rare. With regard to those who become nakleng or middlemen, the judgment is usually equivocal. Disapproval of their actions on moral grounds is often offset by a respect for the control over power and wealth that they display as well as by the necessity to interact with them.

The moral code that is based in the understanding that certain types of actions generate demerit operates, insofar as it does, to constrain aggressiveness, including economic aggressiveness. If this were all there were to Buddhist morality as practiced by northeastern Thai villagers (as well as by adherents to Buddhism more generally), then one might be justified in arguing that Buddhist values do inhibit, albeit weakly, economic development. But Buddhist values do not consist solely of prohibitions against certain types of behavior; they also include inducements to undertake
certain positive acts, those that will produce "merit."

Merit-making to villagers typically means a ritual act involving the offering of alms (thawai than) to members of the Sangha; such alms consist of the "requisites"—food, clothing, shelter, and medicine—needed by members of the order. In addition to the offering of alms, merit may also be obtained through contribution to the construction of a new religious edifice. For men, ordination into the order brings merit and this merit can be shared with their parents or sponsors. In a word, merit-making consists of acts that sustain the "religion" (satsana).

Productive acts (het ngan), even those connected with agriculture, are not in and of themselves religiously significant since they do not result directly in the generation of merit. However, since the acts of merit-making that villagers engage in require the expenditure of wealth, productive acts are viewed as a necessary prerequisite to merit-making. Thus, the way in which religious goals are attained by most northeastern villagers serves as a goad to them to be productive; the poor person not only suffers in the here and now, but also lacks the means to alter his position on the moral hierarchy in the future. Some of the leaders of the "ordained-in-the-dhamma" movement have made explicit
the connection between work and merit by stressing that the more "diligent" (Lao man; one also hears khanjan from the Thai khayan) a person is and the less "lazy" (khikhan) he or she is, the more wealth one will gain to use in making merit. A similar moral stance is taken by Mr. Bunthon the chief entrepreneur in Ban Nong Tun and, I suspect, by many entrepreneurs elsewhere.

Villagers do not, of course, have to use the wealth they acquire entirely for merit-making; indeed, most of their wealth, even for the relatively rich, is used to pay for the needs of the family—for clothes, food, housing, health care, education, and so on. It is also possible to spend wealth to enhance the "pleasure" (muan; sanuk) quality of life, and the array and availability of such pleasures has markedly increased as the economy has developed. For example, it is today possible to enjoy the pleasures of alcoholic beverages everyday since liquor is sold in almost every village whereas in the past it was possible to drink mainly on ritual occasions for which rice wine and perhaps rice liquor was made. Despite the precept that proscribes consuming substances that cause heedlessness, many village men (but very rarely women) take their cue from officials for whom alcohol has become a ubiquitous social lubricant. While figures are not available,
there seems little question but that alcohol consumption has radically increased in rural northeastern Thailand since World War II (and, it is my impression, that it has increased mainly since the early 1960s) and with increased consumption has come a growing incidence of alcoholism.

Gambling (again, almost exclusively by men) has markedly increased as villagers have had more cash income. While most forms of gambling, other than the national lottery, are illegal, there is little enforcement of the law in villages where a "numbers" game is especially popular. Brothels, while not yet, insofar as I know, found in villages, have proliferated in the towns of the Northeast as well as in Bangkok. Again, the law against prostitution is not enforced. Village men, particularly when they are working in Bangkok, are often attracted by the readily available and relatively inexpensive sexual services offered by prostitutes. And again, the precept proscribing inappropriate sexual relations seems to count for little.

While drinking, gambling, and sex are pleasures indulged in primarily by men, there are also pleasures that attract village women as well. Shops selling citified clothing, jewelery and other adornments have also increased markedly in the towns and cities of
northeastern Thailand in the past two decades. There are today many more entertainments to lure both men and women. In addition to the rituals and temple fairs, there are now movies and programs on radio, cassette, and TV.

With the opportunity to effect immediate improvements in the standard of living or to indulge in a variety of immediate pleasures, the question that arises as to what motivates so many villagers to put at least some of their wealth toward a remote goal that will be achieved through the accumulation of merit? It is noteworthy in this regard, that most young people who go off to work in Bangkok do blow most of their earnings on pleasureable pursuits. In part, they do this because they are freed from the moral constraints of village life. Perhaps of equal importance is that for the young, salvation from suffering does not seem an immediate concern because their experiences are so little beset by suffering. But most northeastern Thai villagers sooner or later become aware of the significance of suffering not because of any abstract sermonizing but because it impresses itself so forcibly upon their lives.

Work in the fields in the hot sun brings with it all sorts of aches and pains that villagers seek to
alleviate in the evening with medicines bought at the village shop. Afflictions are not hidden away as they might be in the city; even on a casual walk through Ban Nong Twn one would see a woman lying on her veranda, listless because of some illness; a woman rocking her new baby with an ugly hairlip; a teenage boy so badly retarded that he cannot control his own movements; an elderly man, dying of what is probably cancer, sitting quietly in front of his house. And then there is the suffering that comes with uncertainty—uncertainty as to whether the rains will come too early or too late this year; uncertainty as to whether the price of rice or kenaf will rise or fall; uncertainty whether or not one will be able to use government land to grow crops again; uncertainty as to whether one will be able to pay off bills that have come due; uncertainty as to whether one's buffalo will recover from hoof-and-mouth disease sufficiently to be able to work to plow and harrow the fields. For village women, suffering is epitomized by child bearing, although for some today the intensity of this experience has been muted to some degree by hospital care.

Such suffering is, of course, typical of any poor, agrarian community. But northeastern Thai villagers have drawn upon Buddhist thought and made the
ability to endure suffering a virtue, leading them to orient themselves toward a path of action that will eventually lead to the transcendence of suffering. Immediate gratification of one's desires may provide a temporary surcease of suffering, but it does not move one any closer to the ultimate goal; indeed, it may create more suffering as with the case of the man who spends all the family's wealth on drink. Villagers thus take pride when they are able to refrain from indulging (ot thon) themselves and to use their wealth toward the attainment, directly or indirectly, of a higher status on the moral hierarchy.

The value on foregoing of pleasures (ot thon) is not learned abstractly, but is imbued, insofar as it is, through experience. Within village society, two types of experience, one for women and the other for men, convey this value. For women, the "lying by the fire" (yu fai) following childbirth, entails ascetic-like mortification of the flesh. In one sense, the mortification is literally true because a body of the woman who "lies by the fire" actually is burnt. In addition, she foregoes a normal diet for the period of her sequestering, thereby learning, at least implicitly, how to control her appetite. For men, the temporary stay that one spends in the monkhood also
entails the practice of a form of asceticism. As a member of the order, a man must foreswear all sexual interests, must deny himself the ordinary pleasures of entertainments and drinking with friends, and must reduce his intake of food to two meals, both occurring before noon. While men will return to ordinary ways once they have left the monkhood, they will have developed some self-consciousness of their cravings that will assist them in avoiding excesses as a lay person. Villagers think of the man who has been a monk as one who has been morally tempered; such a man is preferred over the man who has never been ordained because it is thought that he will be more moderate in the demands that he will make of his wife.

The ascetic experiences that most northeastern villagers have had, even today, do not lead to the total rejection of pleasure and the celebration of work, but they do temper for many villagers, their orientation toward both types of action. And in combination with other types of experiences these experiences can create an ethic that in some ways parallels the "Puritan Ethic" as described by Max Weber (1958).

Many villagers from northeastern Thailand have worked for a temporary period in Bangkok or other centers. While there they are afforded the opportun-
ity to engage in many pleasures unavailable in their home communities, and, as already noted, many do so; but those who go to Bangkok also often become aware of being a Lao or Isan minority within a Thai-dominated system. In this regard, their experience is not dissimilar to that of Chinese from the countryside of mainly Southeastern China who took up jobs in Bangkok in the latter part of the nineteenth and early part of the twentieth century. Of such politically subordinated minorities, Weber has written: "National or religious minorities which are in a position of subordination to a group of rulers are likely, through their voluntary or involuntary exclusion from positions of political influence, to be driven with peculiar force into economic activity" (Weber 1958:39). While, as Weber goes on to show with regard to Catholics in some states where they have been political minorities, this force does not always operate, it certainly did in the case of overseas Chinese in Thailand and elsewhere in Southeast Asia. It also has, I suggest, in the case of a significant number of Thai-Lao from northeastern Thailand.

Bangkok in some ways makes the moral hierarchy that a northeastern Thai has learned about through rituals much more a reality than it was in the village
itself. In Bangkok, the extremely wealthy and powerful can actually be seen, seen, moreover, by those who are all too aware of their own lowly position. For many migrants, the social differences that they observe in Bangkok probably seem as fixed as the cosmic order and so they enjoy what they can with the modest earnings they get for being allowed to labor hard in this glittering realm and having had their fling return back to the less exciting but more congenial world of the village. Some migrants, usually those who stay long enough to obtain more than the casual laboring job, make another discovery about the city. There are people, they find, who themselves or whose parents started off as poor as northeastern Thai villagers and yet have succeeded in radically improving their lot. These other people—overwhelmingly of Chinese descent—provide models for social mobility that some Thai-Lao migrants find it possible to emulate.23 Indeed, many such migrants get their start up the ladder in Chinese firms where conditions permit them to save for a "stake" that they will eventually invest in some enterprise in the Northeast or to gain training in a skill that they will be able to market for higher wages, usually in Bangkok.

Whether or not northeasterners who have become entrepreneurs consciously emulate the model of the
immigrant Chinese, there is an affinity between the two groups since both constitute subordinate minorities within the Thai system and both have (the Chinese more in the past than at present) less access to bureaucratic jobs than do Thai. This affinity is not only to be found in Bangkok, but also in the Northeast itself where, as already noted, Chinese middlemen tend to interact with villagers more as equals than do officials. Moreover, Thai-Lao village entrepreneurs often develop close relationships with the owners or managers of certain Chinese firms in nearby market towns.

Within the village context itself, those who are "ordained-in-the-dhamma" impose an ascetic quality upon thier style of life. The term "ordained" (buat) carries with it the connotation of subjecting oneself to a discipline; in this case, the discipline is applicable to women as it is to men. Those who join the movement strongly deemphasize the actions that lead to immediate pleasures. In Ban Nong Twn where this movement was very strong, drinking was conspicuously less noticable than it was in Ban Tae where the movement had made very little impact. Members of the movement also avoided gambling and indulging in raw meat dishes (lap; koi) that are not only costly but are also unhealthy. Although statistics are not available, it was the
impression of several villagers with whom I talked, and
my impression as well based on casual observations,
that those in Ban Nong Tun who had been "ordained-in-the-
dhamma" were economically better off than were those
who had not joined. It was unquestionably the case that
several of the most industrious villagers were members
of the movement.

In sum, while there are certainly reprobates,
bullies, and villagers who are just getting along like
they always have living in communities in rural north-
eastern Thailand, there are also some who have ordered
their lives with reference to what Weber called an
"inner-worldly ascetic" ethic. This ethic has its
roots in popular Buddhist notions of the primary im-
portance of merit-making, but it has been given its
particular shape by the experiences that are more
typical of the lives of northeastern Thai villagers
than of the lives of other peoples in Thailand. As
the basis of the ethic is the awareness that more
northeasterners gain early in their lives of what is
"suffering" in its existential (and Buddhist) sense.
In the critical years of late teenage and early adult-
hood, many, perhaps most, northeastern villagers also
learn, primarily through temporary work in Bangkok,
that they are a part of a minority living within a
Thai-dominated system. Moreover, with rare exception, also realize that it is impossible for them to move from being a villager (chao ban) to being a "lordly" (cao nai) official. But, some villagers discover that there is still another non-village status to which they can aspire, that of merchant (phokha/maekha), for which the model is provided by those of Chinese descent. To emulate this model successfully requires foregoing immediate pleasures; some men learn how to "defer gratification" (ot thon) while serving temporarily as monks, some women during the post-partum rite of "lying-by-the-fire," and some men and women while following the "discipline" they committed themselves when "ordained-in-the-dhamma." While some of these same factors are to be found amongst other populations in Thailand, they are most pronounced among northeasterners.

Northeasterners act with reference to their values in the context of the actual social conditions that impinge upon their lives. These conditions consist not only of village-based patterns, but also of ones that are concomitants of the political-economic structure of Thai society.
FOOTNOTES

1 These changes have come about as a consequence of marked increase in government allocations to education. In the first national development plan (1961-1966), 7.6 percent of the total was projected to be spent for education and only 2.1 percent of the actual amount used to fund the plan was spent for education. In the third plan (1971-1976) 32.8 percent was projected to be spent and nearly this percentage—31.7 percent—was actually spent. In the fourth plan (1977-1981), 37.8 percent of the development budget was projected to be spent on education. These statistics are taken from a table in C.L.J. van der Meer's Rural Development in Northern Thailand (van der Meer 1981:270).

2 Some incentive for villagers to send children for secondary education may have been created by a rather modest scholarship fund that my wife and I have provided the village on an annual basis since 1969. In 1980 I was introduced to two former villagers, now working in government jobs, who said that their post-primary education had been made possible because of the scholarship money. Such cases notwithstanding, I do not think that our scholarship support has been the main factor stimulating increasing numbers of villagers to obtain secondary education and know that our money has paid for only a small fraction of the total costs involved.

3 The difference in the figures may reflect, in part, the fact that in the Ban Nong Tyn statistics no account was taken of those now living in Bangkok.

4 Women who become masseuses/prostitutes are also, I suspect, less likely to return to their home communities because they acquire such a different style of life.

5 Herbert J. Phillips (1958) was the first to characterize Thai elections as "rituals" as perceived by Thai villagers. Although he was writing of villagers in the central Thai community of Bang Chan in the 1950s, the characterization remains true for northeastern villagers in the 1970s.
Northeastern MPs have often been influential in political events in ways that transcend the relatively weak power actually vested in parliament (cf. Keyes 1967). The most recent example of the political significance accorded to elections of members of parliament from the northeastern constituency is a by-election held in August 1981 for a seat in Roi-et province vacated following the death of the incumbent. This seat was contested primarily by General Kriangsak Chomanan, a former Prime Minister and leader of the newly formed National Democracy (Chat Prachathipatai) Party, and by Lt. Col. Boonlert Iertprâechâ, a leader of the Social Action (Kit Sangkhom) Party who, under former Prime Minister Kukrit Pramoû, had promoted policies designed to garner the support of the rural populace. Kriangsak's election to this seat proved to be a major boost to his political fortunes.

I was told of one villager in Ban Nong Tûn, a young man who had assisted me when I was in the village in 1963-64, who had been killed as a Communist in the community in the Phu Phan area where he had migrated after his marriage. Villagers doubted that he had actually been a member of the CPT and opined that he was killed in a government attack on a suspected Communist-held area.

In the discussion of worldview that follows, I have constructed an "ideal typical" (in the Weberian sense) model. This mode of presentation tends to make worldview rather more static than is actually the case. Nonetheless, I still maintain that my description represents the dominant idiom whereby villagers understand the social universe within which they live.

By far the best work on the ideology formulated and promoted by the Sarit regime has been written by Thak Chaloemtiarana (1978, 1979).

These statistics were supplied by the district office in Mahasarakham.

Scott (1976:232-38) has suggested that such restrained protest against the privileges of lords and officials is to be found in most, if not all, peasant societies.

The following discussion applies to those northeasterners--the vast majority--who are culturally Lao rather than Kui, Khamu, Phu Thai, Yô, or some other
minority group.

13 Again, the following discussion has been presented in ideal typical terms, although in this instance I have taken account of some actual differences among villagers.


15 For further discussion of ideas concerning merit-transference in ordination and funerary rites with reference to practices in northern Thailand that are very similar to those in northeastern Thailand see Anusaranasasanakiriarti and Keyes (1980) and Keyes (1981; in press-b). Also compare Tambiah (1968a, 1970) and Keyes (in press-a).

16 Vegetarianism is practically unheard of in rural northeastern Thailand; indeed, it is very rare in any Theravada Buddhist society. Most monks eat meat that is offered to them and learned monks point to the scriptural sanction for this practice since the scriptures attest to the Buddha himself having eaten meat offered to him. In a village close to Ban Nong Tum there is a monk who practices vegetarianism. In 1980 he was invited by a man in Ban Nong Tum to participate in a house-blessing rite. After his departure, I stood talking with several village men about the rather unusual behavior of this monk. Instead of eliciting, as I anticipated, admiration for the monk's asceticism, the men commented instead on the fact that the monk seemed sickly, a function, they suggested, of his not eating enough protein.

17 The degree to which lower consumption of meat was a consequence of this campaign as distinct from being a concomitant of the lower standard of living in Burma cannot be determined on the basis of the evidence now available.

18 In research carried out among prostitutes in Bangkok, Pasuk Phongpaichit found that only thirteen of fifty prostitutes told their families what they were doing in Bangkok, although all but four maintained regular contact with their families (Pasuk 1981:19).
19 This conclusion has been suggested to me by Thak Chaloemtiarana's similar argument with regard to Field Marshal Sarit Thanarat, Prime Minister of Thailand from 1958 to 1963 (see Thak 1979; esp. pp. 339-340). I think that this argument harbors a possible explanation for the behavior to those Khmer who served all too well through their almost indiscriminate killings, the dictates of the Angka Loe, the ruling party of Democratic Kampuchea.

20 The Isan Thai dictionary (Phakanukrom Phak Isan-Phak Klang 1972:355) defines leng as "doing as one wishes" and goes on to give as an example a woman who becomes a prostitute. It would seem, thus, that the prostitute is the equivalent for a woman to the nakhleng for men.

21 A similar question was asked to a smaller sample (28) in Ban Nong Tum, but in Ban Nong Tum responses were not so rich. In part, this was a function of spending less time in Ban Nong Tum with informants on this question than was spent with informants in Ban Tae. It was also a function, I believe, of the fact that Ban Tae has experienced much greater economic changes in the past decade than has Ban Nong Tum.

22 I ignore here "supernatural" sanctions that are said to emanate on occasion from spirits who have been offended by the actions of those in their jurisdiction. However important such sanctions may have been in the past—and there is evidence that they were quite significant for maintaining compliance with prohibitions against improper sexual activities—they have a very peripheral role in the village life of today.

23 For a discussion of the "work ethic" of Chinese in Thailand and the contrast between Chinese and Thai (not including northeasters) values regarding work, see Deyo (1974, 1975) and Tobias (1973).
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SOCIOECONOMIC CHANGE IN RAINFED AGRICULTURAL
VILLAGES IN NORTHEASTERN THAILAND
PART III
DEVELOPMENT AND UNDERDEVELOPMENT IN RURAL
NORTHEASTERN THAILAND

by Charles F. Keyes

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July 1982

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This report continues a report entitled "Socio-economic Change in Rainfed Agricultural Villages in Northeastern Thailand. Part II. Order and Social Action in Northeastern Thai Village Culture." The numbering of pages in this report also continues the pagination of the previous report.
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IV. Political-Economy of Development in Northeastern Thailand

1. Political-Economic Transformation in Northeastern Thailand

While life in pre-modern northeastern Thai villages centered much more around subsistence concerns than is the case today, production was also shaped even in traditional villages by relations with political authorities and with marketing institutions. Prior to the end of the nineteenth-century, northeastern villagers were subject to corvée labor and tax demands levied on them by local "lords" (cao muang) who had been confirmed in their authority over local "domains" (muang) by the Siamese monarch. In the nineteenth-century, there was also considerable trade, carried on primarily during the dry season by itinerant peddlars or villagers themselves. Probably the most important village product that was traded outside the region in the nineteenth century was livestock, a product that continues to be important in many parts of the Northeast today. In addition, there was also considerable locally circumscribed trade in salt, utensils, and some food stuffs. There was, however, no periodic marketing system such as has been reported from many other traditional agrarian societies.
In the 1890s, administrative reforms instituted in the Northeast, as well as throughout Siam, created a significant new structure of relations between villagers and representatives of political authority. Following these reforms, power was removed from the hands of the local lords and concentrated in the central government. As a consequence of efforts to rationalize taxation and to improve the efficiency of tax collection, the tax demands (now including a land tax and a capitation tax in lieu of the corvée) markedly increased for northeastern peasants. The radical restructuring of the political order within which they lived, together with the increases in tax demands, stimulated considerable resentment among northeastern villagers, resentment that led to the largest peasant uprising yet known in Thai history, the phu mi bun ("men-having-merit") rebellion of 1901-1902 (see Keyes 1977). The forceful repression of this rebellion, together with the support given to the central government by leading monks from the Northeast, dampened what enthusiasm northeastern peasants might have had for confrontation with the central Siamese government. Resentment continued to simmer below the surface and occasional local "incidents" did occur, particularly following the abolition of the absolute monarchy in 1932.

The political changes in the world of the north-
eastern peasant went hand-in-hand with economic changes. Siam had been opened up to the world economy following the Bowring Treaty of 1855, but it was not really until the rail line was completed to Khorat in 1900 that northeastern peasants began to any significant extent to respond to world demands for their products or to purchase manufactured goods. It is not an overstatement to say that the railway opened up northeastern Thailand economically. The Khorat-Ubon rail line was completed in 1928 (having reached Ban Tae in the same year), while the Khorat-Khøn Kaen rail line was completed in 1933 (Keyes 1966:365). It was not until the 1960s that a road system began to be developed that not only supplemented the rail system but also competed with it.

The rail system made it economically feasible for commercial firms involved in the rice trade--firms that were overwhelmingly Chinese owned at the time--to extend operations to the Northeast. This extension is exemplified in the increase in the number of rice mills in the Northeast, mills equipped to process rice for the foreign market. Whereas there had only been five mills established in the Northeast before 1926, there were 22 mills established in the five-year period between 1926 and 1929 (Skinner 1957:214). Rice exports from the Northeast increased steadily in the 1920s and 1930s until
by 1935 rice from the Northeast accounted for nearly 20% of total rice exports from the country (Ingram 1971: 47). Except for Khorat (Nakhon Ratchasima) Province, most of the rice sold in the Northeast was of the glutinous variety (Andrews 1935:24), the variety of rice that was then, as it is now, the staple in the diet of people in the region.

There was little diversification of agriculture in northeastern Thailand prior to the second world war. Even the sale of cattle and buffaloes that had figured significantly in the traditional trade of the region does not appear to have been an important part of the commercial production of northeastern farmers during this period (op. cit., pp. 88, 95). The Northeast was known even then for its silk, but sericulture did not emerge as a prominent productive activity among any northeastern villagers until after the war. As Andrews wrote in 1935:

Those villages where trade is extensive have the highest incomes, because the existence of trading provides opportunities for farmers, fishermen, and craftsmen to sell their produce. It is useless to expand production, if the communication does not exist which is necessary to trading. It would be futile, for instance, for the farmers of the Northeast to increase production of silk and cotton today because they would be unable to sell it; it would be impossible today for agents of textile industries to build up a system for collection of raw materials in the Northeast (op. cit., p. 388).
In short, while northeasterners were drawn into the market economy in increasing numbers in the period between 1900 and the second World War, their involvement was primarily a function of the expansion of rice production. Since the rice they produced was also their staple foodstuff and since the use of cash to purchase goods remained very low (see op. cit., inter alia), northeastern villagers were more insulated from the vagaries of market forces than were even their compatriots in rural central Thailand.

The depression did have some effect on the lives of northeasterners since at the outset taxes were fairly high and had to be paid in cash. The government was sensitive to the problems of the depression for villagers throughout the kingdom and reduced taxes during this period (Ingram 1971:184). In 1938 both capitation and land taxes were abolished (loc. cit.; also see p. 60), although the land tax (at a nominal rate) would later be reintroduced.

World War II was less disturbing to villagers in northeastern Thailand and to villagers in Thailand more generally than it was to villagers in other countries in Southeast Asia. There was only minimal change in economic conditions since Thailand continued to export rice (primarily to Japan) during the period and since
the marketing system was only minimally disturbed (mainly by the restriction on where Chinese could live in the country). While some villagers did fight in the border skirmishes that constituted the war with French Indochina in 1940, more remember the renewed corvée demands levied by the Phibun government for the purpose of building a new capital at the inland city of Phetchabun. But the Phibun government fell before the scheme was well under-way and the corvée demands disappeared with him. The infrastructure of the Northeast—consisting mainly of the rail system—survived intact. There was little need for "reconstruction" in the Northeast after the war, but then there had been little constructed before it.

During the first half of the twentieth century, northeastern Thai villagers had been drawn into a world economic system, mediated by Thai government policies, in a quite limited way. There had been increased need among northeastern villagers for disposable cash income to meet tax demands and to purchase modest amounts of agricultural tools or consumer goods as well as to meet more traditional social needs (e.g., on ritual occasions) and to carry on a more traditional trade in cattle and buffalos. For the most part, additional cash income was generated through the sale of surplus rice, mainly of the glutinous variety.

The pattern of involvement in the market economy has
undergone marked alteration in the thirty-year period since 1950. This transformation has been greatly facilitated by the construction of an elaborate system of all-weather highways and feeder roads and the commensurate increase in the number of vehicles used for transporting goods and people. One of the most important of the economic changes in the Northeast has been the movement of significant numbers of rural people out of their agricultural communities to Bangkok and, to a considerably lesser extent, to other places where they have taken up non-farm jobs. A second significant dimension of the economic transformation has been the diversification of agriculture with a number of other crops (notably kenaf and cassava) now competing with rice as cash crops. Thirdly, northeastern villagers have turned in overwhelming numbers away from traditional rice strains to the new strains whose cultivation entails the use of fertilizers and insecticides. The increased amount of disposable cash income available to northeasterners has been associated with an increased demand for manufactured goods. Yet, for all these changes, the northeastern economy of the period from 1950 to 1980 still retains the dominant feature of the pre-war economy: i.e., production is still undertaken primarily for home consumption.
2. Changes in Transportation

Prior to World War II, the Thai government had purposefully refrained from making significant investments in the road system of Northeastern Thailand in order not to create competition for the rail system (London 1980: 88). In the 1950s, the policy was changed as a consequence of perceived security problems in the northeastern region. A major impetus to undertake significant construction and improvement of the road system in the Northeast was also provided by the offer of economic aid for this purpose from the United States government. The first step taken in the wake of this policy change was the building, with American support, the "Friendship Highway" through the hill country that leads from Saraburi on the Central Plan to Khorat on the northeastern plateau; the highway was completed in 1958. The road system on the plateau itself remained quite underdeveloped until into the 1960s. Platenius, observed that in 1963 only 207 km. out of a total of 3,090 km. of all-weather "highway" was paved (Platenius 1963:83). He also reports that at the time there were only 71 "provincial roads" totalling 1,954 km. in length (op. cit., p. 84). And many of these roads were not maintained during the rainy season.

During the 1960s and the 1970s an extremely
ambitious program of road construction was undertaken in the Northeast. This program not only included the building of a system of major paved highways under the direction of the Rural Highway Department but also the development of a system of all-weather feeder roads, most of them built by the American-supported Accelerated Rural Development Program (ARD). The total impact is reflected in the statistics that show that 44% of the kilometers of all new roads constructed or improved in Thailand during the period between 1965 and 1971 were located in the Northeast (London 1980:128n). During the period from 1964 when ARD was created until 1980 some 12,000 km. of roads (and some village streets) were built in northern and northeastern Thailand, mainly in the latter (Moore, et al., 1980:2). The investment in roads and highways that the government has made in the past decade and a half has not yet made it possible to achieve the government's goal of "bringing 90 percent of all Thai villages within two kilometers of a road" (loc. cit.), but it brought this goal closer. In 1971 86% of the villagers of northeastern Thailand already lived no further than 15 kilometers away from a road as compared with some 60% six and a half years previous (Donner 1978:634).

Even before many good roads had been constructed in the Northeast, motorized vehicles had already begun
to carry a significant percentage of the goods and people transported within and from the region. As the roads were improved, the vehicular traffic on these roads increased dramatically. On the major highways of the region, such as Highway No. 2—the extension of the "Friendship Highway," connecting Khorat with Nongkhai via Khon Kaen and Udon—No. 22 connecting Udon with Nakhon Phanom, and No. 23 connecting Khon Kaen with Ubon via Mahasarakham, Roi-et and Yasothon, traffic increased five to six-fold between 1964 before the highways had been improved and paved and 1972 after they had been reconstructed (based on statistics given in Donner 1978:633).

The types of vehicles plying the roads of the Northeast, the uses made of these vehicles, and the patterns of ownership of vehicles have also undergone marked changes in the past two decades. While statistical information is not available, it is possible to provide some impressions of the nature of these changes. In the early 1960s, there were basically four types of vehicles to be seen on the roads of the Northeast: (1) heavy-duty trucks or truck-buses; (2) heavy-duty buses, put together to be able to withstand the rough roads that they travelled; (3) land rovers, jeeps, and similar vehicles used by officials and a few others; and (4) motorcycles. There were few saloon cars and those that did exist were kept
for use primarily within towns rather than for travel between towns. Most trucks and buses were owned by town-based—typically Bangkok-based—firms, although even then a few were owned by village entrepreneurs. While motorcycles had become very popular within towns, few were still to be found in villages (the first motorcycle owned in the village of Ban Nong Tum was one I sold a villager when I returned to the States in 1964). By 1980, motorcycles, while still owned only by the more wealthy in villages, were commonplace in rural northeastern Thailand. For example, in Ban Nong Tum, there were four motorcycles in 1980 (compared with none in 1963). Ban Nong Tum was more-or-less typical of villages in Muang district Mahasarakham. In 1979 there were 627 motorcycles in the rural communities of Muang district, or an average of five per village. In Ban Tae the number was much higher, there being in 1980 twenty motorcycles owned by villagers in that community.

Perhaps even more significant than the growth in the number of motorcycles is the fact that there are few villages in northeastern Thailand with reasonable access to a road in which today there is not at least one truck or truck-bus. In Muang district, Mahasarakham, in 1979 there were 178 motorized vehicles (mainly trucks or truck-buses) in the 127 villages, an average of 1.4 vehicles
per village. Ban Nong Tum was typical of villages in the district for in 1980 there was one large truck and one pick-up, although the latter was not being used because the owner could not afford gasoline at the higher prices instituted in the previous year. In Ban Tae there were three large motorized vehicles, all used for transport.

Today the buses that travel along the all-weather roads are so numerous that villagers typically are able to choose the time of day when they would like to go to nearby towns or even to more distant places. Moreover, when travelling between major centers, they can (and some even do) choose to travel by one of the many air-conditioned buses that have become so common in the last five years. Land rovers, jeeps, and other vehicles that are constructed for use on bad roads have begun to become rare on the roads of the Northeast since it is now possible for government agencies, town firms, taxi-owners and even private individuals to travel around the region, and even into many villages, by smaller, more fuel-efficient Japanese cars and pick-ups.

The oil crisis, which first began to have an impact on the Thai economy in 1973 but which really did not cause serious problems until 1979, will probably dampen the growth of the transportation sector throughout Thailand, including the Northeast. In the past few
years, the cost of gasoline has caused successive increases in the cost of transport. Yet, even by 1980, the increased costs of transport owing to marked increases in the cost of gasoline had barely outstripped the decreased costs that resulted from the improved road system and competition between carriers. For example, I found in 1963 that a Ban Nong Tun villager could travel to Bangkok for about 55 baht by bus or 45 baht if he or she travelled partially by bus and partially by third class train (Keyes 1966:328n). In 1980, the cost of the same trip (now always taken by bus) was 70 baht. Allowing for inflation, the cost in 1980 was actually lower than the cost in 1963. Moreover, the costs in time, while not so important to villagers, had been sharply reduced. Whereas it had taken 12-16 hours to get from Ban Nong Tun to Bangkok in 1963 (depending on whether one took the uncomfortable bus or took a combination of bus and rail), the trip could now be made in about seven hours.

There are several significant economic implications of the expansion of an all-weather road network throughout the Northeast and the concomitant growth in vehicular transport. For one, villagers today find it easier to move in search of other economic opportunities, be these agricultural (such as opening up of new land, taking agricultural labor jobs) or non-agricultural. Secondly,
villagers have today better access to markets than they did twenty years ago. This better access has meant higher farm-gate prices for their products and less uncertainty regarding the marketing of cash crops (cf. in this regard, Moore, et al., 1980:10). Finally, villagers have found it easier to travel to places where they can get credit, bureaucratic approval for certain economic actions, and advice from trained officials or from knowledgeable villagers in other communities.

While the improvement of the transport system in the Northeast does not itself account for the economic changes that have occurred in the region, the fact remains that economic life in most villages now presupposes that goods and people can move easily, rapidly, and relatively inexpensively between these communities, market and administrative centers, and the national capital cum major port city. Given such expectations, villagers are sensitive to increased transportation costs resulting from inefficient maintenance of roads, rises in petroleum prices, or increases in the price of vehicles (which still are imported).

3. Migration

Prior to World War II, northeastern villagers had little opportunity to find employment outside of agriculture.
While new non-agricultural jobs in relatively significant numbers were generated in Thailand during the first half of the century, those who filled these tended to be overwhelmingly Chinese migrants (see Skinner 1957:117-118; Keyes 1967:37). Chinese immigration was sharply curtailed by the War and when the war was over the Thai government instituted a policy that effectively meant an end to large scale immigration from China. At the same time, the economy of Thailand began again to grow and with the growth came an increasing demand for unskilled (and some skilled) non-agricultural labor in Bangkok and (to a considerably lesser extent) in other economic centers. This demand was met by people from rural Thailand who, for the first time in Thai history, left their homes in large numbers to take up off-farm jobs. Those villagers who went to Bangkok, where most new non-farm jobs appeared, tended to be from provinces in the Central region. But northeastern villagers also responded to the demand in significant numbers. In the 1960 census it was found that while 67% of all migrants to Bangkok for the period from 1955-1960 came from central Thailand, a still significant 22% came from the Northeast (Thailand. Central Statistical Office, National Economic and Development Board, 1961: Table 6). The relative proportion of northeasterners among migrants to Bangkok has increased
substantially since the 1955-1960 period. A recent study carried out under the auspices of the Thai National Statistical Office found that 43% of all male migrants and 51% of all female migrants who had arrived in the capital after November 1975 and who were still present in October 1977 had come from the Northeast (reported in Lightfoot 1980:9).

While some northeasterners who found employment in Bangkok and elsewhere ended by making a permanent shift of residence, most have spent only a temporary period of time away from their homes, returning eventually to settle down to an agricultural way of life. Such temporary migration has rarely been "seasonal" if by this is meant that migrants are away from their home communities only during the dry season when rice is not being cultivated. The typical pattern appears to be one that involves a migrant leaving his or her home community for a period of months or even years, and then returning home (cf. Keyes 1966:312-315 and Lightfoot 1980:8). This certainly is the case for temporary migrants from Ban Nong Tyn and Ban Tae.

The "circular migration" of northeasterners has, for the last two decades at least, entailed a flow of young, unmarried adults from the Northeast to Bangkok and other centers and a return flow of these same adults
back to the Northeast. Twenty years ago, it may have been more common, as I discovered in Ban Nong Tun (Keyes 1966:313) for young males than for young females to engage in circular migration, although even then there were at least some villages where, as Klausner suggested, "it may be principally the girls who leave" (Klausner 1972:105). By the late 1970s women appear to be predominant among migrants from northeastern villages (Lightfoot 1980:9). Indeed, one survey in 1978 indicated that 80.8% of all migrants (rather vaguely defined) from the Northeast were women (cited in Pasuk Phongpaichit 1981a:77; also cf. Pasuk 1981b).

It should be stressed that not all migrants from the Northeast have been, or are today, only temporary sojourners in Bangkok and other places. While statistical data are not available (indeed would be hard to obtain) that would permit a distinction to be drawn between temporary and permanent migrants, it is still clear that many northeasterners have found permanent jobs and homes outside of the rural context where they were born. Those who do so have, I suspect, tended to be more skilled than those who return home. In just casual encounters, I found that many car mechanics I met in Bangkok had come from the Northeast. I also visited potteries in Bangkok that were staffed almost entirely by northeasterners (even
though owned by Chinese). Indeed, so marked has been the pattern of migration from the Northeast that it is probably a valid assumption to say that every occupational field that has undergone significant expansion in recent years has attracted at least some people who have originated in northeastern villages.

While data do not exist that would permit an analysis of the exact proportions of northeasterners in different occupational categories in Bangkok, there are data that reveal, perhaps counterintuitively, that northeasterners are significantly under represented among the prostitutes (usually classified as masseuses, bar-girls and the like). In a recent study made among a sample of fifty masseuses in Bangkok, it was found that nearly twice as many (48%) came from the North as came from the Northeast (26%) (Pasuk Phongphaichit 1981a:40). Moreover, in another study of 1,000 prostitutes in Bangkok, it was found that 75% were from the North, the percentage from the Northeast not being given (loc. cit.: also see Pasuk Phongphaichit 1981b:10). The economist who authored the study based on the indepth interviews with fifty women observes that while northeasterners had constituted the majority of prostitutes during the period when American bases were located in the northeastern region, the withdrawal of the Americans resulted in a restructuring
of the market for the services of prostitutes followed by a new pattern of recruitment to these roles.

In the aftermath of the American departure, the trade was successfully reoriented to an urban and international market, and embedded deeply into the structure of the Thai economy. . . . The Northeastern girls began to lose the prominent position in the trade which they had acquired because of their proximity to the US bases. The Northern girls were prettier and clearly more in demand in Bangkok. Whatever the reason, it appears that the migration from the Northeast may be static or in decline, and that villagers of the Northeast are already beginning to rebuild their aversion to such a business. (Pasuk Phongphaichit 1980:143-144).

Whether or not Dr. Pasuk's suppositions regarding the reasons for the change in patterns are valid can be determined only by more research; what is well-established is that northeastern women do not enter into sexual service roles in nearly the same proportions as do women from northern Thailand.

In the late 1970s and early 1980s there were reports that significant numbers of northeastern children, aged between 10 and 15, were being indentured illegally to factories in Bangkok. The conditions under which these children work, together with the character of their recruitment does make the appellation "slave children" used in some accounts, appear justifiable (see for example, Luce 1981, The Portland Oregonian, Sept. 4, 1980, The
The assumption in these accounts is that the poverty of northeasterners drives them to "sell" their children to factories. While any incidence of illegal employment of children under the age of fifteen in factories is deplorable, there is no evidence to suggest that such employment accounts for more than a very small percentage of the labor force in factories in Bangkok. Moreover, children under fifteen most probably constitute a very small fraction of the migrants to Bangkok from the Northeast. The nature of Thai-Lao family relations, the roles played by young-children in farm work (such as tending for animals), and the well-established pattern of compliance with the requirement that children attend compulsory primary school all mediate against the sending of children to Bangkok to work. Only as a last resort would such a means to generate wealth for a family hold any appeal. In this connection, no one in either Ban Nong Tyn or Ban Tae reported children under the age of fifteen working in Bangkok.

The pattern of circular migration has, as Lightfoot has observed, meant "that there is a fairly constant flow of people between the Northeast and Bangkok, with whatever money and trappings of urban culture they may have acquired" (Lightfoot 1980:10). Northeastern villagers who have worked in Bangkok have followed a common pattern
found among other peoples engaged in circular migration of remitting part of their earnings back to their home villages. They also sometimes bring some savings from their earnings home with them when they return. Textor in his study of northeastern migrants who drove pedicabs (samlo) in Bangkok in 1954-55, found them to have saved a much higher percentage of their earnings than non-northeasterners in Bangkok and to have used these savings for remittances and for money to take back home (Textor 1961: 30). My interviews with villagers in Ban Nong Tyn in 1963-1964 indicated that while remittances and savings were significant, most villagers who worked in Bangkok tended to spend their money there, having a "fling," as I wrote, rather than gaining a "stake" (Keyes 1966:219-320). In a recent (1978) study carried out by the National Statistical Office in Bangkok, it was found that only a minority of migrants who were in employment at the time of each survey had sent money home. . . . The total remittances can be estimated as 406 baht per working migrant; this would constitute less than 3 percent of the total annual income of an average farming household in the Northeast, and 5 percent of their cash income (quoted from Lightfoot 1980: 12; original data from Thailand. National Statistical Office 1978).

It would appear, thus, that while northeastern migrants working in Bangkok have earned collectively over the years a very large sum of money, most of this money has not found its way back to the Northeast. This recognized, the fact
remains that consumption of products purchased with cash and investment in capital improvements in the Northeast have been increased as a consequence of the monies generated by northeastern villagers working in Bangkok and in other centers outside of the region.

It should be noted that while there has been massive movement (mainly in the form of circular migration) of northeasterners to Bangkok and to some other centers outside of the region, there has been relatively little movement to urban centers within the region, at least until quite recently. The first towns in the region emerged as the seats of local administration and acquired market functions. Prior to the extension of the railway into the interior of the region, the only important market center was that of Nakhon Ratchasima (Khorat), although both Nongkhai in the north and Ubon in the East had more modest market roles in the trade with interior parts of what is today Laos. Nakhon Ratchasima also benefited by the building of the railroad since it is located at the convergence of the two lines into the region and is the last major town before the combined northeastern line leaves the plateau for the central plains. Even today Nakhon Ratchasima remains the most important center in the Northeast even though, since the building of the road system, most goods from other centers destined for Bangkok
or goods from Bangkok destined for northeastern centers are no longer transhipped at 'horat. The towns of Ubon and Udôn as the two pre-World War II termini of the northeastern railines achieved importance in the pre-war period as transhipment centers for goods moving between the port of Bangkok and centers in Laos. Udôn lost some of its importance in 1955 when the line was extended to the Mekhong border town of Nongkhai. The completion of the Friendship Highway from Nakhon Ratchasima to Nongkhai about a decade later might have resulted in the relegation of Udôn to being a minor center if an American base had not been constructed near Udôn at about the same time. During the 1960s Udôn was a boomtown, having a growth rate (8.7 percent) only second to that of Nakhon Ratchasima (9.8 percent). When the American base was closed in 1975, many thought that the economy of Udôn would suffer a sharp decline, but in fact the economic services that were established in Udôn in the boom period continue to attract considerable business and the city appears to have lost little but its "strip."

Both Nongkhai and Ubon felt the repercussions of the sharp reduction in trade between Thailand and Laos following the establishment of a Communist government in Laos in 1975, but the impact was far more severe in Nongkhai than in Ubon. Udôn has preempted many of the economic roles that Nongkhai might otherwise have played vis-à-vis the surround-
In the "Northeast Development Plan, 1962-1966" (a part of the first national economic development plan), the town of Khon Kaen was designated as an "agrimetro" center, a center in which there was to be a concentration of government services that would, it was anticipated, be associated with the construction of significant new industries (see Thailand. Committee on Development of the Northeast 1961:3-4). Khon Kaen did experience some growth during the 1960s and while it was not as great as might have been hoped (Sternstein 1977, 1979; Thomas and Chakrit 1974), the city has emerged as one of the most important economic (as well as administrative) centers on the plateau.

Other than in Nakhon Ratchasima, Udorn, Ubon, and Khon Kaen, there has been very modest economic diversification in the towns of the Northeast. Indeed, the economic growth that occurred between 1960 and 1970 was so limited that no other town save the four mentioned and the town of Loei (which still today has the smallest population of any municipality in the region) had population growth rates that were higher than the natural growth rate of the population of the region as a whole (for data see Hafner 1980:486). The data on population growth point to the fact that very few rural northerners have moved from their villages to settle in towns in the
region.

It may be that in the decade of the 1970s there has been more significant urban economic growth and associated population growth in the northeastern region. It is evident from even casual observation that there has been significant economic diversification in such centers as Khon Kaen, Udon, and Nakhon Ratchasima. But if villagers are moving in increasing numbers to northeastern towns, their decisions to do so are a consequence of quite recent changes in the economic structures of these towns. From interviews made in both Ban Mong Tum and Ban Tae, it is evident that most villagers still think that urban employment means employment in Bangkok or perhaps in another town in central Thailand.

In the previous chapter I discussed the changing patterns of migration from Ban Mong Tum over the past seventeen years. The data from Ban Mong Tum suggest that there may have been some decline in the participation by northeastern villagers in the pattern of circular migration. If this be the case, then it would follow that northerners are finding increasing opportunities to enhance their material well-being through activities within their home communities or within the region. There have been increasing opportunities generated by the increase in market demand for crops and goods produced by northerners.
While the various governments that ruled Siam—later Thailand—from the late 1890s through the mid-1950s showed some interest in promoting economic development in the rural areas of the country, this interest was quite modest and was clearly subordinated to conservative fiscal policies and to the political concerns of the ruling elites (cf. Ingram 1970; Feeny 1982). There was an increasing government presence in the rural areas during this period as the staffs of district offices were expanded. There was also some very limited investment in irrigation and in agricultural research but before 1955 these investments benefitted very few villagers; almost no impact was felt in the rural Northeast. The government program that wrought by far the greatest change in the lives of rural peoples, including those in the Northeast, was the institution of compulsory primary education. While education was seen by policy makers as serving to achieve the objective of creating good Thai citizens, it also did inculcate some skills—notably literacy in Thai—that enhanced the ability of villagers to participate in a market economy.

Programs of planned change in rural areas in Thailand, including the northeastern region, became a central concern to the Thai government in the period from 1957 to 1963 when Field Marshall Sarit Thanarat served as Prime Minister. The Sarit government made the fundamental assumption that to promote "development" (kanphatthana), the political "security" (khwammankhong) of Thailand would thereby be enhanced (see Thak Chaloemtiarana 1978, 1979). Yet, while the Sarit government developed a rural development program, this program was accorded a distinctly secondary priority relative to industrial development. By far the major expenditures for agricultural development during the period were made for large-scale irrigation projects, a function in great part of the...
fact that agricultural development was funded mainly with foreign aid rather than through direct outlays from the national budget. Foreign donors, and especially the United States which provided most of the foreign aid in the period for rural development, could point to a dam as evidence of how their money was spent in a way that they could not when aid was invested in projects whose results were small-scale and distributed widely throughout the country. The U.S. also accepted, and promoted, the policy objective of shaping development programs to effect security ends (cf. Thaxton 1973).

Even before the 1973 Revolution, a shift was beginning to occur in Thai rural development policy, and since 1973 this shift has continued. While the linkage between development and security formulated in the earlier period continues to influence development policy, development has become a policy objective that for the most part appears to require no justification other than itself. There has also been increasing emphasis given in government policy to the agricultural sector as distinct from the industrial sector, a function in part of the fact that the rural areas have clearly benefited far less from Thailand's recent economic growth than have urban areas. In addition, there is widespread sentiment among the political elite today that while the government needs play little role in industrial development, it is necessary that it involve itself much more in rural development. A concomitant of these shifts has been a deemphasis of large-scale projects such as dams in favor of promoting, in the catchword of the time, more "appropriate technology." Foreign aid has remained important to the Thai government for financing its rural development programs, but in contrast to the period between 1957 and 1973, the U.S. has contributed a far less significant share of this aid. Moreover, in recent years, foreign assistance has come much more in the form of loans—from the World Bank, the Asian Development Bank, the Japanese government, to name the largest contributors—than in the
form of grants. In negotiating loans, the Thai government has been less willing to accept directives of the foreign donors than it was when the U.S. government was channelling such large sums of money into the country.  

The northeastern region of Thailand became a primary focus of attention by Thai government development policy planners during the 1957-1973 period because the region was perceived as harboring the most dangerous security problem in the country and because it was assumed that this security problem was directly tied to the poverty of the region. The Sarit government showed considerable interest in what it considered to be "the northeastern problem," a problem that was deemed related to Communist insurrection in neighboring Laos (see Keyes 1964, 1967). This problem was to be solved by a combination of programs designed to stimulate the development of the northeastern region and of direct military and paramilitary actions directed at those creating a threat to security. Under Sarit, a Northeast Development Committee was set-up and charged with formulating an integrated plan for the development of the region. The Committee's plan, the first Northeast Development Plan, was promulgated in 1961 and was to be implemented over a five-year period (Thailand. Committee on Development of the Northeast 1961). It is worth noting that while the Thai government has been involved in regional planning ever since the early 1960s, there has never been another plan for the Northeast that is as comprehensive as the first one (see, in this connection, Phisit Pakkasem 1973).

The Plan sought to realize six major objectives:

1. To improve water control and supply.
2. To improve means of transport and communication.
3. To assist villagers in increasing production and marketing.
4. To provide power for regional industrial development and (later) rural electrification.
5. To encourage private industrial and commercial development in the region.

6. To promote community development, educational facilities, and public health programs at the local level. (Thailand. Committee on Development of the Northeast 1961:1-2)

In subsequent years these objectives were reformulated as programs were actually instituted to realize them. They have also undergone changes in light of the shift in policy since 1973.

Given the history of policies related to agricultural development in other countries, it might seem that a glaring omission was made in the construction of the Northeast Development Plan—no reference was made to land reform or to land policy whatsoever. This omission did not reflect an attempt by a landed elite to maintain control of large land holdings; quite the contrary, it reflected the assumption that there was no "land problem" in northeastern Thailand. If one considers only the question of land tenure, then indeed this assumption would appear to be as true today as it was in 1961. As can be seen from Table XIII, in 1973 only a little over three percent of the total agricultural holdings in northeastern Thailand was rented. In essence what this figure suggests is that almost all cultivated land in northeastern Thailand is owner-operated. In this regard, northeastern Thailand contrasts with parts of the Central Plains and with the Chiang Mai valley in northern Thailand where tenancy rates have reached very high proportions.

The problems created by high tenancy rates in other parts of the country have been of considerable concern to governments of Thailand, especially since the 1973 Revolution. Beginning with the Sanya Thammasak government which instituted the land reform act of 1975, successive governments have attempted to
<table>
<thead>
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<th>Region</th>
<th>% Land in Agricultural Holdings</th>
<th>% Agricultural Holdings Rented</th>
<th>% Agricultural Households Renting-in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>35.16%</td>
<td>12.25%</td>
<td>20.84%</td>
</tr>
<tr>
<td>Central Region</td>
<td>42.20</td>
<td>29.27</td>
<td>41.31</td>
</tr>
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<td>Southern Region</td>
<td>31.20</td>
<td>4.42</td>
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<td>Northern Region</td>
<td>21.83</td>
<td>15.74</td>
<td>26.71</td>
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<tr>
<td>Northeastern Region</td>
<td>45.86</td>
<td>3.27</td>
<td>8.68</td>
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<td>Mahasarakham</td>
<td>77.37</td>
<td>2.45</td>
<td>10.98</td>
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<tr>
<td>Sisaket</td>
<td>46.84</td>
<td>2.34</td>
<td>6.67</td>
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to implement land reform provisions that restrict ownership of cropland to 50 rai, land used for livestock to 100 rai, and land that is not cultivated by the owner to 20 rai. Although the governments have had only limited success in implementing land reform in those areas of the country where tenancy problems exist, they have not had to worry about implementing it in most of the Northeast because there is no need to do so.\(^9\)

While it is true that even if changes since 1973 were taken into account that northeastern Thailand does not have a tenancy problem, it does not follow that land policies are irrelevant to agricultural development in the region. Until quite recently, most farmers in the Northeast cultivated land to which they did not hold full legal title. In part the absence of titles was a function of the fact that the Thai government had not undertaken cadastral surveys in areas outside of the Central Plains. Without full titles, northeastern farmers found it very difficult to use their land as collateral in obtaining loans for investment in agricultural improvements. In the past few years, the Department of Land within the Ministry of Interior has been engaged in a program of issuing certificates of utilization (N.S. 3), functionally almost the equivalent of full titles (chanot thidin), by use of maps constructed from aerial photographs (Regional Planning and Area Development Project 1979:35). Yet, while farmers are gaining clearer title to much of their land, the program of issuing certificates of utilization has brought out another land problem, one that is more marked in the Northeast than in the remainder of the country.

As can be seen by referring back to Table XIII, the Northeast has the highest percentage of its land area under cultivation of any region in the country. What this statistic points to is the fact that northeasterners have on their own initiative steadily invaded areas that the government considers
titles to land that has long been undercultivation and for which there is a
history of use, it has not been willing to issue titles to land that is
still designated government property. This problem of "illegal" utilization
of land is especially marked for land planted to cash crops other than rice.

A study of recent data (1977-1979) from four provinces in the Northeast found
that 25 percent of land planted to kenaf and nearly 40 percent of land planted
to cassava was unregistered. The study concludes: "While it is impossible to
document the full extent to which forest and other public land has been cleared
and planted in upland crops in the Northeast in recent years, it appears
plausible . . . that half or more of the cassava grown in the region in the
recent boom has been on land which has been cleared in a technically illegal
fashion" (Regional Planning and Area Development Project 1979:38). The
problem of the cultivation of unregistered land is greatest in northeastern
provinces with the highest percentage of land in cultivation; Mahasarakham
province is the first among such provinces.

Recent Thai governments have begun to recognize the magnitude of the
problem created by the increasing encroachment of peasants on forest reserves
and public lands. In mid-1982 the Prem government was proposing that as part
of a set of economic reforms that nearly four million hectares--about 25 million
rai--of illegally cleared land, that is, about 17 percent of all land now under
cultivation, be reclassified. "The reclassification is considered vital in order
to facilitate farm-support infrastructure and credits on the one hand and permit
issuance of proper land title deeds for landless farmers to ensure better tenure
security on the other" (Paisal Sricharatchanya 1982:57). How successful the
Prem government will be in getting this policy instituted and implemented
remains to be seen. Whatever happens, the fact remains that for the past two
decades there have been increasing conflicts between peasants and government officials over the use of land that the peasants have taken over in the time-honored pattern of homesteading and expansion of cultivated area.

While the Sarit government which initiated the first policies designed to effect agricultural development in the northeastern region considered the question of access to land to be a non-problem, it saw the lack of any significant infrastructure to be a serious retarding influence on development. Initial government investment (mainly in the form of monies obtained through foreign aid) in development programs in the Northeast was concentrated on the construction of highways (as has been discussed above) and irrigation projects. The latter were linked to the first and fourth objectives of the initial plan. To date irrigation projects have directly benefitted a very small number of people in the region. By 1970, only about three percent of all cultivated land was within an irrigation project and in 1979/1980 the total land area that could be irrigated from waters controlled by small and medium as well as large irrigation facilities accounted for only 7.2 percent of the total cultivated area (Thailand. National Economic and Social Development Board, Northeast Regional Development Center, Regional Planning Division 1980: Table 1.1). Rural electrification has been made possible by the construction of some of the dams that generate hydroelectric power. While the beginnings of rural electrification can be traced to the last 1960s (see Hoath and Dakin 1968; U.S. Operations Mission to Thailand, Research Division Staff 1968), it has only been since the late 1970s that a concerted effort has been made to extend electrical power to rural communities in the Northeast. As of 1976, only 9.5 percent of all the villages in the Northeast had been electrified (Thailand. National Economic and Social Development Board, Northeast Regional
Development Center, Regional Planning Division, 1980: Table 2.7). It is as yet too early to assess what impact will be on life in the rural communities in northeastern Thailand as a result of their being provided electricity.11

While the major thrust of agricultural development policy through the 1960s and 1970s was directed at the creation of a large (and expensive) infrastructure, there was also a secondary policy, almost totally a creation of American advisors associated with the United States Operations Mission to Thailand (Scoville and Dalton 1974), that promoted the construction of more modest infrastructure projects--rural roads, small-scale irrigation works, tanks, wells, and the like. This policy was to be implemented through a new program, created in 1965, the Accelerated Rural Development (ARD) program (khrongkan rengrat phatthana chonabot), funded by U.S. government aid, and involving the coordination of development efforts previously located in several ministries and departments. While the Americans who designed ARD conceived of it as being the context within which all development efforts directed at the Northeast and, to a lesser extent, the North, would be coordinated, as being means whereby decentralization of policy implementation could be effected through vesting provincial authorities with the power to make decisions regarding projects, and being an instrument to make the development effort more responsive to needs of villagers, the realities of Thai bureaucratic politics conspired to make the program something quite different. In effect, ARD became a provincial public works department whose major activity (accounting for 90 percent of the budget of ARD at least through the mid-1970s) consisted of the construction of rural roads. As Turton has noted, such road-building was undertaken "with a clear eye on military-political as well as economic priorities" (Turton 1978:117). Thus, such "security sensitive" provinces as Sakon Nakhon in the Northeast emerged from the 1970s with a very elaborate system of rural
roads, while a province like Mahasarakham which was deemed to have no security problem, was left with a much less developed road system. As of 1977 the ARD program had built an average of 10.9 kilometers of road per tambon in Sakon Nakhon, the province in which the greatest amount of ARD money has been spent, whereas in Mahasarakham the average was 3.8 kilometers of road per tambon. Although some roads have been built as a consequence of requests made by villagers, most have been chosen by government officials. ARD never achieved the status of a coordinating agency, drawing on the expertise and services of personnel in several different governmental departments and ministries. Rather it has been an extension of the office of the provincial governor, the governor in turn being an official of the Ministry of Interior. While the public works function of ARD continues to the present, ARD is today only one of a number of instrumentalities used by the government to effect its agricultural development policies.

The goal of promoting productivity among villagers in northeastern Thailand has been pursued by a combination of research and extension. Most of the facilities, both within and outside the region, designed to carry out research on new or improved crops that would be suitable and feasible for at least some parts of the Northeast have been created since the late 1950s. In keeping with the intent of the first five-year plan to make Khon Kaen a center of the development process, the major agricultural research facility in the region was located near Khon Kaen at Tha Phra. In addition a number of lesser centers were situated at many other places throughout the region.

Agricultural research has been carried out under the aegis of the Ministry of Agriculture and Cooperatives and this Ministry has also assumed responsibility, through its extension division, for making appropriate results of research available to farmers. This development process has, to date, had but very limited
success in stimulating agricultural change in rural communities in northeastern Thailand. As a recent study reports:

In the last ten years, important gains have been made in agricultural research capabilities in Northeast Thailand. Although packages of new practices have been recommended on the basis of field testing, the impact on the incomes and productivity in the rainfed areas have been modest at best.

(Regional Planning and Area Development Project 1979:16)

While this study explicitly rejects "fixing blame" for why this process has had such modest results, it is clear that one major reason lies in the weakness of the extension services. A study made by an agricultural economist in Chaturaphak Phiman District in Roi-et province in 1969, found that there were only three agents in the district, one of whom—the veterinarian—also having responsibility for another district as well. The two agricultural extension agents, one for rice and the other for other crops, were the first appointed in the district and had been there for only four years. They had responsibility for a district having 6,700 farmers and 170,000 rai of cultivated land. "Although they were young, energetic and knowledgeable, willing to learn from the farmers as well as to teach them, and although they had informally tried new ideas before introducing them to the farmers, they were unable to reach all of the farmers enough of the time to make a significant impact" (von Fleckenstein 1971:21). While the situation has improved somewhat during the past decade, agricultural extension agents still do not figure significantly as the transmitters of new knowledge within rural communities in northeastern Thailand. Moreover, their role is hampered by the fact that agricultural extension officers are forced, by the structure of government relations with local communities, to take distinctly secondary
position to officials in one of the agencies of the Ministry of Interior. By far the most important change that has occurred as a consequence of government investment in agricultural research has been the introduction of the high yield varieties (HYV) of rice. Although research on new rice strains was begun in Thailand in 1970 and was given added stimulus with the creation of a Rice Department in 1954, Thailand was quite late among countries in Asia in instituting what has come to be known as "the Green Revolution." It has only been since 1969 that new strains have been adopted to any significant extent. Motooka has reflected upon the reasons for the delay in the coming of the "Green Revolution" to Thailand:

It is interesting to consider why the new IR-8 and TR-5 varieties which were rapidly disseminated throughout Southeast Asia, India, and Pakistan were not widely adopted in Thailand. Basically, these are short-culmed varieties which cannot be cultivated on flooded land without a degree of water control not generally achievable in Thailand. Further, the grain quality of these varieties is inferior, they are less suitable for export, and production costs are high because of the large imports of nitrogenous fertilizer required. (Motooka 1973:309-310)

In the late 1960s as a consequence of research in Thailand carried out in cooperation with the International Rice Research Institute, "two fertilizer responsive non-photoperiod sensitive non-glutinous varieties . . . , RD-1 and RD-3" and, shortly thereafter, a "high-yielding glutinous variety, RD-2," were developed (Feeny 1982:110). There have been yet other HYV strains developed since.
In the 1970s HYV strains were widely adopted by farmers in the Northeast and today most farmers make use of one or another of these strains. While northeastern farmers, like their counterparts in other parts of the country, began to use chemical fertilizer in association with the new strains (cf. Kolshus 1977), the amounts used were, at least until recently, quite low. Feeny, writing with reference to studies made as late as 1977, concluded that "as a result of the price policies, Thailand's fertilizer utilization is among the lowest in Asia" (Feeny 1982:111). In 1980 villagers could purchase fertilizer at subsidized prices through their farmer associations; even so fertilizer usage remained low.

The fact that fertilizer has not been used in accord with the ideal requirements for the new strains probably goes a long way to explaining why the Green Revolution has not been as dramatic as it might be. The HYV strains are supposed to produce yields fifteen to one hundred percent higher than the traditional strains. If one compares the average yields for the whole of the Northeast for the ten year period between 1969 and 1978 following the introduction of the new strains with the average for the preceding ten years, the twenty-two percent increase from 180 kg./rai to 220 kg./rai places the increased productivity resulting from the adoption of the new strains at the low end of the scaled (statistics calculated from Regional Planning and Area Development Project 1979:73). What is particularly striking, if one plots yields for the whole of the Northeast on a year-by-year basis for the twenty-year period (see Figure 1) is the fact that since the new strains have been adopted, the fluctuations in yields have been much greater. In 1977, the average yield of 143 kg./rai was the lowest for the two decades while in the following year, the average yield of 305 kg./rai was the highests. Such fluctuations bear out the conclusions in recent studies that new strains are much more sensitive than were the traditional varieties to the "large effect of highly variable
FIGURE I: Average Rice Yields, Northeastern Thailand, 1959-1978

monsoon rains" (Regional Planning and Area Development Project 1979:73; also see Feeny 1982:111 and Jerachone, Kamphol, and Somporn 1975).

The Green Revolution has never occupied as central place in agricultural development policies in Thailand as it has in the policies of other Asian countries. Far more stress has been laid on transforming rural society to create a context in which "development" in a more general, and rather vague sense will flourish. To transform rural society requires, it has been accepted by policy planners, that new institutions be created and implanted in rural communities. The first of such institutions, cooperatives, were conceived even before the end of the monarchical period; the earliest cooperative was established in 1916. Following the 1932 Revolution, the cooperatives were given prominence in the new economic policies of the constitutional government.

Yet, while the number of cooperatives rapidly increased in the 1930s, and again after World War II, they never assumed significant roles in the lives of most villagers. For the most part, until the 1970s even those cooperatives that had formal existence rarely facilitated access to credit or enhanced opportunities to market products for those who belonged to them.

In the 1970s credit cooperatives were given a boost by being allowed greater borrowing power from the Bank for Agriculture and Agricultural Cooperatives, an institution created in 1966. But, to qualify for membership in a credit cooperative with access to BAAC loans, a farmer had to be quite well off. According to available statistics from 1976, in that year only about ten percent of farming families throughout Thailand belonged to credit cooperatives (Turton 1978:116); the figure would be much lower for the Northeast. In Myarg District, Mahasarakham in 1979 there were only two agricultural credit associations (klum qmsap phya kanphi) accounted for only
0.7 percent of all households in the district (figure from district office records).

The lack of success of the cooperative movement in Thailand can be traced primarily to the fact that associations that have been created are not true cooperatives. Rather, they are creations of the government and are dependent upon government actions to make credit available or to facilitate marketing. Cooperative members have never been allowed freedom to organize their own affairs. Insofar as farmers have benefitted from membership, they have tended to be relatively well-off already and to have good connections with the relevant district or other officials.\textsuperscript{15}

For most villagers, the main new institution that has been created for the purposes of promoting rural development has been the community development (CD) program (khlongkan kanphatthana chumchon). The CD program has its antecedents in the Thailand-UNESCO Fundamental Education Centre program of the 1950s (see Nairn 1966); under Sarit this program was moved from the aegis of Ministry of Education and placed under the Ministry of Interior. From that time on, the Ministry of Interior became the primary locus of programs directed toward the rural areas of the country and most especially toward the villages of northeastern Thailand.\textsuperscript{16}

While the CD program was first established in those northeastern districts that were deemed to be the most undeveloped, and, in accord with the ideology of the time, thus the most vulnerable to insurrectionary appeals, the program was eventually expanded so that by the 1970s nearly every tambon had its own CD-organizer (phatthanakon), operating under a district CD-supervisor. For the most part, CD workers have been young men and often young women who hold positions whose status is somewhere between that of district clerks and that of assistant district officers. They have typically operated with very small budgets and have not been permitted to use large sums of government money for
any of the village-based projects they initiate. Rather they are charged with "organizing" villagers into various types of groups to undertake usually pre-determined (by central authorities) community projects. While some CD workers have had excellent rapport with villagers and have had some success in stimulating actual changes that villagers deem beneficial to themselves (I describe one such exceptional CD worker in my dissertation—see Keyes 1966:97-103), most have assumed a role of being a sometime liason between district officials and villagers and a sometime compiler of local statistics. While some CD officers because they have been recruited from the local northeastern populace genuinely empathize with villagers and seek to be their advisors and not spokesmen for authoritarian district officers, most workers, including many native northeasterners, are openly contemptuous of village ways. Community Development workers might be good patrons, they might be petty nuisances, or they might be yet other power figures who must be placated by villagers. Whatever roles they play, they can never be held accountable by the people they are supposed to serve; they always remain government officials, constrained by the ethos of the bureaucracy. Like the cooperative movement, the CD program has suffered from the fact that it is not really a local-level institution, but an extension of the administrative apparatus of the central government. And like the cooperative movement, the CD program has had quite limited funds available for use in stimulating local development.

Both of these difficulties were recognized by some Thai technocrats involved with development programs in the 1960s. With the encouragement and financial support of U.S. advisors, they attempted to midwive a new type of program, one that would provide the legal and financial means for a local-
based institution, the tambon council (สานาตตต), to initiate and implement projects that were truly shaped with reference to local needs. This program was also known under the pretentious title of "developing democracy," a title resonant of activities currently being promoted by the U.S. in war-torn Vietnam. Under this program the tambon council was to be given a sufficient grant-in-aid to make it possible for it to undertake projects that could have developmental significance. While a few tambons were chosen as pilot projects for this new program, the program faced strong opposition from Ministry of Interior officials long accustomed to controlling whatever monies the government made available for local uses and to dictating what type of projects were deemed important for villagers to undertake. The political climate of the time also mediated against the program's success as the military dictatorship of Thanom and Phiphat was not supportive of any effort to "promote democracy."

The notion of making the สานาตตต a local developmental institution resurfaced in the 1973-1976 period when the democratically-elected government of Kukrit Pramote became interested in winning support from villagers. In 1975 the Kukrit government inaugurated the grant transfer program (กสร์กัน กณฑ์พานุกฤษณ), known in English as the Tambon Development Program (TDP) or, more formally, the "Local Development and Rural Labor Assistance Program." Under the terms of this program, 2.4 billion baht were distributed in equal grants of nearly 500,000 baht to each of the slightly more than 5,000 tambons in the country. In 1976 the funding for the program was raised to 3.5 billion. The program was also slated to be continued in 1977 under the Seni Pramote government, but the coup of October 1976 aborted this plan.

According to Phisit Pakkasem, the monies were to be used by the tambons
for three types of rural infrastructural projects:

(1) the construction of roads, bridges, canals, ditches, lakes, reservoirs, small dams and similar projects;
(2) the repair and extension of the above as well as the repair of school buildings, health centres, and tambon administrative offices; and
(3) the installation of poles for rural power supply.

(Phisit Pakkasem 1971:60)

The program was designed to further two objectives: First, the monies were to be used to employ local people, thereby providing paid work for villagers during the slack period of the agricultural season. Secondly, the determination of what projects should be undertaken was to be made by the tambon councils rather than government officials. "The government thus by-passed the established hierarchies in the Ministry of Interior that have closely controlled local government expenditure in the past. Consequently, decisions on the content of the local development programmes were made largely by those in daily touch with local felt needs" (Phisit Pakkasem 1977:60).

The implementation of the Tambon Development Program, particularly given the short lead time before the first year's program was undertaken, was fraught with considerable problems and surrounded by heated controversy. District officials were very reluctant to give up their control over government monies and often attempted to play a decisive role in determining the projects that the tambon councils were charged with selecting. The degree to which they played this role can be seen in the fact that throughout the country most projects were carbon copies of each other. Almost two-thirds of the projects consisted of building or repairing roads or bridges. Secondly,
rural income is the highest, benefited disproportionately relative to people in other regions. Thirdly, there were many cases where members of the tambon councils diverted some of the grants to their own uses or to the uses of their families. Turton, drawing upon his own observations of this program in northern Thailand as well as on the analysis of the first year program by Kroekriat Phiphatseritham (1975), concludes that "the 1976 scheme strengthened the local influence of members of well-to-do peasant and junior official classes, who tended to determine the nature of the projects, and frequently also profited in other ways" (Turton 1978:118). Yet, while these criticisms are well-taken, the program did succeed to some degree in opening up a direct relationship between elected government and rural populace, a relationship that was perceived as directly threatening to the established bureaucratic authorities who had long maintained a monopoly on government-village relationships. In addition, the corruption that did occur was much less hidden from the populace than was the much more significant corruption by officials. Further, there was a break from the past when labor for public works projects had been recruited without compensation.18

There was an effort under the Seni Pramote government which replaced the Kukrit government after the April 1976 elections to modify the program for 1977 in a way that would have taken into account some of the criticisms that had been made of the first two years' experience. The October 1976 coup, which led to the emergence of the Thanin Kraiwichian government, prevented the modified program from being instituted. The Thanin government did continue to promote some local infrastructural projects through drought and flood relief programs and through a program of "voluntary labor." But the basic
emphasis of Thanin's rural development program entailed a return to the status quo ante, with villagers being expected to respond to government directives communicated through the Ministry of Interior hierarchy.

The authoritarian rule of Thanin was, however, short-lived. Under Prime Minister Kriangsak Chomanan, who came to power following the coup of October 1977, rural development was given high priority in policy deliberations. The new emphasis notwithstanding, Kriangsak's agrarian policies had little different effect during his first year in office. As Ansil Ramsay has written:

Despite Kriangsak's stated commitment to help farmers, they received little benefit from his government. Only half of 1,600 million baht allocated for drought relief early in the year was actually spent, and did little to offset income losses to farmers estimated at 6,800 million baht. A program to have the Bank for Agriculture and Agricultural Cooperatives (BAAC) take over farmers' debts from private money lenders at lower rates of interest helped only a small minority of farmers. (Ramsay 1979:109)

Prodced by a World bank report (International Bank for Reconstruction and Development 1978; also see Ho Kwon Ping 1978a, 1978b) that was highly critical of the continuing existence of high levels of rural poverty in Thailand and of the increasing gap between rural poor and urban rich, the Kriangsak government declared fiscal 1979 to be the "Year of the Farmer" and sought through increased support to existing programs and the creation of new programs to stimulate more significant rural development. One new program, in many ways the successor to the Tambon Development Program, was the
Provincial Development Program (khrongkan phatthana cangwat), also known in English as the Provincial Planning Program. The objectives of this program, as detailed by Vithya Siripongse, the Director of the Regional Planning Division of the National Economic and Social Development Board and one of those responsible for developing the Provincial Development Program, echo strongly the objectives of the Tambon Development Program:

Pursuant to the Fourth (Five-Year) Plan strategies, local development planning in Thailand has added another important dimension of the bottom-up concept of planning "with" the people to the already established top-down process "for" the people. This concept has three distinct socio-economic objectives; namely

- to meet the basic felt needs in the predominantly rainfed rural areas where, for the past two decades, the people have long been denied the fruits of development.
- to provide adequate rural infrastructure and related productive inputs in order that they would be in a better position to help themselves, and
- to further enhance, on a step-by-step basis, capability of local self-governing bodies to become more responsive viable tools for integrated development in the rural areas.

With this conceptual framework in mind, the so-called "Provincial Development Plan" (in the form of the Provincial Development Program) has emerged as a desirable bottom-up process within
the context of the Fourth Plan Development strategies.

(Vithya Siripongse 1978)

There were, despite the similarities, some significant differences between the new Provincial Development Program and the previous Tambon Development Program. Most important, despite the rhetoric regarding "bottom-up," the actual locus of initiative for determining projects lay with bureaucrats—at the provincial level now as well as at the district level—and not with villagers through their representatives on the tambon councils. Moreover, the program was funded at a much lower level than the Tambon Development Program had been. For 1979, the Kriangsak government "allocated 20,261.8 million baht ... for 18,926 projects all over the country to improve water and irrigation systems, build roads, and provide farmers with fertilizer and credit. By July 1979, or nine months into the fiscal year, slight over 50% of the projects had been completed, and 46% of the money allocated had been spent" (Ramsay 1980:119).

In early 1980, following the formation of a new government under General Prem Tisulanon, the Tambon Development Program was revived under a new name, the "rural employment generation program" (khrongkan sangngan nai chonabot). This program, devised by Boonchu Rajanasathien, Deputy premier for Economic Affairs in the new Prem government and the architect of the Tambon Development Program in the previous Kukrit government, was funded at the same level—i.e., 3.5 billion baht—that the TDP had been in 1976. It differed from the TDP in that tambons were not all allocated the same amount of money, distinctions being drawn with reference to population size and to relative need; grants varied thus between 250,000 baht and 800,000 baht per tambon. There were also constraints placed on the use of
the money, with most projects having to be those that were labor intensive. Seventy percent of the money had to be spent on employing villagers to do work on the projects. While this program was also designed to permit tambon councils considerable freedom in determining projects, in practice local government officials still played preeminent roles in influencing these decisions. While many projects were undertaken under this program, the value of most of them was, insofar as I was able to observe in visiting a number of villages in north-eastern Thailand in the summer of 1980, at best marginal. The major problem with the program lay in the fact that it was initiated only after the dry season was half finished. Projects had to be chosen, funded, and carried out in less than a four month period as by late June and early July the rainy season made it impossible to work on most projects and, moreover, most people were involved in rice planting. Despite the problems, the program was pronounced a success by Anat Arbhabhirama, the Deputy Minister of Agriculture and Cooperatives and vice-Chairman of the National Rural Job Creation Committee. A Bangkok Post article of July 21, 1980 reported that Dr. Anat "said the rural job-creation project should be continued because it gives rural people extra income during off-season periods and provides local communities with useful facilities." Dr Anat also said that the next year's program, to be funded at the same 3.5 billion baht level, "should emphasize public utilities in villages instead of soley developing water sources." Implicit in this statement is the fact that most projects undertaken in 1980 were duplicates of each other, thereby indicating that once again local initiative was highly constrained if not non-existent.

While the Rural Employment Generation Program and its successors have stimulated some improvements in local level rural infrastructure, the "developmental" impact has been relatively small. The monies channeled by the government into the rural villages in aggregate seem large, but when distributed among a large number of people have been insufficient to foster any significant invest-
ment by villagers. The tambon councils have remained basically powerless since they are dependent upon the district office for their monies, have no taxing power of their own, and are subject to strong, usually irresistible pressures by district officials to undertake projects that these officials deem acceptable. And the problems of corruption by tambon elites, while perhaps not so marked as in 1976, continue. Such problems notwithstanding, government grants to tambons for local public works projects will probably continue in one form or another so long as Thai governments have some interest in winning the votes of the rural populace.

In conjunction with the various development efforts of the Thai governments during the 1960s and 1970s an array of farmers' groups were set up under government aegis. Records obtained from the district office in Muang district, Mahasarakham showed that in 1979 a total of fifteen different groups with some role in effecting rural development were in existence. In addition, the same source listed five government-sponsored groups whose functions were explicitly connected with the security of village and nation. As can be seen from Table XIV, few of these groups have any significant membership in the villages of Muang district, Mahasarakham; of the developmental groups, only the agriculturalists' groups, the household vegetable grower's groups, the village development committee groups, and the youth groups have members drawn from more than five percent of the households in the villages in the district. Ban Nong Tyen probably typifies most villages in the district in having only a few of these groups represented. And the district probably typifies most districts throughout the Northeastern region.

The various developmental groups are linked with different government agencies. Village Development Committees were established in every community where the CD program was instituted; I found one in existence in Ban Nong Tyen when I carried out field work there in 1963-1964. In recent years CD workers
<table>
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<tr>
<th>Group</th>
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<tbody>
<tr>
<td></td>
<td>Number Members</td>
<td>% House-</td>
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<tr>
<td></td>
<td></td>
<td>Groups Members holds w/</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Members</td>
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<tr>
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<td>52</td>
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Source: District Office Records, Myang District, Mahasarakham, 1980.

Notes: (1) In 1980 there was an agriculturalists' group in Ban Nong Tyn.
(2) In 1980, one villager in Ban Nong Tyn joined the pig cooperative.
have encouraged the forming of women's and youth groups whose primary functions, I was told, is to promote better public health. CD workers have also set up in some places occupational groups (klum achip) whose purpose it is to improve the quality of products sold on the market. The various agricultural groups are supposed to provide an institutional means whereby agricultural innovations can be acquired and disseminated. Agriculturalists' groups also have some connection with agricultural extension agents. The school development committee, again a committee with some history (in Ban Nong Tyn one had been in existence even before I began work in 1963), has the basic responsibility for maintaining, and in some cases, expanding school facilities. The committee operates, insofar as it operates at all, in conjunction with village school teachers. The cooperative and credit groups are dependent, as already noted, on district officials for their access to markets or loan money. 20

While on paper there would appear to be a conspicuous government-sponsored development endeavor instituted through a variety of different programs in operation at the village level, in practice the actual developmental impact that these programs have had in rural communities in northeastern Thailand has been relatively limited. Their main effect has been to expand the bureaucracy that has the responsibility for mediating the relationships between state and village. The institution of rural development programs in northeastern Thailand, as well as in other parts of the country, created new governmental functions at the local level. These functions have been assigned almost exclusively to agencies of the central bureaucracy and not to local, self-governing institutions. The political structure of Thailand has made it all but impossible for any such local institutions to have a viable role.

The administrative reforms instituted under King Chulalongkorn in the 1890s
succeeded in arrogating all power in Siam for the central government. Traditional, semi-autonomous local "lords" were stripped of their power and, for the most part, pensioned off. Attempts by peasants, particularly in the Northeast and the North, to reclaim some power for themselves by means of politio-religious uprisings were suppressed by military force (see Tej Bunnag 1967; Keyes 1971, 1977; Murdoch 1974; Ishii 1975; Skrobanek 1976; Ramsay 1979b). The central government, having succeeded in concentrating all power in its hands, then proceeded to "deconcentrate" authority by creating territorial units administered by officials appointed by the central government. Beginning with the Revolution of 1932, there have been periodic efforts to democratize the Thai polity through the institution of elected National Assembly, provincial councils, muncipal councils and mayors, sanitation district councils, and, beginning very hesitatingly in the 1960s, tambon councils. These efforts have been seriously hindered, however, by the marked reluctance on the part of those who wield actual power (i.e., the prime ministers, the senior civil servants, the top military officers, and their supporters) to permit any significant decentralization of power. The ruling elite have found support and rationalization for their position from the bureaucratic argument that democratic institutions are inefficient, conflict-ridden, and prone to corruption. According to this view, democratic institutions are a luxury that cannot be afforded by a society that needs competent and efficient administration to achieve modernizing goals. This position is still strongly held by many high-ranking Thai officials and I have had the same rationalization offered to me as an obvious truth by some Americans who have been involved in supporting development programs in Thailand. Even those Thai officials who claim to support decentralization often find in practice that they themselves reassert the authority of the central
government in order to achieve efficiency of action. Writing of the late 1970s, Krannich has summarized the situation well:

While the issue of centralization versus decentralization is very prevalent in the orientation of local officials, it is less important to central officials. The major issue for central officials is politics. They are eager to decentralize, but they continuously face the problem of decentralizing central administrative authority to local political arenas. These arenas, in turn, cannot be trusted to produce the expected efficient and effective delivery of public services. Faced with this dilemma and despite their general sympathy with the idea of democracy, administrative values and performance demands of central officials lead to a pragmatic emphasis on dominating local political processes by administrative means. (Krannich 1979:521-522)

While there have been some efforts to reform the system and to effect real decentralization by the Kukrit, Kriangsak, and Prem governments, the government-initiated development programs in Thailand have continued to be overwhelmingly "top-down," serving to reinforce the authoritarian nature of state relationships with rural peoples.23

Recent programs, most notably the Tambon Development Program and its successor the Rural Employment Generation Program, have supported the effecting of some improvements in rural roads, water supply, small-scale water control, and a few other public works. There have also been some changes in agricultural practice, most notably the adoption of new rice strains and concomitant increased use of chemical fertilizers, that have come about through the actions of agricultural extension agents and the use of agriculturalists'
groups. Such government-sponsored development changes pale, however, in comparison to the changes that have come as a consequence of villagers' response to market demands.
FOOTNOTES

1 The line was extended from Khon Kaen to Udorn in 1941. The line was finally completed with the connection between Udorn and Nongkhai in 1955.

2 For a detailed account of the failure of government efforts to promote commercial silk production in the Northeast in the period from 1901 to 1913, see Brown (1980).

3 For a description and some analysis of the Accelerated Rural Development Program by men who were involved in the program on the side of the Agency for International Development, see Scoville and Dalton (1974).

4 Data from records kept at the District Office, Amphoe Myang, Mahasarakham.

5 Data from records kept at the District Office, Amphoe Myang, Mahasarakham.

6 Given the "temporary" nature of migration from the Northeast, it is probable that the number of migrants to Bangkok during this period was underreported and that the proportion may have been rather higher than the figures given.

7 On the influence of foreign aid on Thai agricultural policy, see Sugitani (1978); on agrarian policy more generally, see Silcock (1970:183-199), van der Meer (1981), and Feeny (1982:111-125).

8 Without question, the Sarit, and subsequently the Thanom governments spent far more on military and paramilitary actions in northeastern Thailand than they did on development programs. The linkage between "development" and "security" was most evident in the Mobile Development Unity Program set up by the Sarit Government under the National Security Command in 1962. According to Scoville and Dalton, the purpose of the MDU program "was to promote intensive and rapid development in a few model villages of an amphur, to win the friendship of the people and to gain information on subversion. Each MDU program was intended after a year or so to be phased out and to be replaced by strengthened regular civilian government services" (Scoville and Dalton 1974:55; also see Huff 1967). The first MDU was situated in Kalasin province and the program has operated ever since primarily in areas of the Northeast and North that have been designated especially "security-sensitive." As special-purpose projects, operated by military personnel, the MDU's have had only a limited impact on the economy and society of rural northeastern Thailand. Of far greater significance has been the experience that a number of members of the present military elite gained through participation in the MDU program. These men, among whom the foremost is General Kriangsak Chomanan, Prime Minister from 1977 to 1979 and current leader of one of the major opposition blocs in Parliament, gained some insight into conditions of northeastern peasants that is not shared by other members of the elite who have rarely left Bangkok.

9 By far the best discussion of land reform in Thailand covering the period up to the early stages of the Kriangsak government is that by Kroekiat Phiphatseritham (1978a; also see Kroekiat--spelled Krikkiat--1978b, Motooka 1966 and Fallon and Kanel 1978). Yano (1968) and Kemp (1981) have discussed the relationship between legal bases of land tenure and peasant practice in a southern and a central Thai village respectively. Bruneau (1980) and Turton (1978:109-111) have discussed some of the implications of high tenancy in those
parts of the country where they exist. For the special case of tenure in an area within a major irrigation project in the Northeast, see Demaine and Dixon (1972).

10 Because I am concerned in this study with rainfed agricultural communities, I will attempt no detailed assessment of the impact of the major irrigation projects in the region. I would note, however, that studies made of this impact reveal some distinctly negative effects of these projects. For one, many of those displaced because their land was flooded when reservoirs were created were inadequately compensated and were left in worse straits than they were before. The whole landscape surrounding village in irrigation projects is radically altered when large-scale early-moving equipment level fields so that they can benefit from irrigation waters. Trees planted between fields have been removed and differences, important to the owners, between fields that had previously obtained have been eliminated. There also appears to be a major shift towards larger holdings in irrigated areas with poorer farmers becoming agricultural laborers or moving to other areas in search of unirrigated land. On the effects of large-scale irrigation projects in the Northeast, see Demaine (1979), Demaine and Dixon (1972), Donner (1975:624-30), Frutchey (1969), Ingersoll (n.d., 1969), Kardell (1970), Jerachone Sriwasdilek (1979), McDole (1968), O'Reilly (1974), Thailand. National Statistical Office, Office of the Prime Minister and U.N. Economic Commission for Asia and the Far East, Coordination Committee for Investigations of the Lower-Mekong Basin (1967), Thomas and Block (1970), Thomas and Chakrit (1972 and 1974). Also compare Sterling (1972).

11 The village of Ban Tae had been electrified in the late 1970s while Ban Nong Tyn was in the process of being electrified while field work was being carried out in 1980. I plan a separate study of the effects of rural electrification in Ban Nong Tyn, but the study will have to wait a further field trip to follow up on what happened after electric power was turned on in September 1980. Madigan, in a note on the relationship between "rural electrification and development" in the Philippines found that rural electrification stimulated "large increases in new business and off-farm employment, change in occupational pattern, increase in cash and real income, and decline in fertility" (Madigan 1982:315). It would be interest to compare the changes in rural northeastern Thailand with those Madigan reports from the Philippines.

12 Figures from Thailand. National Economic and Social Development Board, Northeast Regional Development Center, Regional Planning Division (1980: Table 2.6). The fact that Khon Kaen and Khorat provinces had the lowest averages, 0.8 kilometers per tambon in Khon Kaen and 1.2 kilometers per tambon in Khorat, is somewhat misleading since these provinces have benefitted much more than have other provinces in the Northeast from road construction undertaken by the Royal Highway Department. Other than these two provinces, the lowest average ARD built roads (2.5 kilometers per tambon) is in Yasothon province.


For further discussion of cooperatives, see Hughes, Larson, Robinson, and Whitney (1968).


For some discussion of this program as viewed by a Thai government official intimately connected with it at the time, see Adth (1970).

For further analysis of the Tambon Development Program, see Poot (1979) and Seminar... (1979).

In another context (Keyes 1979) I have undertaken an analysis of the Provincial Development Program in which I argue that while the program took into account experience in previous rural development efforts, it still had rather minimal success in stimulating rural development.

For further discussion of government-sponsored farmers' groups, see Turton (1978:116-117) and especially Demaine (1972, 1974).

According to Krannich (1979:507) deconcentration "refers to territorial or area administration, that is, subnational units function as administrative outposts for central units."

This conclusion can be supported with reference to almost any of the studies of the Thai bureaucracy, and especially to those of Siffin (1966) and Riggs (1966).

The authoritarian character of official, and especially district official relationships with villagers in all parts of Thailand has been well-studied. See Dakin (1968), Ingle (1974), Moerman (1967), Philco-Ford Corp. (1968), and especially Rubin (1972, 1973a, 1973b, 1974, 1980).
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Demaine, Harvey, and G. J. Dixon
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Ingle, Marcus

Ingram, James C.

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<td>&quot;The Slave Children of Thailand,&quot; Thailand Update (Los Angeles, publication of the Union of Democratic Thais), 2.6:3-4.</td>
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V. THE CHANGING ECONOMY OF RURAL NORTHEAST THAILAND

1. Types of Market Relationships

Prior to the opening of the railway to Khorat in 1900, most trade in northeastern Thailand was highly localized. Villagers produced most of what they consumed and what they did not produce they usually obtained through barter with local people. Some northeasterners would take cattle and buffalos to sell in the central part of Thailand or in Cambodia and bring back some products (e.g., dried fish, utensils, and so on) to sell in their home areas. And periodically, peddlers would pass through selling items such as bronze gongs and images that were desired for ritual purposes. There was not a well-developed market system in northeastern Thailand such as has been reported from many traditional agrarian societies (see, for example, Skinner's excellent analysis of the traditional marketing system in China--Skinner 1964). Khorat (Nakhon Ratchasima) did develop the characteristics of an intermediate center where much of what produce was marketed from the Khorat plateau and from the trans-Mekhong areas of Laos was collected prior to shipment to central Thailand and Bangkok and where goods (mainly manufactured products) coming from Bangkok were brought before being broken up into lots to be taken throughout the region and
to Laos. There was also some concentration of commercial activities, particularly after a few Chinese merchants began to settle in the region toward the end of the nineteenth century, around the seats of the more important local lords. Villagers had, however, only very limited involvement in this rudimentary marketing system.

The creation of the rail system, mainly in the period between 1900 and 1933 by which time the two lines had been extended from Khorat to Khon Kaen to the north and Ubon to the east, proved to be a strong stimulus to trade in the northeastern region. This stimulus was not felt equally throughout the region for even in 1930 an official government report on rice farming noted that there was no production of rice for sale in the northern part of the Khorat plateau (i.e., in what was then Monthon Udon) or in the provinces of Kalasin, Mahasarakham, Poiet, Ubon, Kukhan, and Surin (Chatthip, Suthy, and Montri 1978:31; the reference is to a report dated July 1, 1930). Nonetheless, as the transportation system improved, so villagers involvement with markets also increased. A second major stimulus to trade came with the creation of a good network of roads throughout the region in the period from about 1950 to 1970. Today there are probably no villagers anywhere in the region who do not have well-established market relationships.
The marketing relationships entered into by villagers are structured around several different types of market demands to which they respond. First, there is the local demand for such products as vegetables, fruit, fish, chickens, charcoal, bamboo walling, rush mats, tools, basketry, pottery and the like. These products rarely travel more than relatively short distances before they reach their consumers, the limits being the marginal costs of transportation and the perishability of the goods. There is also a local, and growing, market for such services as clothes making, barbering and hair dressing, vehicle repair, entertainment, and food preparation. Secondly, there is the demand generated by national or world markets for such products as rice, cassava, kenaf, pigs, and silk cloth. While some proportion of these products is consumed locally, a larger proportion finds its way to Bangkok and some of that is eventually shipped overseas. Something of an intermediate type of trade revolves around the traffic in cattle and water buffalos. This trade is as much regional as it is national in that much of the buying and selling of large animals takes place within the region itself.

Villagers themselves also generate demand for a variety of products and services. Again, some of these are locally produced not only by other villagers but also,
for such products as alcoholic beverages, bricks and push-carts and such services as repair of bicycles, motorcycles, and trucks by specialized firms in nearby towns. Except for buffalos and cattle, most of the other products that villagers purchase come from Bangkok, either having been manufactured there or else having been manufactured abroad and transhipped at Bangkok.

2. **Local Trade**

While some local trade is carried out directly by producers selling to or bartering with consumers, there is a concentration of such trade in the marketplaces of towns and of some larger villages. The degree to which villagers frequent, as buyers or sellers, marketplaces would appear to be a function of ease of access, cost of transport, and amount of disposable income available. Villagers in Ban Nong Tum, located two kilometers walk from a main road and fifteen kilometers from the nearest town, make relatively few visits to the marketplace. Of 131 adult villagers (most heads of household) interviewed in 1980, only 15 went to town for any reason more than three times a month. The six informants who made regular trips (at least once a week) to town included those who ran shops in the village and those who were among the richest villagers. By way of contrast, many villagers in Ban Tae made daily trips
to Uthumphonphisai, four kilometers away, and during the vegetable and melon season, dozens of village women made trips by cheap third-class train to markets as distant as Sīkhōraphum in Surin province (45 kilometers away) or even to Ubon (80 kilometers distant) to sell their produce. Most local trade, including that which takes place in the marketplace, requires little capital investment and for rather small profits; it is, in other words, a type of economic activity that Tax long ago termed "penny capitalism" (Tax 1953) and which Geertz (1963) called "bazaar" economics. Typical of such "penny capitalists" are those women in Ban Tae who take vegetables grown on their own land together with vegetables and melons obtained from neighbors to sell in the marketplace at Uthumphonphisai. These mae kha "women traders" (lit., "mother-trade") require only enough capital--several hundred baht at most--to pay for the vegetables and melons they get from others, to pay for the nominal transportation fees and the even more nominal fee for a stall in the marketplace. If they have had a good day (really, a good morning) at the market, they may return home the richer by fifty baht or so. The more adventurous mae kha will aggregate larger numbers of vegetables and melons and take them to more distant markets where they can get higher prices; for their extra labor (which is considerable con-
sidering the weight of the sacks they have to tote about), they may reap a profit of as much as two, perhaps three hundred baht. Over the course of the season (about two months), the mae kha from Ban Tae can make enough to make a difference in family income. In Ban Tae some 93 households (79.5% of all households in the village) earned an average of 3,083 baht for the year 1979-1980 from the sale of vegetables and melons. Moreover, a few women earned quite large sums, the greatest amount being 20,000 baht. By way of contrast, only 37 households (29.2% of the total) in Ban Nong Tun gained income from the sale of vegetables and melons and the average income from such sales was only 1,232 baht for the same period of time.

Not only do bazaar-economy activities require little capital; they also are associated with little indebtedness and minimal extension of credit although such characteristics of capitalism are not entirely lacking (cf., in this regard, Preecha 1980:111-117). Where markets are closeby entry into the bazaar economy is easy and competition is quite intense, as can be seen in the case of Ban Tae vegetable and melon sellers where nearly every household has a mae kha.

One of the striking characteristics of local trade not only in northeastern Thailand but throughout Southeast Asia and, indeed, in much of the Third World, is that penny
capitalists are overwhelmingly women. In the marketplace in Ban Phai in Khon Kaen province, for example, it was found that about eighty percent of the 200 sellers in the marketplace were women (Chulalongkorn University, Social Research Institute 1980:89). Although writing of the marketplace in Wang Thong, Phitsanulok province, what Preecha has to say on this score applies equally to northeastern marketplaces:

Though there is no discrimination against men taking up business in the marketplace, most tend to be ai (shy) of becoming petty traders. Those who do are regarded as mai me saksi, a term meaning 'no price'. To gain saksi (pride) men must be involved at the higher levels of trade as permanent traders (Preecha 1980:104).

In northeastern Thailand, women traders (mae kha) are typically villagers and, thus, are members of the dominant local ethnic group, usually Thai-Lao.

While men are rarely found in the marketplace, some are involved in local trade. One of the most interesting examples of this comes from the "pot village" (Ban Mô) located in the same tambon as Ban Nông Tyn. This village has long specialized, as have a number of other villages in the Northeast (see Solheim 1964), in the manufacture and marketing of pots for household use. In Ban Mô, as in other such villages, the women make the pottery, passing on the techniques to their daughters,
while the men (who, if not born in the village, marry into it following the usual northeastern pattern of uxori-local residence) take the pots and sell them directly to consumers or to stores. In 1963-1964 I observed men from Ban Mō peddling their pots on foot, travelling with a heavy load attached at the two ends of a pole, from village to village. In 1980, peddlers from Ban Mō were now pushing their wares around on little carts mounted on bicycle tires; moreover, they were having to compete with other peddlers coming by truck from more distant parts.

Not all local trade is of the bazaar type. In all northeastern towns one will find a shop or two that buys locally-made tools, baskets, matting, and the like and then resells them to village consumers. In Mahasarakham, the two shops specializing in such goods were both run by Sino-Thai owners and I suspect that such is rather typical of such shops throughout the region. The store owners in Mahasarakham bought most of their stock from several villages where there was something of a specialized manufacture of such goods. They also bought from some villagers from other communities who brought their products to town to sell.

The changes in the economy over the past three decades have generated increased demand for some types of local goods and services and have also depressed demand
for other types. An example of a decline in demand comes from Ban Nông Tôn. In 1963-1964, there were four men in the village who had a part-time specialization (all were primarily farmers) as blacksmiths. Blacksmithing had long been practiced in Ban Nông Tôn, with older men providing opportunities for younger (usually relatives, but not always sons) to learn the skill. In 1963-1964 it was already apparent that the demand for locally-produced metal (almost all iron) tools was declining while the demand for manufactured metal (often steel) tools was increasing. In 1967-1968 I was able to obtain a representative collection of metal tools made by village blacksmiths for a larger collection of village craft wares made for the Burke Memorial Washington State Museum at the University of Washington. In 1973 when I attempted to replicate this collection for the American Museum of Natural History, I found it more difficult to get the metal tools because only one blacksmith was still practicing. By 1980, this man had died and no one in the village was carrying on the skill. Demand for ox-carts has similarly declined, but has been offset by a marked increase in demand for small push-wagons mounted on bicycle tires (while the tires are imported, the wagons are manufactured locally). The availability of plastic matting has depressed the market for rush matting.
On the opposite side, there is today a marked demand for the services of local mechanics. Whereas in 1963-1964 there was only one business in Mahasarakham town where one could have a motorcycle repaired, by 1980 there were literally dozens of such shops located not only in town but also in many of the larger villages. As villagers have found it increasingly difficult, because of legal restrictions and because of the rapid shrinkage of forested-areas, to find trees large enough for house-posts, so the demand for cement piles has grown. Such piles are manufactured locally in many places throughout the Northeast. Increased wealth has also generated a higher demand for planed lumber and for the services of carpenters.

Changes in local trade have squeezed out some small-scale producers and some penny-capitalists, but they have also resulted in the emergence of other new types of producers or service-producers; on balance, there are unquestionably more opportunities for bazaar traders today then there were in the past. Moreover, there are also today more local non-farm jobs available in the Northeast because of the growth in local trade and increasingly these jobs are filled not by immigrant Chinese or Vietnamese or Sino-Thai but by local people from village backgrounds.
Changes in local trade have occurred mainly as a concomitant of increased involvement of northeastern villagers in national and international marketing systems. In the following discussion I will devote attention both to the changing relationships that northeastern villagers have had to these marketing systems and to associated changes that have occurred in local trade. My intent is to identify general patterns obtaining amongst villagers in rainfed agricultural communities in the Northeastern region and particularly in the core area of the Chi and Mun River valleys. In my analysis I will draw upon data on sources of cash income in Ban Mông Tụn and Ban Tae (see Tables XV, XVI, XVII, XVIII) as well as upon the results of other studies.

3. Trade in Livestock

Historically the most important market demand for the products of northeastern farmers that was not locally circumscribed was that for large livestock—mainly cattle and water buffalos although in some areas trade in horses was also significant. Buffalos are raised primarily to be work animals, although consumption of buffalo meat is not uncommon. Northeasterners trade buffalos to obtain good breeding stock, to acquire better work animals, or simply to increase the size of their herds. While most trade in buffalos takes place within the region, there is
TABLE XV: Sources of Cash Income, Ban Nong Tyn, Amphoe Myang, Mahasarakham, 1980.

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<th>Source of Income</th>
<th>% Households Gaining Income</th>
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<th>% Total Income from Source</th>
<th>Ave. Income for Households with Income from Source (baht)</th>
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<td>Kenaf</td>
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<td>Melons &amp; Vegetables</td>
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<td>Tobacco</td>
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<td>Tamarind and Kapok</td>
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<td>Cattle</td>
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<td>Pigs</td>
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<td>Chickens</td>
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<td><strong>Sale Products of Home Enterprises</strong></td>
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<td>Charcoal</td>
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<td>Bamboo walling, basketry, etc.</td>
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<td>Rice Milling</td>
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<td>Shop Sales</td>
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<td>Buffalos</td>
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<td>4.7</td>
<td>11,100</td>
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<td><strong>Wage Labor</strong></td>
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<td>Out of Village</td>
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<td>Other</td>
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<td><strong>Total</strong></td>
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TABLE XV: Sources of Cash Income, Ban Nong Tyn, Amphoe Myang, Mahasarakham, 1980 (cont.)

Notes:  
(a) Other includes turkeys and eggs.
(b) Income from all commercial enterprises are likely underreported.
(c) Income gained from agricultural labor, employment in the government-sponsored Employment Generation Project, and from work in commercial enterprises.
(d) Under the "official" rubric is subsumed the stipends given to the headman and his assistants and the salary paid to the school janitor. These monies come from government sources.
(e) Most of the income earned outside of the village came from those who worked in Bangkok and either brought back earnings to the village or remitted to families. In addition, two villagers were employed full-time in nearby manufacturing concerns.
(f) Other includes income from sale of land, sale of other property, a death benefit for a son killed in battle, and income from a few miscellaneous sources.
(g) Income total from all sources was 73,088 baht less than the total of estimates of household income recorded on the forms.
### TABLE XVI: Sources of Cash Income, Ban Tae, Amphoe Uthumphonphissai, Sisaket, 1980.

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<th>Source of Income</th>
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<tbody>
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<td><strong>Sale Cash Crops</strong></td>
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<td>basketry, etc.</td>
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<td><strong>Rentals of Land and Buffalos</strong></td>
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<td>117</td>
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TABLE XVI: Sources of Cash Income, Ban Tae, Amphoe Uthumphonphisai, Sisaket, 1980 (cont.).

Notes: (a) Other includes kapok and miscellaneous plant products.
(b) Other includes turkeys only.
(c) Other includes production of raw silk and prepared food.
(d) Sources of incomes in this other category were not specified.
(e) Income within the village gained from agricultural labor, employment in the government-sponsored Employment Generation Project, and from work in commercial enterprises. Also included here is the school janitor's salary.
(f) A number of villagers in Ban Tae were salaried, working as teachers (in other villages), policemen, and so on. Villagers who had gone to work in Bangkok and other places also brought back some earnings or remitted some monies to their families.
(g) Other includes income from sale of land, sale of a bus, sale of other property, and income from a few miscellaneous sources.
(h) Income total from all sources was 25,950 baht more than the total of estimates of household income recorded on the forms. The percentage total adds up to less than 100.0 because of rounding.
TABLE XVII: Sources of Cash Income; Comparison of Ban Nong Tyn, Amphoe Myang, Mahasarakham and Ban Tae, Amphoe Uthumphonphisan, Sisaket, 1980

<table>
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<tr>
<th>Source</th>
<th>% Households&lt;sup&gt;α&lt;/sup&gt;</th>
<th>% Total&lt;sup&gt;β&lt;/sup&gt;</th>
<th>% Households&lt;sup&gt;α&lt;/sup&gt;</th>
<th>% Total&lt;sup&gt;β&lt;/sup&gt;</th>
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<td><strong>Sale Cash Crops</strong></td>
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<tr>
<td>Rice</td>
<td>56.7</td>
<td>14.2</td>
<td>56.4</td>
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<td>Kenaf</td>
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<td>0.9</td>
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<td>0</td>
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<td>Melons &amp; Vegetables</td>
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<td>11.8</td>
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<td>0.9</td>
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<td>0</td>
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<tr>
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<td>2.2</td>
<td>1.7</td>
<td>1.3</td>
</tr>
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<td>4.3</td>
<td>2.1</td>
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<td>2.1</td>
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<td>29.9</td>
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<tr>
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<td>6.5</td>
<td>23.9</td>
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</tr>
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<td>1.7</td>
<td>15.4</td>
<td>12.7</td>
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TABLE XVII: Sources of Cash Income: Comparison of Ban Nqng Tyn
Amphoe Myang, Mahasarakham and Ban Tae, Amphoe
Uthumphonphisai, Sisaket, 1980 (cont.)

Notes: (a) The number of households in Ban Nqng Tyn totalled 127 and in
Ban Tae 117.
(b) The total income figure used here for Ban Nqng Tyn was 1,878,744
baht and for Ban Tae 2,431,220 baht. The figure for Ban Nqng
Tyn was 73,088 lower than the figure totalled by other means
while the figure for Ban Tae was 25,950 baht higher than the
figure totalled by the same other means. These numbers do
not represent total cash income of households but only totals
of itemized cash income. Percentages of cash income for
Ban Tae total 99.7 owing to rounding.
(c) The other category includes such things as kapok and tamarind,
both of which were more important in Ban Nqng Tyn than in Ban
Tae.
(d) The most important item in the other category here was turkeys.
Also included by some informants were eggs.
(e) The other category here includes such things as utensils made
by villagers.
(f) Income from shop sales was probably significantly under-reported.
(g) It is probable that if more information were available, this
category would disappear and the income reported would be included
elsewhere.
(h) The several sources of income earned within the villages were:
wage labor for others (usually farm labor); employment in the
government-sponsored Employment Generation Project; stipends
for headmen and assistant headmen; salary for the school janitor.
(i) Some of the income earned outside of the villages came from those
engaged in temporary jobs in Bangkok and elsewhere. There were
also a number of people (more in Ban Tae) who held jobs outside
of the village while still residing in the village.
(j) Under the general other category was subsumed such extraordinary
income gained from the sale of property (land, trucks, gold jewelry,
and the like), lottery winnings, interest payments, and so on.
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<th>Source of Income</th>
<th>% of Total Income from Source (1963)</th>
<th>% of Total Income from Source (1980)</th>
<th>% Change in Income from Source</th>
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<td>from Households</td>
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<td>Sale of Crops</td>
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<td>0.1</td>
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<tr>
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<td>3.9</td>
<td>1.7</td>
</tr>
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</table>
TABLE XVII: Changes in Sources of Cash Income, Ban Nong Tyn, Amphoe Myang, Mahasarakham, 1963 and 1980 (cont.)

Notes: (a) Based on interviews with representatives of 120 households.

(b) Based on interviews with representatives of 127 households, not including any from Ban Non Khao Ngi that in 1963 had been part of Ban Nong Tyn.

(c) In 1963 there were a number of households that planted tobacco but despite the proximity of a tobacco drying station, no informant reported gaining cash income from selling tobacco.

(d) The primary craft products in Ban Nong Tyn in both 1980 and 1963 were bamboo walling and utensils made out of woven bamboo. Only one household reported gaining income from the sale of cloth, this being in 1980.

(e) In 1963 a few villagers gained very small incomes from sewing, barbering, carpentry, and traditional doctoring. A few others earned small amounts doing farm labor. In 1980 all of these types of income were still represented, but they had been overshadowed by the income earned from the government sponsored "employment generation" project. Farm labor was rather more significant in 1980 than in 1963.

(f) In both 1963 and 1980, most income earned outside the village was generated through non-farm employment in Bangkok. Those so employed either brought some of their earnings back to the village or remitted some to their families still living in the village. In 1980, two men were also employed full-time in nearby manufacturing concerns.

(g) Under the "official" rubric is subsumed the stipends given to the headman and (in 1980 only) his assistants and salary (1980) of the school janitor.

(h) Other includes income from sale of land, sale of other property, lottery winnings (in 1963), a death benefit for a son killed in battle (1980), and a few miscellaneous sources.
a considerable trade between the Northeast and the Central Plains. In Central Thailand, the expansion of paddy land has left many communities without much grazing land; it has become necessary, thus, for people in such communities to keep only work animals and not to raise animals for breeding purposes. Whether the increasing mechanization of agriculture in central Thailand through the use of both large tractors and small garden tractors has led to the depression in the demand for buffalos from the Northeast cannot be determined from available data; it is likely, however, that such a depression has occurred. On the other hand, mechanization has so far been minimal in the Northeast and with the large expansion of land under rice cultivation there has come an increased demand for water buffalos. Thus, the market for buffalos remains very strong.

Until quite recently, oxen provided an important source of power for the main large vehicles in the northeastern region—the ox cart. As the road system has improved in the region, there has been a radical decline in the use of ox-carts. This decline has not, however, led to a commensurate decline in demand for cattle. Indeed, even historically cattle were not raised primarily to be work animals. Nor were they ever raised, in the present as in the past, to provide milk; milk is an almost
negligible part of the diet of northeasterners and what is consumed (by infants and as an element in a few sweet dishes) is purchased in the form of canned milk. Moreover, while most cattle will eventually be slaughtered for meat (and, to a lesser extent, for their hides), the primary function of cattle for northeasterners today as in the past is as a sort of living bank account. Cattle is an investment that can be relatively easily liquidated, usually with a substantial capital gain.

The potential that the husbanding of buffalos and cattle had for the generation of increased income for northeastern villagers was recognized at least as early as the 1890s by an English advisor to the Siamese government, H. Warrington Smyth, who wrote: "In the future a large export of buffalo and oxen may be looked for, as the plateau is eminently suited for rearing cattle, and it has already a good reputation in this respect" (Smyth 1898: vol. I, p. 233). Trade in animals probably continued to grow in the first part of the twentieth century until the depression hit. During the depression, a study found that northeastern villagers gained little income from the sale of cattle and buffalos and some poorer villagers were having to liquidate their holdings to pay their taxes and other expenses (Andrews 1935: 88-89, 95). By the late 1930s trade had again picked up and, for the first time, the
government had begun to take some interest in the trade through interventions to control cattle diseases (Pendleton 1943:30-33).

In the postwar period traffic in cattle and buffalos continued to be an important source, probably the most important source, of cash income for northeastern villagers (Pendleton 1962:207). This importance was recognized by a World Bank team that in 1959 recommended to the Thai government that as an important element in the economic development of the northeastern region that research and extension programs leading to improved breeds of native cattle, better forage growing and storage, and more secure pasturage areas be established (International Bank for Reconstruction and Development 1959:75).

The government did act to some extent on these recommendations. During the 1960s there were concerted efforts to improve the cattle stock by interbreeding native cattle with imported animals (usually "Brahmin" cattle brought in from the U.S.). Such efforts notwithstanding, a recent report has concluded that "several institutional and animal health-related problems are presently seen as constraints which prevent Northeastern farmers from realizing the potential value of their breeding stock, pasture and supplementary feed resources" (Regional Planning and Area Development Project 1979:32). Cattle
diseases and parasites are endemic and government extension
and veterinarian services are inadequate to cope with these
health problems. In the summer of 1980, hoof-and-mouth
disease afflicted many animals in Ban Nong Tum. When
asked why villagers were treating the animals themselves
rather than seeking the help of the district veterinarian,
villagers reported that the disease was so widespread
that the veterinarian would take many days before he got
around to coming to Ban Nong Tum. Until such diseases
can be eradicated, there will never be a significant
market for meat from the Northeast outside of Thailand.
It is quite possible that such a market could exist,
especially given the growing demand for beef in Japan.

Grazing land has been markedly reduced in the
Northeast as a concomitant to the expansion of paddy land.
Many villagers now graze animals on upland fields used
for kenaf or other crops during part of the year and on
harvest rice fields during other parts of the year.
While cassava is produced in large amounts in the North­
east primarily for the purpose of being turned into
animal feed for the European market, very little cassava
or other produced feed is given to animals in the North­
east itself.

Most of the trade in cattle and buffalos is in
the hands of northeastern villagers themselves. The man
(and it is always a male) who demonstrates his prowess in the livestock trade is accorded today, as in the past, the title of hqi. The really adept hqi today make use of such modern facilities as telegraph, telephone, and motorized vehicles to carry on trade at some distance from their home communities. Moreover, whereas in the past they had to depend on what credit they could get from relatives and associates, today they also can avail themselves of new types of credit arrangements. The case of Mr. Som (a pseudonym) in Ban Nông Tvin is illustrative. In July 1980 while I was carrying out research in Ban Nông Tvin, Hqi Som, a well-known cattle trader even in 1963 and one of the richest men in the village, learned of a good deal on ten head (or five pairs as he put it) of cattle in a village in southern Rqi-et province, some 150 kilometers by road from Ban Nông Tvin. He borrowed money from the agriculturalist's association that had been formed with government support only the year before. He then hired Mr. Bunthon, a fellow villager who owned a truck, to take him down to get the cattle. On return I had a chance to see the cattle, all mixed breed (native and "Brahmin") and to my untutored eye, fine beasts; at least they did not have that lean and hungry look that is so characteristic of much cattle in the region, particularly at the end of the dry season.
Hpi Som told me that he would probably not keep the cattle long, but within a few weeks would resell them. Mr. Bunthon estimated that he would gain a profit of several thousand baht from the transaction.

When cattle (and more rarely buffalos) are sold to other than villagers, other types of marketing relationships are involved. Most of the middlemen who buy cattle for sale to slaughter houses or tanning factories are not local northeasterners but are Sino-Thai. Moreover, the government also plays an important role in the trade that brings livestock to the city. The manner in which the controls placed on the slaughter of animals in Bangkok have been implemented has resulted in a much higher proportion of cattle for slaughter coming from areas nearer to Bangkok (often from "ranches" owned by wealthy absentee Thai or Sino-Thai landlords) rather than from the Northeast. Moreover, the necessity that those transporting cattle and buffalos any distance face to pay "extra fees" at check stations on the highway also have added to the costs of sending cattle to Bangkok from the region. There has been some easing of the controls on slaughter in the Northeast itself, especially as regards the slaughter within villages. The ease of these controls, coupled with increased cash income and a commensurate increase in local demand for beef, has stimulated the market for
cattle within the region. But, this demand notwithstanding, the conclusion reached by a team who recently assessed conditions in the Northeast probably remains true:

Legal restrictions on cattle slaughter and 'extraordinary costs' in transporting livestock to the Bangkok market (and for export) have resulted in a farm level price which does not return the true value of livestock to the farmer (Regional Planning and Area Development Project 1979:32).

While there is still some growth potential in the trade in cattle and buffalos, such factors as government controls, other "unofficial" barriers, diseases, limited pasturage and low nutrition of animals have a strong dampening effect upon this potential.

The significance of the trade in cattle and buffalos in the Northeast to the present is indicated by findings made in a survey of animal holdings throughout Thailand in 1970. It was found that

40.5 percent of the cattle [and] 55.6 percent of the buffaloes . . . live in the North-East. The average North-East farm household keeps more buffaloes and cattle than the average Thai farm household, having 2.46 buffaloes [and] 1.45 cattle (Donner 1978:618).

Water buffaloes are fairly equally distributed throughout the region, although there are some areas where local conditions either favor or discourage the husbanding of buffaloes. Cattle are more concentrated in the Chi and Mun river basins and are not raised in significant numbers.
in the more hilly terrain of Loei province and the western part of Khon Kaen and Udorn provinces or in the Phu Phan areas of Udorn, Sakon Nakhon, and Nakhon Phanom provinces (see Donner 1978: figure 33, p. 149).

Ban Nong Tun and Ban Tae villagers are rather typical of those living in rain-fed agricultural communities in northeastern Thailand in the significance that trade in cattle and buffalos holds for them. In 1980 it was found that about 30 percent of households in both Ban Tae (29.9 percent) and Ban Nong Tun (31.6 percent) gained significant income from the sale of buffalos. In the case of Ban Nong Tun, the percentage of households engaged in the buffalo trade in 1980 represented an increase from the 21.7 percent of households who in 1963 earned income from the sale of buffalos. Moreover, the traffic in buffalos generated 10.9 percent of all cash income for Ban Tae villagers and 8.7 percent for Ban Nong Tun villagers. The Ban Nong Tun figure was up from 5.0 percent of cash income gained through the sale of buffalos in 1963. In 1980 42.5 percent of Ban Nong Tun villagers gained income from the sale of cattle, up from 21.7 percent in 1963. The number of households involved in the cattle trade in Ban Tae was considerably lower (29.9 percent) than in Ban Nong Tun, a function of the restricted amount of grazing land in the vicinity of
Ban Tae. Still, the sale of cattle in Ban Tae generated 9.2 percent of total cash income in Ban Tae. In Ban Nong Tun, the amount of cash income from the sale of cattle was 12.1 percent of the total, up from 10.4 percent in 1963. In other words, in 1980, a fifth of all cash income gained by Ban Tae and Ban Nong Tun villagers (20.1 percent for Ban Tae and 20.8 percent for Ban Nong Tun) was generated through the sale of buffalos and cattle.

At least until the early 1960s the central part of northeastern Thailand produced a significant number of horses; according to the 1963 agricultural census, for example, there were over a million horses in the Northeast (Thailand. National Statistical Office 1965: 39), most of which were found in the core area of the region. Historically, the horses produced in the Northeast had been used as pack animals, but by the 1960s the main demand for horses was for racing (race-courses were found in every northeastern town of any size) and for meat. Mahasarakham province (which in 1963 had a total of 66,468 horses—Thailand. National Statistical Office 1964:43) was the source of some of the horses that were traded in the 1960s and a few villagers in Ban Nong Tun participated in the trade. In 1963 I found that 2.5 percent of all households gained some income from the sale of horses and I also was aware that horses
were periodically slaughtered (illegally) for meat in the village. By 1980 there apparently had been a marked decline in the demand for horses. No longer were any villagers in Ban Nong Tum producing horses. In Ban Tae, so far as it can be determined, horses have never been raised. It seems unlikely that there is any significant potential in the horse market that would attract northeastern villagers to produce for this market.

While pig-raising was historically nowhere as significant for northeastern farmers as was the husbanding of cattle and buffalos, there is evidence to suggest that there was a significant trade in pigs from the region that continued to at least the beginning of this century. According to Credner (1935:249; cited in Donner 1978:151), in 1900 half the pigs in the country were raised on the Khorat plateau. With the influx of Chinese into Thailand, however, the locus of commercial pig-raising shifted to areas nearer to Bangkok. Northeasterners did continue to raise pigs and to sell part of their animals, but until the establishment of mechanized rice mills in villages in the late 1950s and early 1960s, the animals raised by northeasterners, raised as they were on rather ad hoc diets, were not competitive with those raised by Chinese (and a few Vietnamese) on diets based on bran from rice mills. The proliferation of small mechanized
rice mills throughout the Northeast radically altered the patterns of pig-production in the region. The generation and concentration of large amounts of bran made possible the raising of pigs with improved nutrition. At the same time, new breeding stock became accessible to northeastern pig-raisers. Those who were able to obtain rice bran and to avail themselves of the new stock were able to raise pigs that were competitive on the market. These factors led to a shift in the pattern of pig-raising. The government-sponsored economic farm survey made in 1957, discovered that 46.9 percent of all households in the Northeast owned pigs and 20.3 percent realized some income from the sale of pigs. The changes that occurred from the late 1950s on led to a concentration of pig-raising in the hands of a smaller number of villagers, those who were themselves rice millers or who could afford to purchase bran from millers and invest in the new breeds of pigs. Data from Ban Nông Tynth and Ban Tae reveal the changes in pattern. In Ban Nông Tynth in 1963 (two years after the first mechanized rice mill had been established) only 8.3 percent of households gained any income from the sale of pigs; by 1980 there had been a slight change with 9.5 percent of households gaining income from pig-raising, the increase being a direct function of the addition of one more rice mill. In Ban
Tae in 1980 only 7.7 percent of households gained income from pig-raising. In Ban Nông Tấn in 1980 the sale of pigs accounted for 13.1 percent of total cash income in the village, the highest percentage from any one product save from rice. This high percentage (compared with only 2.9 percent in Ban Tae) reflected the fact that one man had gone into pig-raising on a large scale, having over the past several years a herd averaging approximately 100 at any one time.

This man exemplifies the typical pig-raiser in the Northeast today. Mr. Bunthon (a pseudonym) began raising pigs in 1962 at the same time that he opened the first mechanized rice mill in Ban Nông Tấn. In 1963 he purchased a large Duroc Jersey boar to breed with native pigs in order to improve his herd. In 1963 he had a rather small herd, consisting of 3 adult pigs and 17 piglets. There were other pig raisers in Ban Nông Tấn at the same time, but Mr. Bunthon had a competitive advantage over all except one other man who also opened a rice mill in having an assured supply of rice bran. He has kept this advantage to the present day. While he does sell some surplus bran to other pig raisers, he first sets aside what he needs for his own purposes (for further details on the pig enterprise of this man, see Keyes 1966:251-60; he is there called "Mr. Ng.").
During the 1960s and into the early 1970s, the market for pigs in Bangkok was very difficult for northeastern pig-raisers to enter. Government controls and associated monopolistic practices kept the market in the hands of those who obtained their pigs primarily from Chinese or Sino-Thai raisers mainly living in the vicinity of the capital city. In 1963-1964, a group of pig raisers from the tambon in which Ban Nong Twn is located attempted to form a cooperative with links to a buyer in Bangkok. The coop failed because of the barriers that existed. By 1980, however, the growth in demand for pork in Bangkok together with a change in government controls made it much easier for northeastern producers to gain access to the market in Bangkok. The government itself encouraged the creation of pig cooperatives. In Amphoe Muang Mahasarakham in 1979 there were five pig cooperatives with 80 members and in 1980 the size of membership in these cooperatives had, I was told, nearly doubled. These cooperatives, however, were not necessarily the best channel for local producers to get their pigs to market. Mr. Bunthon in Ban Nong Twn told me about the corrupt practice of the head of the cooperative to which he belonged. Without a bribe, this man would not put a member at the head of the list to market his pigs despite the fact that places on the list were supposed to
Mr. Bunthon found that he had better luck taking his pigs to Ban Phai, a town in Khon Kaen some 60 kilometers away, where a Sino-Thai middleman was always willing to buy his pigs and to buy them, moreover, often at a price higher than that he could obtain through the cooperative.

While the sale of cattle, buffalos, and pigs generate a significant percentage of the cash income of villagers in northeastern Thailand (totalling 33.9 percent for Ban Mong Tum and 23.0 percent for Ban Tae in 1980), the sale of other animals (mainly chickens and ducks) and fish are today, as they have been in the past, relatively unimportant for most villages in the northeastern region. Villagers located near the major rivers or such large bodies of water as Mong Han lake or Nam Phong Reservoir may make fishing a significant commercial enterprise, although rarely one that is the dominant source of cash income. Ban Mong Tum and Ban Tae are more typical of villages in the Northeast in being communities in which fishing is a quite unimportant income-generating enterprise. Ban Mong Tum is slightly better off in this regard than Ban Tae in being relatively close to small reservoirs. In Ban Mong Tum in 1980, 14.1 percent of households gained an average income of 797 baht from the sale of fish while in Ban Tae in 1980 only 6
percent of households had an average of 843 baht from fish sales. In Ban Nong Tum, there was a slight increase—from 12.5 to 14.1 percent of households and from 0.5 to 0.8 percent of total cash income—in the significance of fishing in 1980 as compared to 1963, a function, I suspect, of the building of the nearby Huai Aeng Reservoir in the interim.

In recent years commercial chicken breeding has come to the Northeast, being promoted by Sino-Thai firms in Bangkok. To date, villagers have had little involvement in these capital-intensive operations. In one such commercial operation that I observed in a village near Khon Kaen, practically the only "rural" aspect was the location. Chickens were raised in screened coops, were fed commercial feed, and were provided a permanent supply of water through a specially constructed water supply system. The few laborers who were employed supervised the feeding, kept the coops clean, and guarded the chickens at night. The manager, a Sino-Thai, was an urban-based representative of a Bangkok firm and one of the two employees present when I visited was a relative of the manager.

In contrast to such operations, most northeastern villagers raise a few chickens by allowing them to wander about, picking up what scraps of food they can. In Ban
Nong Tun, for example, almost all households (119 or 93.7 percent) in 1980 owned a few chickens, the average being 17.8 chickens per household. Save for the few fighting-cocks, no special attention was given to the chickens and those that make it to the curry pot are rather scrawny, tough birds. Again, other than fighting-cocks, almost no chickens raised in Ban Nong Tun were sold beyond the local community and surrounding villages. Ducks, in contrast to chickens, are raised more for the market than for home consumption. Indeed, I found that northeastern villagers have something of an aversion to duck-meat, although there is no taboo against eating such. It is common for northerners to buy a few ducklings at the beginning of the rice season, to raise these in the water-filled fields during the season, and to sell them after the waters have receded. Almost no ducks are raised during the dry season. In Ban Nong Tun in 1980, 87 households (68.5 percent of the total) owned an average of 11.3 ducks. The attrition rate would appear to be rather high since only 16.5 percent of households reported any income from the sale of ducks during the previous year. In both Ban Nong Tun and Ban Tae, the sale of ducks constituted an almost negligible percentage of cash income—0.2 percent in Ban Nong Tun and 0.1 percent in Ban Tae. Commercial
duck raising may have even suffered something of a decline in recent years if the limited data from Ban Nong Tun is any indication. In 1963, 33.3 percent of households reported some income from the sale of ducks and income from duck sales constituted 1.3 percent of total cash income.

4. Rice Trade

Until the 1950s, the only important cash crop in the Northeast was rice. As already noted, the production of rice for the market in northeastern Thailand grew initially in direct relation to the expansion of the railways. From the beginning, much of the rice that was exported from the Northeast was ordinary white rice (khao cao) rather than glutinous rice (khao niao) that is the staple of the Thai-Lao (Ingram 1971:47-48). In other words, the demand for rice was met by northeasterners not simply by the expansion of a crop that was already being produced for home consumption; rather, the response to this demand entailed the production of a new cash crop, albeit one very similar to the staple crop. The demand for glutinous rice also increased as well, but it was not until after World War II when a significant market for glutinous rice opened in Laos that northeasterners began to increase markedly production of this crop to
sell.

Since the end of World War II, the market for rice has been shaped first by the monopoly that the government instituted in the export of rice and then after 1955 by the premium that the government levied on the export of rice. While government control of the rice trade through these means has benefited farmers in stabilizing rice prices for the past 35 years and may also have reduced the profits of middlemen in favor of producers (see Ingram 1971:89), it has also had the powerful effect of reversing "the prewar policy of reducing the tax on the farmer, who now bears an extremely heavy tax" (op. cit., p. 92). Between 1955 and 1970 the rice premium "accounted for 25-35 percent of the total value of rice exports" (op. cit., p. 247). As recently as 1979 the rice premium depressed the internal price of rice to about 2/3 that of the international price of rice (Chulalongkorn University Social Research Institute 1980:128).

There has been a long debate about whether or not the government's control of rice prices has resulted in an inequitable tax burden being placed on farmers as compared to other people in the society (for reviews of this debate, see Silcock 1967; Usher 1967; Silcock 1970:17-24, 200-202; Ingram 1971:243-261). For our purposes
here, it is important to note that, as Ingram has concluded,

the burden of the rice premium seems heaviest on the larger rice farmers, and on farmers in the Central Plain. Farmers who do not grow rice, or who grow it only for their own subsistence, are not harmed by the premium (Ingram 1971:259).

Northeasterners have never depended upon the sale of rice to generate cash income to anywhere near the extent that farmers in central Thailand have and continue to do. Thus, while the rice premium has added a tax burden to northeastern farm households, it has not been so onerous as it would appear to be for farmers in Central Thailand. The point can be illustrated with reference to both Ban Nong Tun and Ban Tae. If in 1980 farmers in these two villages had received an additional 30 percent from the rice that they sold (an unrealistically high figure since the elimination of the rice premium would not have led to such a jump in price), total cash income in Ban Nong Tun would have increased by only 4.3 percent and in Ban Tae by only 3.2 percent. The villagers in northeastern Thailand who are most affected by the rice premium are not those living in rainfed agricultural communities but those in irrigation projects where rice-cropping has become the predominant income-generating enterprise.
While northeasterners do not depend upon rice sales to the extent that those living in the mono-culture areas of central Thailand do, such sales still generate a significant amount of income for many northeastern farm families. In 1980 in Ban Tae, for example, 56.4 percent of all farm households gained an average of nearly 4,000 baht (3,992) from the sale of rice while in Ban Nong Tum in 1980 the statistics were almost the same: 56.7 percent of households gained an average of 3,709 baht from the sale of rice. It is interesting that the income figures are so similar since the rice sold in Ban Tae was almost all white rice while that sold in Ban Nong Tum was predominantly glutinous rice. In other words, these two cases suggest that there is little difference in producing rice for an international market or for what is primarily a local or regional market.  

In Ban Nong Tum between 1963 and 1980 the number of households selling rice jumped from 10.0 percent of all households to 56.7 percent. There was also a commensurate rise in the percentage of total income gained from rice sale, from 6.1 percent in 1963 to 14.2 percent in 1980. This increase has been made possible by the huge expansion of area under cultivation in Ban Nong Tum and by the adoption of new high yield varieties of rice (see below).
In 1963 most rice sold in Ban Nong Tunn never made it further than a nearby village; that is, most of the trade in rice was highly localized, although the two rice millers who played important roles in this local trade did also sell some rice to merchants in Mahasarakham (Keyes 1966:258-59). While Ban Nong Tunn was not atypical, rice produced in many northeastern villages in the 1960s did find its way out of these communities and into the national and international marketing system. A good description of non-localized marketing of rice is contained in a study based on interviews in 1962 with 520 households residing in rainfed agricultural communities in thirteen tambons in Khon Kaen province (Long et al., 1963). While no comparable description exists for more recent times, it is possible to identify, on the basis of other researches, including those upon which this study is based, some of the changes that have occurred in rice-marketing patterns since the early 1960s.

In the 1962 study in Khonkaen, it was found that about 15 percent of the glutinous rice and nearly 60 percent of the white rice produced by those included in the sample found its way to town-based millers (Long, et al., 1963:65). If the relative proportion of glutinous rice to white rice produced was the same for the sample as for the province (4.3:1), then about 23 percent of the
total rice crop of the province was marketed beyond the villages in which it was produced. While most rice was apparently sold at the farm gate, it is reported that 36 percent was delivered directly by producers to the millers (op. cit., p. 67). What difference in price selling at farm gate as compared to selling directly to millers, is not reported, although it is said that "the ability of the farmers to sell directly, whether or not its actually done, reduces the chances of middlemen exploitation" (Long et al., 1963:66). There appears to have been little competition for the crops of farmers, but even without competition farmers felt they received reasonable prices (op. cit., p. 67). Given the fact that the government controlled the rice price, a price that villagers were aware of through radio broadcasts and word-of-mouth, competition would have had little effect in creating price differentials. The Khon Kaen study reported that between 500 and 800 baht per ton was paid for unmilled rice in 1962 (op. cit., p. 137); a year later I found that Ban Nong Tun villagers received between 400 and 600 baht per ton for their rice, almost all of which was glutinous (Keyes 1966:257). Glutinous rice commanded a lower price than did white rice. The range in price reflected whether or not the rice was sold at the farm gate (at a lower price) and the quality
of the rice that was sold. What is noteworthy, I believe, is that the profit realized by the middlemen was hardly exploitative; the Khon Kaen study estimated that it was 32 baht per ton of milled rice (Long, et al., 1963:68, 135-136, 137); this represents only 3-4 percent more than the price paid to producers.

In 1962 the town-based processors of Khon Kaen shipped most of the rice they acquired (85 percent) onto Bangkok. Of this, only about 10 percent was sent in the form of paddy, while the remainder had been polished before shipment (op. cit., p. 67). Given that farmers in Khon Kaen sold four times as much white rice as glutinous rice (op. cit., p. 65), it is likely that most of the rice sent to Bangkok was white rice; some unknown percentage of that sent from Khon Kaen would then have found its way among the shipments of rice exported to other countries.

In the 1960s small scale rice millers established themselves in more and more villages throughout the region and began to purchase an increasingly larger proportion of the surplus rice produced by farmers. Moreover, such village-based millers also often served as local traders, assembling unmilled rice at the village level and reselling it to town based markets. There is no adequate recent information on the relative proportion of milled rice to
unmilled rice purchased by town-based middlemen, but it would certainly have increased since 1963. A recent study also made in Khon Kaen reports that farmers receive a higher price for their rice the further away from the farm gate that they sell it (Chulalongkorn University Social Research Institute 1990:73). The data in this study, however, are not sufficient to support this conclusion. In Ban Nong Tum in 1980, I found that the price village producers received ranged between 20 and 22 baht per thang (2,000 and 2200 baht per ton). The price differential appears to have been a function primarily of the quantity and quality of rice sold rather than where it was sold. The main village rice trader (a miller and truck owner) was willing to absorb the transportation costs when a producer had a large quantity of rice to sell. And both the village trader and town-based middlemen offered different prices for different quality rice.

Given that the demand for rice is likely to increase rather than to decrease, it is probable that villagers in rainfed agricultural communities in northeastern Thailand will continue to attempt to meet this demand. As the data from Ban Nong Tum suggest, it is probable that the sale of rice has become in 1980 a more important source of cash income for such villagers than it was two decades ago. The importance of rice as a cash
crop notwithstanding, villagers in non-irrigated communities in the Northeast most certainly devote more attention in the aggregate to the production of other crops as a means to generate cash income. In 1980 in Ban Nong Tyn, for example, villagers gained 21.7 percent of total cash income from the sale of crops other than rice as compared with 14.2 percent from the sale of rice. Ban Tae villagers in the same year gained 12.7 percent from the sale of other crops as compared with 10.8 percent from the sale of rice. These figures point to a major change in cash-cropping that has occurred since World War II.

In the period prior to World War II, rice was the only significant cash crop raised by northeastern villagers. From a sample survey carried out in the Northeast in 1933-1934, it was found that sales of rice accounted for 55.7 percent of all income realized from the sale of crops (Andrews 1935:52-3); the remaining 44.3 percent was realized primarily through the sale of a variety of items (fruits, vegetables, coconuts, betel nut, areca leaf) that would have been consumed within local areas. Since the 1950s, by contrast, there has been a marked growth and diversification of cash cropping in the region as can be seen from Table XIX. While the area planted to rice has also increased significantly over the past three decades, the area planted to field
### TABLE XIX: Average Annual Area Planted in Major Field Crops, Northeastern Thailand.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Area Planted (thousand rai)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td></td>
</tr>
<tr>
<td>Upland Field Crops</td>
<td></td>
</tr>
<tr>
<td>Maize</td>
<td>125</td>
</tr>
<tr>
<td>Mung beans</td>
<td>27</td>
</tr>
<tr>
<td>Cassava</td>
<td>-</td>
</tr>
<tr>
<td>Sugar cane</td>
<td>113</td>
</tr>
<tr>
<td>Oil Seeds</td>
<td></td>
</tr>
<tr>
<td>Peanuts</td>
<td>94</td>
</tr>
<tr>
<td>Soybeans</td>
<td>2</td>
</tr>
<tr>
<td>Sesame</td>
<td>17</td>
</tr>
<tr>
<td>Fiber Crops</td>
<td></td>
</tr>
<tr>
<td>Cotton</td>
<td>144</td>
</tr>
<tr>
<td>Kenaf</td>
<td>59</td>
</tr>
<tr>
<td>Kapok</td>
<td>-</td>
</tr>
<tr>
<td>Tobacco</td>
<td>79</td>
</tr>
</tbody>
</table>


**Notes:** (a) For 1950-52, 1958-60, and 1965-67, data represent the average for two year periods. For 1968/69 and 1978/79 data are for one harvest only.
crops other than rice has grown even more rapidly as can be seen from Table XX. The current (1978/1979) significance of crops other than rice as cash crops in the various northeastern provinces can be seen in Table XIX.

5. Sugar Cane, Maize, and Cotton in the Development of Cash-Cropping

At the beginning of the 1950s, only three crops other than rice were planted to a total of more than 100,000 rai: sugar cane, maize, and cotton. Sugar cane, unlike the other two, is a very old cash crop in Thailand and was thought in the 1860s likely to become one of Siam's major exports. However, this was not to be; following a crop failure in 1871 in the Central Thai province of Nakhon Chaisi, the industry went into a marked decline from which it has only recently begun to recover. By 1880, export of sugar essentially came to an end and from the 1880s domestically-produced sugar has competed with imported sugar (cf. Ingram 1971:123-127; Donner 1978:97-100). The rise in internal demand for sugar following World War II stimulated the production of sugar in areas outside of the Southeast where most production had previously been concentrated, and some of the new areas planted to sugarcane were in the Northeast. From the beginning, sugarcane production has been concentrated only in a very few areas in the Northeast.
TABLE XX: Area Planted to Main Cash Crops other than Rice in Northeastern Thailand Taken as a Percentage of Area Planted to Rice.

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-52</td>
<td>4.1</td>
</tr>
<tr>
<td>1958-60</td>
<td>10.2</td>
</tr>
<tr>
<td>1965-67</td>
<td>22.0</td>
</tr>
<tr>
<td>1968/69</td>
<td>13.2</td>
</tr>
<tr>
<td>1978/79</td>
<td>24.5</td>
</tr>
</tbody>
</table>

Notes: (a) Main cash crops include maize, cassava, sugar cane, peanuts, cotton, and kenaf.
In 1968/9 34 percent of the area planted to sugar cane was located in Udón province; by 1978/0, 65 percent of the area was in this province. The only other significant production in the region is to be found in Buriram, with very modest production in Nakhon Phanom province. In 1967 there were three large sugar mills, two in Udón and one in Buriram, and a small mill in Mukdahan in Nakhon Phanom province (Donner 1970:607). Even with the growth in the sugar industry in the Northeast over the past three decades, only a very small percentage of northeastern villagers are involved in producing sugar cane for sale.

The growth of maize and cotton production has followed a pattern quite similar to that for sugar cane. According to Silcock:

Maize is in many ways the most dramatic of all the 'miracle crops' that have developed since World War II to transform Thailand's rural economy. . . . Output of maize has risen nearly two hundredfold, from the pre-war average of 5,000 tons to the present [mid 1960s] figure of over a million (Silcock 1970:83).

The promotion of maize as an export crop was supposed to be directly beneficial to the northeastern region where it was expected most of the maize for export would be grown (Donner 1978:90). In practice, the policy was at best only very partially successful. In 1955, 45 percent
of the area of the country under maize cultivation was located in the Northeast; by 1967, this percentage had declined to 11 percent. Moreover, maize production in the Northeast is heavily concentrated in Khorat (Nakhon Ratchasima) province, the province nearest central Thailand. In 1978/9, 43.7 percent of all the land planted to maize in the Northeast was in Khorat province. Moreover, the remaining area in maize was mainly located in Loei province (23.7 percent of the total). Some maize is produced in a number of other provinces—notably in Udon, Chaiyaphum, Sisaket, and Khon Kaen provinces—but it still remains a cash crop for only a very small percentage of northeastern farmers outside of the areas of heaviest concentration. While maize has become a major export crop, having by the late 1960s become one of the principal exports from the country (see Table XXI), it is not one of the major market crops for most of the populace of northeastern Thailand.

Cotton, like sugar cane, had been produced for home consumption long before Siam became drawn into a world market system. As with so many other non-Western countries, when foreign produced textiles were introduced into Siam, the domestic textile industry, together with the production of cotton (and silk), went into a marked decline. In 1910, G. E. Gerini reported that "the local
TABLE XXI: Percentage of Agricultural Area Planted to Major Cash Crops in Northeastern Thailand, By Province, 1978/1979

<table>
<thead>
<tr>
<th>Province by Sub-region</th>
<th>Cash Crop</th>
<th>Soy</th>
<th>Mung</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sugar</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rice</td>
<td>Cassava</td>
<td>Kenaf</td>
</tr>
<tr>
<td>Chi River Basin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chaiyaphum</td>
<td>65.6%</td>
<td>8.8%</td>
<td>13.6%</td>
</tr>
<tr>
<td>Khon Kaen</td>
<td>73.1</td>
<td>10.8%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Mahasarakham</td>
<td>85.1</td>
<td>5.4%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Kalasin</td>
<td>76.2%</td>
<td>14.4%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Roi-et</td>
<td>93.6%</td>
<td>3.2%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Yasothon</td>
<td>91.2%</td>
<td>1.7%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Mun River Basin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surin</td>
<td>91.8%</td>
<td>2.1%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Sisaket</td>
<td>82.6%</td>
<td>1.1%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Ubon</td>
<td>89.4%</td>
<td>1.2%</td>
<td>6.6%</td>
</tr>
<tr>
<td>North</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nongkhai</td>
<td>79.6%</td>
<td>13.3%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Udon</td>
<td>67.0%</td>
<td>8.2%</td>
<td>8.8%</td>
</tr>
<tr>
<td>Sakon Nakhon</td>
<td>93.5%</td>
<td>2.3%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Nakhon Phanom</td>
<td>87.8%</td>
<td>5.6%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Northwest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loei</td>
<td>21.1%</td>
<td>1.1%</td>
<td>4.3%</td>
</tr>
<tr>
<td>South West</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nakhon Ratrasima (Khorat)</td>
<td>48.4%</td>
<td>22.3%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Buriram</td>
<td>79.5%</td>
<td>9.8%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Northeast Total</td>
<td>75.9%</td>
<td>8.0%</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

Source: Thailand. National Economic and Social Development Board, Northeast Regional Development Center, Regional Planning Division, Khommu byangton phak tawan-ok chiang nya yaek cangwat (Basic Statistics of the Northeastern Region, by Province) (Bangkok, June 1980), Table 2.4.
[cotton] industry, which has been languishing for the last 50 years, has been more or less supplanted by the foreign one" (Gerini 1912:209-10; quoted in Ingram 1971:115).
Initially, northeastern villagers were less inclined, lacking significant cash income, to buy foreign textiles, but by the 1920s Wilhelm Credner found evidence that cotton production had been reduced in Roi-et in the central part of the Northeast (Credner 1935:233-234). Such reduction notwithstanding, many northeastern villagers continue to produce cotton for much of their clothing until well after World War II. Even in 1963 I found many Ban Nong T'un women weaving much of the cotton cloth needed by their families; while little raw cotton was produced in Ban Nong T'un itself, the cotton that was used was obtained from local sources. By 1980, store-bought clothing was much more common in Ban Nong T'un, but by this time such clothing was as likely to have been produced in Thailand at least in part from locally produced fibers than to have been imported from abroad.

In the 1960s there was a marked upsurge in the production of cotton to meet domestic needs as well as for export. Cotton production has proven to be a quite high-risk endeavor for those who undertake it, owing to periodic failures caused primarily by pests and insects that have yet to be controlled. It is for this reason that cotton
probably has not appealed as a cash crop to more farmers. In northeastern Thailand there has been increased production of cotton over the past three decades, but as with sugar cane and maize, production has been heavily concentrated in a very few places. In fact, only two provinces (Khorat and Loei) accounted for 81.6 percent of all land planted to cotton in 1978/9. It is worth noting, that yields of cotton have been notably lower in the Northeast than in the country as a whole. In 1968/9, yields in the Northeast were 122 kg./rai as compared with a national average of 141 kg./rai.

As this discussion has demonstrated, the field crops other than rice that had some significance in the northeastern economy in the early 1950s--i.e., sugar cane, maize, and cotton--were not the crops that were to be the most important in the expansion of cash cropping that most northeastern villagers were to engage in in the subsequent three decades. Ban Nong Tun and Ban Tae villagers are typical of farmers in rainfed agricultural communities in the Northeast in realizing no income from the sale of sugar cane, maize, or cotton. The crops that did become important cash crops in northeastern Thailand in the 1960s and 1970s were ones that were quite insignificant in the northeastern economy in the 1950s; these were kenaf and cassava.
6. Kenaf and Cassava: Major New Cash Crops

Kenaf and similar hard-fibers (jute, hemp) were produced for local purposes—mainly to make rope—in the pre-modern times. There appears, however, to have been very little trade in such fibers. Commercial production of kenaf was first reported in 1947 and there was a modest stimulus to production when the postwar government of Phibun Songkhram supported the opening of three gunny-sack factories in 1949-1953 (Silock 1970:78). It was not, however, until a major surge in world demand for hard fibers occurred in the 1950s following hemp crop failures in what was then East Pakistan that commercial kenaf production began to expand to any significant extent in Thailand. In 1950, exports of kenaf were negligible; by 1957 10,000 tons were exported and within three years this figure had risen to 230,000 tons. During the 1960s kenaf became one of the major export commodities from Thailand. As can be seen from Table XXII, kenaf became one of the major export commodities from Thailand. In 1966 it even ranked third (the total exports were slightly higher than those for maize) amongst all export commodities from the country. World demand for kenaf has never been so high since; prices have fluctuated widely and, as a consequence production of kenaf in Thailand also declined, although kenaf still continues to be one
TABLE XXII: Percentage Share of Principal Exports from Thailand

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Percentage Share of Total Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1950</td>
</tr>
<tr>
<td>Rice</td>
<td>48</td>
</tr>
<tr>
<td>Rubber</td>
<td>21</td>
</tr>
<tr>
<td>Tin</td>
<td>7</td>
</tr>
<tr>
<td>Teak</td>
<td>4</td>
</tr>
<tr>
<td>Maize</td>
<td>-</td>
</tr>
<tr>
<td>Kenaf and Jute</td>
<td>-</td>
</tr>
<tr>
<td>Cassava</td>
<td>1</td>
</tr>
</tbody>
</table>

of the major export commodities from Thailand. Kenaf production has been almost exclusively restricted to the Northeast with about 90 percent of the area planted to kenaf each year being located in the region. The growth of kenaf production did not proceed equally throughout the region, although the skewing was not nearly so marked as it was with sugar cane, maize, and cotton. Kenaf production has been concentrated in the core area of the region (the Chi and Mun river valleys) and in Khorat province. For most of the 1960s, six provinces in this area—Khon Kaen, Chaiyaphum, Mahasarakham, Ubon, Khorat, and Sisaket—accounted for two-thirds to three-quarters of the output of kenaf. By the late 1970s, the pattern had changed somewhat; Udon province had become a leading producer, in 1978/79 having more area planted to kenaf and higher total yields than any other province in the region (Thailand. Northeast Development Center, Regional Planning Unit, National Economic and Social Development Board 1980: Tables 2.4 and 2.5). Buriram also became an important producer of kenaf during this period as well. There is also some kenaf production in most other provinces in the region, being essentially insignificant only in Nakhon Phanom, Loei, Sakon Nakhon, and Nong Khai provinces. Indeed, until cassava production took-off in the mid-1970s, kenaf could be said to be the
cash crop, next to rice, of the Northeast.

Kenaf appears to be a crop that is particularly well-suited to the northeastern region. While it responds well to intensification of labor, it requires little technological inputs. It grows well under even dry conditions and has a growing period that does not conflict with the rice cycle. Kenaf yields have declined since production was expanded, being 207 kg./rai on average in 1960, 205 kg./rai in 1968/69, and 180 in 1978/79 (figures from Donner 1978:107, 600 and Thailand. Northeast Development Center, Regional Planning Unit, National Economic and Social Development Board 1980: Tables 2.4 and 2.5). There appears to be some debate about whether the application of fertilizer would improve yields. One recent study asserts that "the application of commercial fertilizer to kenaf is practically nil" (Regional Planning and Area Development Project 1979:23) while another study reports that yields have been increased in fertilizer experiments to 2.7 tons per ha. [432 kg./rai] with good profit" (Donner 1978:603). There is little evidence that fertilizer or manure has been used to any significant degree by those actually engaged in production.

The increased production of kenaf in the Northeast proceeded with little direct involvement by government officials or in reaction to government promotion policies.
Rather, the stimulus came primarily from middlemen (usually Sino-Thai) who, having been informed of the demand for hard fibers from exporters in Bangkok, indicated willingness to purchase whatever kenaf villagers could sell them. As some villagers began to respond to this demand, their neighbors saw the benefits being gained and often followed suit.

The area under cultivation in kenaf in the Northeast has varied markedly since the mid-1960s, reaching a high of 2,642 rai in 1973/1974 and a more recent low of 1,585,000 rai in 1977/1978 (Regional Planning and Area Development Project 1979:23). The variations reflect directly the fluctuations in market demand for kenaf that are indexed for producers by fluctuations in price. Villagers in Ban Mong Tyn told me that the price of kenaf had ranged from a low of 50 satang (2½ cents) to a high of 5 baht (25 cents), with the typical price being around 1.50 baht (7½ cents) per kilogram (whether or not this was the actual range is perhaps less important than village perception of what the range is). Villagers usually obtain information about prices in the same way as they first heard about the demand for kenaf, from local middlemen. While the government has moved since 1979 to provide limited price supports for some commodities (maize, cotton, sugar, soybeans, mungbeans, and peanuts)
(Chulalongkorn University Social Research Institute 1980: 133) it has not created a price support system for kenaf. Thus, the price continues to fluctuate. Kenaf is less desirable on the world market than is jute or hemp and it is only in years when jute and hemp production is insufficient that the demand for kenaf increases significantly (Silcock 1970:80).

Kenaf producers in the Northeast ret the plants themselves in whatever water is available (the best product being one that has been retted in deep, clear water, a rather rare commodity in the region), dry the fibers and bundle them for marketing. In a study made in 1969 in three sample villages in Khon Kaen province, it was found that kenaf producers sometimes sell their market-prepared kenaf to local village traders who then deal with firms in nearby towns, to agents of such firms or of firms from larger commercial centers, directly to a town-based firm, or through a cooperative that has relationships with particular firms. The study concludes: "Kenaf sale [sic] depends very much on the available sale agents represented in the area, and villagers usually sell to the most convenient agent" (Amara Pongsapich 1976: 231). Cooperatives are the least common form of marketing institution for kenaf; efforts by cooperatives to take kenaf directly to Bangkok to sell have not met with much
success because such efforts undercut long-standing relationships between export or processing firms in Bangkok and up-country middlemen. Cooperatives aside, there are usually a number of possible buyers for the kenaf of any one village producer. While producers may return to the same buyer year after year, there is no evidence to suggest that buyers ensure that certain producers always sell to them through the manipulation of credit. On the contrary, I found in Ban Nong Tun that the same producers over the years between 1963 and 1980 had sold their kenaf to two different local traders, and to at least two different firms in Mahasarakham town. Competition amongst buyers tends, it would appear, to work in the favor of the producer obtaining a higher price for his kenaf.

Although Sisaket province has been a significant producer of kenaf, only one farmer in Ban Tae realized some cash income in 1979 from the sale of kenaf, his income (15,000 baht) representing 0.6 percent of total cash income. By way of contrast, many Ban Nong Tun villagers today continue to gain significant income from kenaf sales; 61.4 percent of all households in Ban Nong Tun in 1980 had some income from kenaf sold the previous year, and their income represented 8.5 percent of total income in the village. At least some Ban Nong Tun villagers have been kenaf producers since the crop became important
in the late 1950s and early 1960s. It is, however, a 
cash crop that appeals to Ban Nong Tun villagers less 
today than it did in 1963 when 80.0 percent of all house-
holds gained some income from the sale of kenaf and when 
the aggregated total of such income accounted for 13.7 
percent of total income, the highest percentage of any 
source of cash income in that year. Ban Nong Tun villagers, 
like their fellow villagers in Mahasarakham (see Table 
XXII), indeed like villagers in Sisaket and in other 
kenaf producing areas, alter the amount of land planted 
to kenaf significantly from year to year, depending upon 
the price that is anticipated will be paid for kenaf. 

The volatility of the world market for kenaf coupled 
with the growing competition that hard natural fibers 
such as kenaf face from artificial fibers have led the 
Thai government to support research on possible 
alternative domestic uses for kenaf such as in pulp and 
paper production and on improvement of sacking and cloth 
made from kenaf for export (Donner 1978:604; Regional 
Planning and Area Development Project 1979:41). Even 
without such alterations in the market, it is still 
likely that kenaf will remain an important cash crop for 
many villagers in northeastern Thailand for at least the 
foreseeable future.

Although cassava (also known as tapioca or manioc)
### TABLE XXIII: Percentage of Cultivated Land Area Planted to Kenaf in Mahasarakham and Sisaket Provinces.

<table>
<thead>
<tr>
<th>Year</th>
<th>Mahasarakham</th>
<th>Sisaket</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Land Area Planted to Kenaf</td>
<td>Rank Order among NE Provinces Producing Kenaf</td>
</tr>
<tr>
<td>1960</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>1961</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>1962</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>1963</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>1964</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>1965</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
<td>1973</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>1974</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>1975</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>1976</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>1977</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>1978</td>
<td>9</td>
<td>5</td>
</tr>
</tbody>
</table>

has long been grown in Thailand, it is quite a new crop to the Northeast. Cassava is a New World plant that was introduced into India and Sri Lanka in the 18th century and probably into Southeast Asia sometime after that (McFarland 1944:645). In Thailand, as well as in Malaya from where it came, it appears to have been first produced by Chinese for the purpose of making tapioca flour. Commercial cassava production was long concentrated in the Chonburi area of southeastern Thailand and it was not until the world market altered in the late 1960s that it began to be produced in significant amounts elsewhere (Silcock 1970:93-95; Donner 1978:93,95). The major change came about as demand for cassava pellets for animal feed developed markedly in the European Common Market countries. The demand was so significant that by 1970 there was "hardly a province in Thailand that does not grow some cassava" (Donner 1978:95). In the early 1970s only one province in northeastern Thailand became a significant producer of cassava; this was Khorat (Nakhon Ratchasima), the province closest to the southeastern provinces where cassava production had long been important. By the late 1970s, cassava production had literally exploded throughout the region and had become the major export crop from the Northeast, even surpassing kenaf and maize (see Tables XIX and XXII). While Khorat remained
the biggest producer of cassava, with over 23 percent of its agricultural land area devoted to this crop, a number of other provinces—notably Buriram (bordering on Khorat), Nongkhai, Kalasin, and Khon Kaen—also are major producers with 10 percent or more of their agricultural land being planted in 1978/1979 to cassava.

Although cassava is grown in every province in the Northeast, it is not a major crop in all provinces. In Sisaket province for example, cassava production is not significant—accounting for only a little over one percent of all cultivated land; no one in Ban Tae village planted cassava. The relative unimportance of cassava as a cash crop in Mahasarakham province (a little over five percent of agricultural land was planted to cassava in 1978/1979) is reflected in the data from Ban Nong Tun where only a little over six percent of households had gained income from the sale of cassava in 1980).

The rapid expansion of cassava production in northeastern Thailand has generated an intense debate among policy planners concerned with agricultural development in the region. Cassava is seen by many as a poor cash crop for the region because the present mode of production whereby no fertilizer is used results in marked declines in soil fertility after several years of cultivation (cf. Donner 1978:95-96). Moreover, the price of
cassava fluctuates greatly (Regional Planning and Area Development Project 1979:41), even despite the recent introduction of (an apparently ineffective price support (Chulalongkorn University Social Research Institute 1980: 74-75). It has also been pointed out that there is little internal market for cassava or cassava products, although there is potential for such a market for animal feed. Finally, there is little price setting, at least for producers, on the basis of quality of product. (Regional Planning and Area Development Project 1979:41). While cassava production may have peaked owing to the influence of these various factors, it is very likely that it will continue to be, along with kenaf, a major cash crop among northeasterners for some time to come.
7. **Tobacco and Other Secondary Cash Crops**

Tobacco has long been grown in northeastern Thailand, as elsewhere in the country, for home consumption. In 1963-1964 I still found many households in Ban Nong Tyn cultivating small amounts of tobacco for home consumption. Villagers dried leaves in the sun and then chopped them by means of a homemade wooden shredder and machete. Tobacco has also been produced commercially in the Northeast since at least the 1950s and has for some years been the source of small amounts of cash income for villagers living in several provinces in the region.

Giving the existing local demand for tobacco in Thailand at the time of the opening of the country to the West in the mid-nineteenth century, it was hardly surprising that Western tobacco companies moved to take advantage of the market. Between the end of World War I and the beginning of World War II, foreign-produced cigarettes had captured most of the urban market and had begun to drive "the domestic article even out of the rural market" (Thompson 1941:398). The government, even before the 1932 Revolution, had begun to move to protect local tobacco production by the imposition of taxes on imports. In response to these taxes, several companies, mostly foreign owned, begun to stimulate the production of Virginia and Turkish strains that had been introduced in the 1920s (Feery 1982:56). A major change in tobacco production occurred in 1941 when the Thai government created the tobacco Monopoly, a semi-independent body given "the exclusive right to buy, sell, and manufacture all tobacco products in Thailand" (Ingram 1971:140). In practice, the Monopoly limited itself then as it does today to those products using Virginia and Turkish leaf and has taken essentially no interest in native tobacco or its products. The Monopoly took over the properties
of the British-American Tobacco Company, most of which were located in northern Thailand.

After the establishment of the Monopoly, there was an effort to encourage production in other areas of the country, including in the Northeast. By the time of the agricultural census of 1963, 42 percent of the acreage on which tobacco was harvested was located in the Northeast. In 1968 "29.2 per cent of the tobacco growing areas and 32 per cent of the tobacco harvest refer to the North-East, where more than half comes from the three changwats Maha Sarakham, Nong Khai and Nakhon Ratchasima" (Donner 1978:607). Donner adds that the area and production fluctuate in the region, thus suggesting a possible explanation for the decline in the relative percentage of acreage devoted to tobacco production in the Northeast between 1963 and 1968. In the Northeast both Turkish and Virginia varieties are grown for the market, although Aphisak (1982a:104) suggests that Turkish is today the dominant strain produced in the region. In 1963 tobacco production in the region totalled 18 million kilograms. More recent figures seem not to be available and the estimate of 5 million kilograms per year given by Aphisak is certainly too low (Aphisak 1982a:104).

When I began to work in Ban Nong Tyn in 1963 I found there to be a Tobacco Monopoly buying station located in Ban Khwao some five kilometers away in the same tambon. This station was one of several in the province, although the only one (and still today the only one) in Myang district. This station dealt only in Turkish tobacco while other stations in the province dealt in Virginia. In February 1963 I interviewed the manager of the station in Ban Khwao who told me that village-producers brought tobacco to the station in bales weighing 1½-3 kilograms in weight. These were then examined by agents, some rejected, and the rest graded according to a four-fold scale. Depending on the grade, the producer would receive between 3 and 14 baht per
kilogram, with an average being between 7-10 baht/kg.

Despite the proximity of the tobacco station to Ban Nong Tyn, no household in 1963 gained any income from the sale of tobacco. The factors involved are indicative of some of the problems faced by villagers throughout the northeastern region in entering into production for the market. One villager suggested that conditions in the village were not ideally suitable for tobacco production because of the need to water plants everyday. In 1963, water was not easy to obtain as there was only one deep well. But more significant was the fact that the station bought on a quota system and Ban Nong Tyn villagers had not been brought into the system. As I wrote in 1968: "According to the director [of the tobacco station], villagers in the area who are long-standing producers of tobacco are given priority in their sales. If the quotas allotted to these farmers are not fulfilled, then others can market their produce on a first come first serve basis. As a result, Ban Nong Tyn villagers who are established tobacco raisers, and now are, are reluctant to raise a crop for which they have no certain market" (Keyes 1966:262). Without the patronage of those who regulated the quotas, it made little sense for Ban Nong Tyn villagers to devote any of their energies to producing tobacco as a cash crop. The role of the government in regulating various markets for village products, accompanied as it often is by corruption, is a major source of friction between villagers and the government.

By 1980 the situation had radically changed as over half of the households in Ban Nong Tyn reported deriving some cash income from the sale of tobacco. Moreover, cash income realized from such sales--8.1 percent of total cash income--approached that realized from the sale of kenaf (8.5 percent), the most important cash crop next to rice. I did not have the time
in 1980 to make the inquiries that would have been necessary to determine why this significant change had occurred. I did learn in a conversation with the district agricultural officer in Mahasarakham that the station in Ban Khwao continued to be the only place within the district where tobacco was bought from villagers. He also said that the purchasing was now done by a private company, the Adam Company, although the tobacco thus bought was still destined for the Tobacco Monopoly. I did not discover whether or not the same type of quota system continued to exist. The major factor that had stimulated increased production of tobacco purchased by the Ban Khwao station clearly must be traced to a marked increase in the number of smokers in the Thai population. Most adult males, but few women, smoke and since their number has grown rapidly in recent years due to the population explosion so too the demand for tobacco, especially tobacco processed into cigarettes, has also grown rapidly. Ban Nong Tyn villagers, living near a tobacco-buying station, were thus positioned well to respond to the increased demand. But where villagers have not had access to the market as organized by the Tobacco monopoly, they still have found little incentive to produce tobacco for commercial purposes. In Ban Tae, which is typical of most villages in northeastern Thailand, commercial tobacco production was for all intents and purposes nil.

A recent study of agriculture in northeastern Thailand has suggested that northeastern farmers might offset the loss of nutrients resulting from planting the same fields year after year to kenaf or cassava by the introduction of a cropping system whereby fields planted to kenaf or cassava one year would be planted to legumes the following year. Despite the apparent advantages to such
a rotation system, the study continues, "farmers have not adopted these practices because they have not yet been shown to be economically prudent under actual farm conditions. There is also a reluctance to use good legume crops in rotation with cassava to improve soil fertility where immediate cash benefits from the rotation crop are not comparable with those received for cassava" (Regional Planning and Area Development Project 1979:20). Three legumes--mung beans, soy beans, and peanuts--would appear to have some possible appeal as cash crops for northeastern farmers because they are crops with which there has been some experience in the region and for which a market exists.

The production of mung beans has expanded rapidly in Thailand in the period since 1960, the area being planted to this crop growing 356 percent between 1960 and 1970 (Donner 1978:93). Northeasterners found, however, less appeal to this crop than to kenaf (Donner 1978:93) and area planted to mung beans actually declined (at least for a period) in the Northeast while being rapidly expanded elsewhere (mainly in central Thailand). Between 1960 and 1965 area planted to mung beans in the Northeast declined 57 percent while expanding 171 percent in central Thailand (percentages calculated from data given in Silcock 1970:92). As recently as 1978/1979 acreage planted to mung beans in the Northeast accounted for only 0.3 percent of total cultivated area (see Table XXI). While farmers can realize much better profits on kenaf, cassava, and other crops, it is unlikely that they will expand mung bean production.

Soy bean production has also increased markedly in Thailand in recent years although the increase has not been so dramatic as it has been in the case of mung beans. Between 1960 and 1970 the area planted to soy beans
increased 165 percent (Donner 1978:106). Almost all the increase came as the result of the expansion of acreage in the north central plains. While some new acreage was planted to soy beans in the Northeast, this region contained only 2.4 percent of all land planted to soy beans in 1978/1979 (Regional Planning and Area Development Project 1979:22). There would appear to be three factors that strongly inhibit the development of soy bean production in the Northeast despite the growing market for this crop: "1. the lack of high yielding varieties suitable for the Northeast; 2. the lack of effective rhizobium inoculum or specific soybean varieties; and 3. inadequate and variable soil moisture throughout the cropping season" (Regional Planning and Area Development Project 1979:23). While these inhibitions may be overcome with new technology, for the moment few farmers in rainfed agricultural communities in the Northeast think of soy beans as even a potential cash crop. In 1978/1979 only 0.2 percent of all land under cultivation in the region was planted to soy beans.

Peanuts have a slightly greater appeal among northeastern farmers than do either mung beans or soy beans. There appears to have been no market for peanuts grown in Thailand until after World War II, although some peanuts were grown including in a few areas on the Khorat Plateau (Donner 1978:104). Initial expansion of peanut production in the early 1950s was stimulated to some degree by demand from outside the country, but the growth that has occurred in more recent years has come about as a result of a growing internal market. While some northeasterners have responded to this demand--the acreage planted to peanuts in the Northeast constitute about 30 percent of the total acreage throughout Thailand in peanuts for much of the past twenty years--the total output has remained low. In 1978/79 only 1.0 percent of the total cultivated area of the Northeast was planted to peanuts. The
low production is not, it would seem, a consequence of poor conditions in
the region; on the contrary, "the climate and soils of the Northeast are, in
general, suited to groundnut production" (Regional Planning and Area Development
Project 1979:21). Northeastern farmers have chosen not to plant peanuts
primarily because they can realize higher prices from other field crops. Since
the mid-1970s, however, the price of peanuts has increased to a small degree
relative to kenaf and if this trend continues and the market for cassava
softens as it might, then peanuts might become a more attractive crop for
northeasterners.

The relative insignificance of legumes among the cash crops in the
Northeast to date is also reflected in the fact that no villagers in either
Ban Nong Tyn or Ban Tae raise legumes for the market. It might be expected
that Ban Tae villagers would be more inclined than Ban Nong Tyn villagers to
begin raising peanuts commercially since Sisaket province in 1978/79 had the
highest percentage of land planted to peanuts (3.2 percent of all land under
cultivation) of any province in the region while Mahasarakham was one of the
two provinces in the same year with the lowest percent of land (0.1 percent
of all land under cultivation) planted to peanuts. But, for the present, there
has been no move in Ban Tae any more than in Ban Nong Tyn toward the cultivation
of legumes as cash crops.

Northeastern villagers have long grown a variety of vegetables and fruits
as well as kapok for home consumption. The types of crops produced by village
households for their own use are summarized well in a report from a survey
carried out in Ubon province in the early 1960s:

In every village, the small plots of land on which the
farmers' houses stand are crowded with a heterogeneous
stand of banana (*Musa spientium*), coconut (*Cocos nucifera*), areca nut (*Areca catechu*), kapok (*Ceriba pentandra*), tamarind (*Tamarindus indicus*), custard apple (*Anona squamosa*), carambola (*Averrhoa carambola*), pomegranate (*Punica granatum*), jack fruit (*Artocarpus spp.*) and papaya (*Carica papaya*). A small portion of the rice fields is cultivated in the off-season and planted with tobacco (*Nicotina tabacum*) and vegetables, the most common of which are cucumber (*Cucumis sativa*), gourd (*Coccinia indica*), cowpea (*Vigna sinensis*), green gram (*Phaseolus spp.*), onion (*Allium spp.*), garlic (*Allium sativum*), Chinese cabbage (*Brassica sinosis*), Chinese radish (*Raphanus sativus*) and coriander (*Coriandrum sativum*). The water necessary for the growth of these crops in the intense dry season is obtained from unlined wells dug near the site of the plots and which yield water at depths varying from 1-4 meters below ground level, the water being commonly raised by woven buckets lowered at the end of a bamboo pole. (Coleman 1963:2-4; quoted in Donner 1978:608)

While there has always been some trade among villagers of some of these products, it has only been in recent years that there has been development of any significant market for any of them. For the most part the market has been created by the expansion of towns in the region itself, although some demand has been generated from Bangkok as well.

In 1963 I found that few villagers in Ban Nong Tyn gained any income from the sale of fruits and vegetables: twenty households realized an average of 143 baht. Some change occurred in 1963 when the government,
supported by the United States Operations Mission to Thailand (the country mission of the U.S. Agency for International Development) determined to promote watermelon production, deemed suitable for the Northeast, by distributing free watermelon seeds to villagers throughout the region. Many villagers in Ban Nong Tyn received these seeds. Initially, only a small number of villagers undertook to produce for the market; in Ban Nong Tyn, two villagers who planted watermelons on nearby government land grossed 3,000 baht each from their efforts. But in the second year (1964), there was a massive overproduction of watermelons throughout the region and the price was so depressed that many people could not sell their melons even though they now wished to do so. One saw stacks of watermelons along the road that were rotting because it was not worth it to transport them to market.

More stable growth in the production of fruits and vegetables for sale did occur where villagers had access to local markets where the demand was reasonably high. In the mid-1960s in the village of Ban Don Daeng, located some twenty kilometers away from the major northeastern center of Khon Kaen, Mizuno found that households obtained incomes from the sale of vegetables and fruits that were substantially above those I found being realized in Ban Nong Tyn. "The average amount sold of vegetables during the year is 126 baht. A good cultivator may earn as much as 600 baht and a specialist more than 2,000 baht a year" (Mizuno 1971:51). By 1980 many villagers throughout the region were gaining some income from the sale of such things as chilies, cucumbers, gourds, cabbages, melons, coconuts, bananas, and so on, the particular products depending on local conditions suitable for production of garden crops and the relative strength of market demand. In Ban Nong Tyn in 1980, 37 households (accounting for 30 percent of the total) made an average income of 1,132 baht from the sale of melons and vegetables; in Ban Tae where villagers had much better access to a number of urban markets via the trains that stopped at a station a
kilometer away 93 households (80 percent of the total) made an average income of 3,074 baht. Indeed, in Ban Tae, the sale of melons and vegetables accounted for a higher percentage of cash income (11.8 percent) than did the sale of any other product including rice.

There are two products of domesticated trees—tamarind and kapok—that deserve mention as these have long been products for which there has been more than local demand. Of the nearly three million tamarind trees reported as existing in the country in the 1963 Agricultural Census, 1.3 million were located in the Northeast. The meat of the tamarind pods is used as a condiment in food and for certain medicinal purposes. While most tamarind is consumed within Thailand, there is a small export trade as well (Donner 1978:130). A small amount of tamarind was being produced for sale in Ban Nong Tyn in 1963. Because of the cutting down of a number of the old tamarind trees, there was no significant increase in the sale of tamarind in 1980. Kapok trees are grown primarily for the cotton-like fibre contained in their seed pods. Kapok is used throughout Thailand as a stuffing for bedding and other upholstery. As with tamarind trees, kapok trees are concentrated in the Northeast; 46 percent of all the trees in 1963 were to be found in the region (Donner 1978:109). In 1963 40 percent of all the households in Ban Nong Tyn realized a small amount of income from the sale of kapok. It then sold for between 1.50 baht and 3.00 baht per kilogram. It took quite a bit of work to pick or collect the pods, remove the shells and seeds, and then take the product to market. Most was sold in Mahasarakham where, in turn, it was resold by middlemen either to local people who made bedding or to buyers in Bangkok. In 1980 I found that Ban Nong Tyn villagers had not significantly increased their production of kapok
for sale. Sales of kapok and tamarind together accounted for two percent of total cash income in 1980 whereas sales of kapok alone had accounted for two percent of total cash income in 1963 with sales of tamarind accounting for an additional half percent. In Ban Tae both crops were all but insignificant. It would appear that while there continues to be a market for kapok and tamarind in Thailand, the demand remains so low as to be unimportant in the marketing decisions made by villagers.

8. Marketing of Forest Products

Northeasterners have long gathered certain things from the forests surrounding their villages to sell in nearby markets. In the nineteenth century, wild cardamon (Lao lāo; Thai krawān) and sticklac (L. khang; Thai khrang) were included in tribute payments sent to Bangkok from some parts of the region. While some cardamon and lac continue to be gathered in forests in the Northeast, the low demand coupled with the decline in forested areas have made neither viable sources of cash income for contemporary villagers. In Ban Nông Tyn where in 1963 a few villagers gathered lac to sell, in 1980 this activity had disappeared.

Of much greater importance than cardamon or sticklac is bamboo (mai phai in both Lao and Thai). While bamboo is widely distributed throughout the region, the large bamboo used for making walling as well as for flooring in cheaper houses grows best only in certain areas. In Ban Nông Tyn there are many stands of large bamboo, most of which are considered to be privately owned. Those owning such stands cut the wood for their own uses as well as sell some to other villagers and to people from other communities; a large pole sold for between fifteen and thirty baht in 1980. In Ban Tae, by contrast, there is little bamboo and most that is used must be purchased from elsewhere.
Until quite recently, almost all the wood used for house construction in northeastern villages was obtained by villagers who cut trees in neighboring forests. As forested areas in the region have shrunk, the government has stepped up its enforcement of the laws against cutting trees without licenses. Today, only those villagers still living in remote areas near large forested areas—such as in parts of Loei province or in areas near the Phu Phan mountains—are able to cut trees large enough to make boards for houses without bringing the law down upon them. In Ban Nong Tyn in 1963-1964 most houses were still built from home-hewed lumber, but by 1980 almost all new houses were constructed from lumber and cement pilings that had been purchased in town. Houses in Ban Tae were also built from similar materials and there were even houses built primarily of cement blocks. Lumber extraction has now become almost entirely a commercial endeavor, undertaken by companies operating under government permits.

Villagers throughout the region still today, as in the past, collect wood from the forests and even cut some smaller trees for purposes of supplying fuels needs. Most villagers, as well as most people in northeastern towns and even many people in Bangkok, use charcoal as their main fuel. In northeastern Thailand, those who have access to sources of wood for making charcoal have sometimes developed the production of charcoal as a home enterprise. Such is the case in Ban Nong Tyn. While there was a decline in the number of households producing charcoal from nearly 56 percent of all households in 1963 to 20.5 percent in 1980, the amount of income generated from the sale of charcoal as a percentage of total cash income in the village showed a slight increase from 1.6 to 1.7 percent. In other words, those households still engaged in selling charcoal realized a larger income in 1980 (an average of 1,211 baht) than those who had charcoal in 1963 (an average of 86 baht per producing household). How long Ban Nong Tyn villagers will continue
to be able to find sufficient wood to transform into charcoal is uncertain given the striking contraction of forested land around the village. The future points to a situation like that in Ban Tae where there is not even a sufficiency of wood to make into charcoal for local use, much less any to market.

In Ban Nong Tyn in 1963 most charcoal was bagged in the village and sold to a local village entrepreneur who, in turn, took it to Mahasarakham by hired truck. Villagers were paid seven baht a sack, while the entrepreneur sold it in turn at thirteen baht per sack in town. His profit was reduced by the cost of renting a truck to transport the charcoal to town. The same sack retailed for about seventeen baht. By 1980 the village middleman had been cut out of the process and town middlemen came directly to the village to purchase the charcoal. This change was stimulated, I suspect, in part by the fact that there are now fewer producers in the village and the charcoal is concentrated at a few locations.

The forests of northeastern Thailand have long provided an economic reserve for poor villagers. Not only could they find much in the forests that they themselves could consume, but the forests also provided a source of marketable products. In Ban Nong Tyn, for example, two of the poorest families gain almost their only cash income from the manufacture of charcoal. With the radical decline in forested areas, many poor are faced with a serious threat to their well being.

9. Craft Production and Market Demand for Village Crafts

As is true with many developing countries, many products of local craft enterprises in Thailand have been driven out by cheap manufactured goods. While this is less true of northeastern Thailand than of rural central Thailand, the pattern still can be observed in that region as well. As late as
1963 there were still a number of specialists in the central Chi River Valley provinces of Mahasarakham, Roi-et, and Kalasin still engaged in making ox-carts. By 1970 the ox-cart had all but disappeared from use in this area, although it was still being used in the southern part of the region in areas inhabited by Kuy (Sua) and Khmer peoples. In Ban Nong Tyn in 1980 there was only one remaining ox-cart, and it was rarely used. The ox-cart had been replaced for intra-village use by a pushcart mounted on bicycle wheels manufactured in Bangkok or elsewhere. For transport between villages or between villages and towns, motorized vehicles had replaced ox-carts. In 1963-1964 there had been four men in Ban Nong Tyn who worked part-time as blacksmiths, making a number of iron tools. When these men died, as they all had by 1980, no one replaced them. Metal tools could be bought cheaper in town. In a similar vein, store-bought cotton cloth had almost entirely replaced homespun except for loin cloths and blankets. Ban Nong Tyn is certainly not exceptional in this regard; villagers throughout the region have come depend for their productive activities, for their clothing, and for many other things they deem essential upon goods manufactured in industries in Bangkok or even outside of Thailand instead of upon goods they have made themselves or have obtained from local craftsmen.

Such changes notwithstanding, some local craft industries continue to persist in rural northeastern Thailand and some have been transformed to meet new market demand. Pot-making has continued to be economically viable for the villages scattered throughout the region that specialize in this craft (cf. Solheim 1964). In 1980 as in 1963-1964, villagers from the "pot village" (Ban Ng) near Ban Nong Tyn continued to bring their wares to Ban Nong Tyn as to other villages to sell; they also took their products to sell to middlemen in the nearby town of Mahasarakham. In pot-making villages women do the actual
manufacture of the pottery while their husbands sell the pots. In 1963-1964 men from Ban Mephy in Mahasarakham carried pots suspended from a pole that they carried over their shoulder; in 1980 they pushed bicycle sheet carts filled with pots. But the product they sold had not changed.

While pot-making and selling provide the primary source of income for households in pot villages, other crafts serve to generate a supplementary source of income for some villagers in rice-growing villages. In the community of Ban Don Daeng near Khon Kaen, for example, the sale of rush-matting woven by members of the community provided in the mid-1960s some income for nearly every households. Rush suitable for matting was gathered by young men and women in nearby swamps. Then young women would take over the process of drying, dying, and weaving the rushes into mats. In the mid-1960s the mats were sold for five baht each. The average income earned from the sale of mats was 109 baht per household, although those with the best weavers gained up to 600 baht (Mizuno 1971:52). In Ban Nong Tyn, the main craft enterprise from which some significant income was realized was the weaving of bamboo walling. In 1963 46 percent of all households gained some income from the sale of bamboo walling or other products made with bamboo, realizing an average of 144 baht per household. In 1980, the percentage of households engaged in making bamboo walling had declined slightly: 38 percent realized some income from the sale of bamboo walling and/or other products made from bamboo. But the average income had risen significantly to 2,285 baht per household. As a percentage of total income, the sale of bamboo walling and other bamboo products had risen from 2.3 percent in 1963 to 5.7 percent in 1980. Several households earned substantial income from the sale of bamboo walling, one earning 9,000 baht, another 25,000 baht, and a third 32,000 baht. For the first of these, the income from the sale of bamboo walling accounted for the total cash income of the household; for the second, it accounted for 87 percent,
and for the third, 58 percent. For these households, in other words, craft production had become the primary source of cash income. The shift in emphasis given to the production of bamboo walling was evident in Ban Nong Tyn in the fact that in 1980 some people made walling even during the rainy season whereas in 1963-1964 it had been an activity almost entirely restricted to the dry season. Another change lay in the fact that in 1980 both men and women were involved in making bamboo walling whereas in 1963-1964 it had been almost an exclusive male endeavor.

In the village of Ban Tae the making of bamboo products for sale was undertaken by only a handful of villagers, a function of the fact that little bamboo was available to villagers. Another type of craft production was, however, very important in Ban Tae and generated even more income for those involved than did bamboo wall weaving in Ban Nong Tyn. Ban Tae women, like women throughout the Northeast, have long made silk cloth for home use. Some such cloth was probably even traded in pre-modern times, but with the introduction of manufactured cloth into Thailand beginning in the latter part of the nineteenth century, the demand for silk cloth stagnated or even declined. Efforts were made to stimulate silk production as a home enterprise in the pre-World War II period, but these efforts came to naught. A market for home woven silk cloth did continue, however, as older women still preferred to wear the traditional silk phasion, the native skirt. In the post-World War II period, Thai silk, promoted by the American Jim Thompson, gained an international reputation. While the silk that Thompson sold under the label of "Thai silk" was not the same as that made in northeastern villages since it used a combination of Thai and Japanese silk threads, was dyed with commercial dyes, and was in designs (usually plain, but in recent years in a variety of patterns) different to those made by villagers, the growth of demand for silk made in Thailand still
had a positive effect on production of silk in northeastern Thailand.

Even after the demand for Thai silk on international markets began to grow, most northeasterners who produced silk continued to do so primarily for home consumption. In 1963 my wife and I found it difficult to buy northeastern silk commercially at any place in the Northeast except for a couple of stores in Khorat that were outlets for weavers employed by companies. The beginnings of commercial silk production in the region were, however, becoming evident as a consequence of a stimulus provided by the Queen Mother and especially by the Queen. Both imbued the wearing of traditional silk clothing with an aura of high status by wearing such clothing themselves. When they did wear modern style clothing, they usually wore pieces made with Thai silk fabrics. Most importantly for the Northeast, the Queen assumed patronage of selected centers of silk manufacture.

One such center was in Roi-et province. In this same province, the government established an experimental farm for testing a variety of mulberry trees from various parts of the world, for improving the indigenous variety of mulberry, and for improving the silk worm. Seedlings of improved mulberry and improved worms were made available to some villagers through the community development program. From the early 1960s on a number of villages in Roi-et province were drawn into the production of either raw silk thread or silk cloth or both. Similar developments occurred in a few other villagers throughout the region. But the villagers that were drawn into this market were few.

More typical was the village of Ban On located in Caturaphak Phiman District some 23 kilometers southwest of the town of Roi-et, a community in which von Fleckenstein carried out research in 1968. While he found that more than half (59) of his sample of 100 households raised silk worms, little of their work found its way to market. Only 16.4 percent of the mulberry leaf
produced, 15.2 percent of the silk thread, and 2.3 percent of the finished silk were sold, and little of this found its way out of the village (percentages calculated from figures given in von Fleckenstein 1971:82). In part, the low involvement in producing silk thread or cloth for the market reflected the fact that villagers were still producing silk by village standards rather than by market standards. Few villagers had adopted improved varieties of mulberry or purchased better silk worms. Moreover, for commercial purposes silk needed to be woven of finer thread with fewer lumps than was typical of traditional silk (von Fleckenstein 1971:206).

In those northeastern villages where there was a shift in silk-making to produce for the market rather than for home consumption, there was typically a situation whereby the producers would be guaranteed a market for their silk. One of the most important such guarantees was provided by the Queen's project, a project designed to stimulate the development of silk cooperatives in selected villages. Ban Tae was fortunate in being selected for participation in this project. Those women in Ban Tae involved in the silk cooperative have been able to gain profits from their enterprise that add significantly to the incomes of the households to which they belong. The thirty-one households in Ban Tae that in 1980 sold cloth (almost entirely silk) realized an average income of 5,403 baht. The total income from the sale of cloth, moreover, accounted for nearly seven percent of total cash income in the village; in the households in which it was produced, it accounted for a much higher percentage. 10

By 1980 the possible outlets where northeastern villagers could sell silk thread or cloth had multiplied many times over the number of outlets available in the mid-1960s. Not only are there today buyers for silk produced under the aegis of the Queen's project or under that of other semi-official projects, but there are also shops in nearly every town where local silk is
bought from villagers and sold either to local townspeople, to tourists, or to
stores in Bangkok. Still, only a few villages throughout the region have
been able to make silk production a significant income-generating enterprise.
I learned, for example, from the agricultural officer of Myang district in
Mahasarakham province of only four villages out of a total of 127 in the
district in which silk was being produced commercially, and only in two of
these were there a significant number of silk worm sheds. The officer told
me that (and I quote here from my field notes of 29 July, 1980) "The Queen's
project buys the silk that is produced in these villages. In those villages
where silk production is being promoted, insecticides are used for the
mulberry trees and new types of worms are introduced from the various
experimental stations." While village level silk-production has not been driven
out by the availability of cheaper commercial fabrics, the potentiality for
the growth of silk-production as an income-generating home enterprise in the
Northeast appears still to be quite limited. Moreover, traditional designs
and colors are given way even in villages where silk is not produced
commercially in favor of more standardized designs and colors.

The market for other village products—most importantly basketry and
cotton cloth and cotton cloth products such as pillows—has grown somewhat
in recent years. There has been some effort to promote the demand for such
products by some agencies such as Sri Nakharinwirote University in Mahasarakham
where a center for northeastern crafts has been established. Such efforts have
not yet led to any significant changes in the ability of village households to
realize income from the sale of their products.
10. Wage Labor and Entrepreneurship in a Changing Economy

While most households in rainfed agricultural communities in northeastern Thailand today as in the past gain the bulk of their cash income from the marketing of cash crops, animals, and products of home enterprises, increasing numbers of households have come to depend on income generated from wage labor or from the proceeds of entrepreneurial activities. Such dependence has been a necessity for those families who have inadequate agricultural resources to meet their needs. While expansion of the agricultural land base together with intensification of agriculture has made it possible for the agricultural sector to absorb the bulk of the additional labor force created by the rapid population growth in the Northeast over the past two decades, the number of landless or land poor families has been steadily growing. Members of such families have often sought work for which cash wages are paid. But not all who have turned to cash employment have done so out of economic necessity; many others have sought to augment relatively adequate incomes from agricultural and home enterprise pursuits with wages earned from employment in one of the many new businesses created in the expanding economy of Thailand. Yet others have moved to take advantage of the changing economy to create new enterprises of their own.

Until about 1960 few villagers in rural northeastern Thailand could gain any cash income through wage labor or entrepreneurship while continuing to live within their home communities. Most additional labor for such agricultural activities as transplanting and harvesting were recruited, when needed, through labor exchange among kinsmen and fellow
villagers. A few relatively large landowners might hire a few people on a very temporary basis at the nominal sum of five baht per day. A small amount of cash did find its way into every village in the form of the token expense money allocated by the government for village and tambon headmen and their assistants. Other than in large villages, or communities located near highways and rail lines where a Chinese shopkeeper might have settled, there were few villages in which one would find a permanent shop. A few venturesome villagers might sell sundries or food or sew clothes for sale but would do so only to supplement their agricultural incomes.

If villagers determined in the period prior to about 1960 to seek employment off the farm, there were few opportunities open to them in the towns of the region. By far the biggest employer in all the towns was the government, but few villagers were able to attain the education requisite to becoming even a clerk; most clerks as well as other petty officials emerged from the petit-bourgeois of the towns themselves. It was equally difficult to find work for one of the commercial establishments in the towns. Most of these were owned and operated by ethnic Chinese or Vietnamese who hired kinsmen when they needed more help. Few manufacturing or processing plants were to be found in northeastern towns—it was a rare town that had more than a rice mill, a liquor distillery and an ice plant—and those that did exist required very small labor forces. While most of those who drove pedicabs (samlo) for small fares in the towns were from villages, the demand for such services was insufficient to create many jobs in the small towns of the Northeast.
Most northeastern villagers who prior to 1960 sought off-farm employment made their way to Bangkok where an economic boom begun in the early 1950s was creating a considerable demand for unskilled labor. Some also went to other expanding economic centers— to Vientiane in Laos or to one of the mining towns of the South, for example.

While most off-farm employment is still found by northeastern villagers in Bangkok and some other centers outside the region, increasing numbers of northeastern villagers have found it possible to augment their cash incomes, or even to make their primary incomes, through wage labor or entrepreneurship closer to home. Within most villages in the Northeast it is now common to find families who employ for wages the extra labor they need for agricultural activities and to find other families with members willing to be so employed for farm work. The institution of the Tambon Development Program and its successor the Employment Generation Project has made it possible for even those families with adequate incomes from their farms to gain some income through wage labor within the villages themselves. Ban Nong Tyn provices us with a salient example. By 1963 there were already five households or about 16 percent of the total for whom local farm labor brought in significant income. By 1980 over half of all families gained some income from local wage labor; this very high percentage reflects the fact that many villagers, even those above the poverty line, accepted paid work under the Employment Generation Project. While farm labor and other in-village wage labor has increased in northeastern villages during the past two decades, such income-generating activities have not reached anywhere like the proportions they have in rural central Thailand. The demand for farm labor is strongly constrained by the fact that most farms remain relatively small and can be operated for the most part by
labor recruited within families.

Probably of greater significance in the long run than in-village wage labor has been the marked increase in the past few years in demand for labor generated by the growing number of manufacturing, processing and service concerns that have emerged in the towns, and even in some villages in the region. It was an objective of the first Northeastern Development Plan of 1962-1966 to stimulate the growth of "agro-metro" centers in the Northeast. During the first decade following the promulgation of this plan, the objective seemed to remain but an ideal. In a study made using demographic data for Khon Kaen province, a province that according to the plan was to be the northeastern development center, Sternstein found that up to 1972 more people left Khon Kaen--mainly to work in Bangkok--than were attracted to the province by increasing job opportunities (Sternstein 1979; also see Sternstein 1977). Sternstein's pessimistic conclusions regarding the unlikelihood of Khon Kaen becoming a significant development center are, however, belied by subsequent data. It now appears that a major change took place in the northeastern economy in the 1970s, and one of the concomitants of this change was the emergence of Khon Kaen as a magnet for many new industries.

Between 1964 and 1970 the number of relatively large manufacturing and processing plants in the Northeast grew by thirty percent (Donner 1978:641); most of these were sited in Nakhon Ratchasima (Khon Kaen), long the main economic center of the northeastern region. Between 1970 and 1979 the number of such plants grew at a much more dramatic 150 percent (figure calculated from data given by Donner 1978:641 and Ratana 1982:305-307). There has been probably even greater proliferation of commercial
establishments within the region. The at least modest "take-off" that occurred in the 1970s was a function of a number of factors. By 1970 most of the new road system had been completed, a definite boon to those who wished to transport raw materials and manufactured goods cheaply to and from places within the region. Because of the growth in available cash income to villagers as a consequence of increased production for the market, there was also a growth in demand from within the region for some types of goods and services. Manufacturing and processing plants also benefited directly from the provision of power generated by the new hydroelectric plants that were finished in the late 1960s or early 1970s.

By the latter half of the 1970s, the agricultural sector was generating less than half of the Gross Regional Product of the Northeast (see Table XXIV). This figure still compares unfavorably with an average of 30 percent of the Gross Domestic Product for the whole country for the five year period between 1974 and 1978 that was generated by the agricultural sector. When national and regional data are compared (see Table XXIV), it can be seen that the manufacturing and processing sector of the Northeast still lags far behind that of the country as a whole. Banking is still weak in the Northeast as compared with the national situation, although it would appear that there has been a steady, if small, growth in this sector in the late 1970s. Indicative of the change in banking can be seen from the case of the town of Mahasarakham, the seat of a relatively poor northeastern province. In 1963 the first commercial bank opened; prior to this time there had been only a government savings bank. In 1968 the Bank for Agriculture and Agricultural Cooperatives opened a branch and then, between 1972 and 1979, four more commercial banks established branches in the provincial capital. Thus, by 1979 there were seven banks in a town where
TABLE XXIV: PERCENTAGES OF GROSS REGIONAL PRODUCT GENERATED BY VARIOUS SECTORS OF THE ECONOMY, NORTHEASTERN THAILAND, 1974-1978; COMPARED WITH AVERAGE SECTORIAL PERCENTAGES OF GROSS DOMESTIC PRODUCT OF THAILAND FOR FIVE-YEAR PERIOD, 1974-1978

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Source: Thailand, Northeast Regional Development Center, Regional Planning Division, National Economic and Social Development Board. Surup saphap sehhak lae sangkho phak tawan-gh chiang nga chaphq cangwar thi khat lyak phaitai khrongkan PPD (Summary of Economic and Social Conditions of the Northeastern Region / and/ Especially of those Provinces Selected for the PPD / Provincial Planning and Development Program). Bangkok, 1980.

Note: Figures for 1978 were estimates.
seventeen years prior there had been only one (data from Pitaksit et al., 1981:23). The construction sector has assumed a more prominent place in the regional economy of the Northeast than it has in the total economy of the country. The steady growth in this sector in the latter half of the 1970s reflects a building boom that has included both large buildings for new plants, commercial establishments, universities and colleges and small family dwellings. The public administration and defense sector has remained unchanged, and continues to account for a higher percentage of the regional product than it does of the national product.

The diversification of the northeastern economy has been especially marked in the two provinces of Nakhon Ratchasima (Khorat) and Khon Kaen, the former long the major economic center in the region and the latter the center that has been provided government support for development since the early 1960s. The disproportionate change in the economies of these two provinces as compared with other provinces in the region can be seen especially with reference to the growth in the industrial sector of the northeastern economy (see Tables XXV and XXVI). In 1970 40.8 percent of all the major manufacturing and processing enterprises in the Northeast were to be found in these two provinces; by 1979 the percentage had increased to 57.8 percent. Udon and Ubon, the provinces with the next highest percentages, together accounted for 17.6 percent of major manufacturing and processing plants in 1970 and 16.1 percent in 1979. All other provinces experienced by 1979 only modest growth in their industrial sectors. If all the major manufacturing and processing plants existing in 1979 were equally divided among all sixteen provinces, there would have been an average of 84 enterprises per province. In fact the twelve provinces
### TABLE XXV: Processing and Manufacturing Enterprises, Northeastern Thailand, 1970 and 1979, By Province.

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**Note:** The apparent decline in numbers of enterprises in Sisaket and Surin provinces between 1970 and 1979 may be a function of the different sources used. The province of Yasothorn was part of Ubon province in 1970 and the fact that it has fewer enterprises than any other province in the Northeast reflects the fact that it was only recently made into a separate province.

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| **NORTHEAST TOTAL** | **108**       | **558**         | **87**        | **19**                  | **134**       | **15**           | **6**           | **117**        | **80**                  | **46**                | **127**           | **40**             | **16**              | **1,353** |}

*Source: Ratana Rucirakun, Phumisat phak tawan-qk chiang wea (Geography of the Northeastern Region) (Bangkok: Odean Store, 1982), pp. 304-307.*
with the least development of an industrial sector had an average of only 29 enterprises per province.

Whereas the major manufacturing and processing plants have been concentrated in two main centers and two secondary centers, small scale rice mills have been relatively equally distributed throughout the region. In 1977, according to one source (Aphisak 1982a:206), there was a total of 12,074 mechanized rice mills in northeastern Thailand, of which not more than 110-125 were large commercial mills. Using a figure of 11,949 (the total less 125) for the number of small-scale rice mills, and assuming equal distribution by province, district, and tambon, then one would expect to find an average of 747 mills per province, 53 per district, and 7 per tambon. Data from Mahasarakham, a province for which only 35 major manufacturing and processing firms were recorded as existing in 1979, bear out the expectation of a more equal distribution of small-scale rice mills throughout the region. One source (Aphisak 1982b:24) gives a total of 467 mills for the province in 1980, five of which being large commercial mills; another source (Pitaksit et al., 1981:21) gives a figure of 621 mills for 1981. Both figures are probably underestimates given the data in Myang district records. From these I found that in 1979 there was a total of 179 mills (131 medium-sized and 48 small ones) in the district outside of the town-center, an average of 22 per tambon. As I have greater confidence in these data than in the published records, and as I doubt that the rural parts of Myang district accounted for 29 percent of all the mechanized in a province having nine districts and one sub-district, I would place the total for the province at well over a thousand mills. Whatever the exact figure, it is clear
that Mahasarakham, like most of the other northeastern provinces lacking any significant number of major industrial firms, has a relatively equal share of the small-scale rice mills.

In Mahasarakham province, and perhaps in some other provinces in which cassava is an important crop, many small-scale cassava chipping plants have been set up in a manner comparable to the establishment of small-scale rice mills. Whereas the data on major manufacturing and processing enterprises (see Table XXVI) lists 26 cassava processing plants for Mahasarakham for 1979, other sources indicates that in 1980/81 there was a total of either 83 or 86 plants in the province (Pitaksit, et al., 1981:21; Aphisak 1982b:24). The additional 57-60 firms are small operations located mainly in the rural areas. Comparable data could probably be found for other provinces as well.

In provinces like Mahasarakham, what industrial development has taken place, both small and large, has been closely linked to agriculture. One exception has been in the area of firms set-up to service motorized vehicles; numerous small mechanic shops have sprouted up in all towns and in many villages throughout the region. In the major centers a significant number of firms manufacturing metal, metal products, and transportation equipment have been established.

While adequate statistics are not readily available, a comparable pattern to the development of the industrial sector in the Northeast also has emerged for the commercial sector. Again, most of the large commercial establishments are located in the major centers of Khorat and Khon Kaen and, to a lesser extent, of Udon and Ubon. There has, nonetheless, been a significant expansion of commerce throughout the region. Mahasarakham may
well be typical in this regard in having experienced, according to one source (Pitaksit et al., 1981:21) a ten-fold increase in retail shops in the decade of the 1970s. Small-scale commercial firms have also proliferated throughout the countryside. In Myang district Mahasarakham, for example, there were in 1979, according to records made available by the district office, 179 small shops, an average of 20.5 per tambon.

There have been similar developments in the establishment of trucking and bussing firms. While most of the major firms are based either in Bangkok or, to a lesser extent, in one of the major centers of the Northeast, and while most medium-sized firms are based in other towns in the region, hundreds of lesser firms, usually involving only one truck, bus, or combination truck-bus, have been set-up throughout the region. While statistical data for the whole of the Northeast are not available, data for Mahasarakham provide insight into the nature of the development. According to a source published in 1982, there were 155 regular buses and trucks operated by large firms carrying passengers and goods between the province and other places in Thailand. There were an additional 45 buses and trucks providing regular service between the provincial capital and district seats (Aphisak 1982b:31). These figures themselves represent a significant increase in access to transportation by people in the province, but they do not take into account the large number of locally-owned vehicles that ply the routes between villages and towns. Myang district Mahasarakham is probably typical in this regard of most districts in the Northeast. In 1979 according to information made available from the district office, there were 178 motorized vehicles (mainly trucks and truck-buses) in the rural
communities of the district, that is, an average of 22 vehicles per tambon. I did not obtain comparable data when I was carrying out field work in 1963-1964, but my observations of the movement of traffic in the district lead me to think that there could not have been more than 5 vehicles per tambon at that time. A recent study of the impact of rural roads in northeastern Thailand provides confirmation that the changes I observed in Mahasarakham have occurred in a comparable way throughout much of the region: "Better roads have encouraged many villagers to purchase small pickup trucks to haul people and village produce to the market and bring back goods for sale in the village" (Moore et al., 1980:12, emphasis added).

The diversification of the economy in the Northeast has led to the creation of an increasing number of non-agricultural jobs. Since most of the concerns that employ significant numbers of workers have been established in the major centers of the region, only a small number of villagers are able to fill most of the newly created jobs and still remain living in their home communities. Most workers are constrained to migrate to the towns of Khorat or Khon Kaen if they are to find work in much the same way that other northeasterners leave their homes to seek work in Bangkok. As yet no study has been made that would reveal the extent to which northeasterners are finding off-farm employment in the Northeast as compared with finding such work in Bangkok or elsewhere outside of the region, but the marked expansion of job opportunities in the region in the past decade has given an increasing number of villagers a choice as to whether to leave the region to find work or to look for it closer to hand.

While fewer jobs have been created by the small industries and commercial firms in the provinces of the Northeast outside of those con-
taining one of the major centers, there still has been some increase in the number of non-farm jobs available in all provinces. Most jobs are unskilled and are associated with the processing of the major cash crops—rice, cassava, and kenaf. In better-off districts, men and sometimes women, can also find work in construction and road work. Some skilled jobs have also opened up in concerns where skills can be acquired on the job: dress-making, barbering and hair-styling, machine and automobile repair, for example. Some commercial concerns have taken to hiring villagers with somewhat more than a basic education as salespersons and stock clerks. In a recent study (Pitaksit et al. 1981) made in two districts of Mahasarakham and Yasothon (the latter arguably the least developed of all northeastern provinces) found that the competition for unskilled jobs tended to depress wages below the legal minimum (Pitaksit et al. 1981:18, 46). The study noted, however, that low wages in both skilled and unskilled jobs were compensated for in some cases by the provision of room and board by the employer.

In the cases of Ban Nong Tyen and Ban Tae, most village families who reported income from off-farm work had gained such income from wages paid to a member of the family who had gone to Bangkok to work. In a few cases, however, the wages were obtained locally. In Ban Tae there were several villagers who were employed as teachers or as clerks in the nearby district office, a function of the close proximity of the village to the district seat. In Ban Nong Tyen, such jobs were not available, but two villagers had found types of employment that had not been available in 1963-1964. One was employed by a road construction firm and the other
by a factory making cement poles for electrical wires. While the number of villagers in Ban Nong Tyn or Ban Tae, like the number in most rainfed villages in the Northeast, who support their families from employment in off-farm jobs still remains quite small, their existence has already begun to have some impact on village life. Unlike most villagers who have gone to work in Bangkok who have, on returning home, resumed the role of farmer, those who find local non-farm jobs have begun to think of these jobs as permanent alternatives to farming. If the non-agricultural sectors of the northeastern economy continue to expand at the same rates they have during the past decade, then it is likely that an increasing number of villagers will have the choice of whether to follow their parents into farming or to attempt to obtain a permanent non-farm job at some nearby concern.

The creation of new types of wage-labor jobs has not been the only significant concomitant of the changing economy of the rural Northeast. Of at least equal, and, I suspect, of greater significance have been the opportunities for entrepreneurship opened up to villagers. While statistics are not available to prove the point, it is my impression from observations I have made in many villages as well as from reading the reports of other researchers that the number of village families that have come to depend primarily upon the fruits of entrepreneurial undertakings is greater than the number of families who have come to depend primarily upon wage labor either off or on the farm. Whatever the actual facts may turn out to be, there can be no question but that the emergence of local rural entrepreneurship over the past two decades has been dramatic.
The most conspicuous entrepreneurial development that has occurred in rural northeastern Thailand has been the rapid multiplication of small (and later medium-sized) mechanized rice mills and the equally rapid proliferation of local shops selling a variety of goods. Beginning in the late 1950s a number of factors combined that made it feasible for some northeastern villagers to begin setting-up mechanized rice mills at the village level. Some villagers were able to acquire sufficient capital either because as village school teachers they were salaried or because they had been able to make savings from wages earned in Bangkok. Japanese firms had begun to produce small and relatively inexpensive mills that were marketed in Thailand through Chinese-owned retail stores. Finally, ordinary villagers were beginning to have sufficient disposable cash income to make paying for milling a reasonable alternative to milling by traditional time-consuming methods. It is perhaps worthy of note that traditional milling was done primarily by women and so the labor saved through the paying for milling was the labor of female members of rural households.

In the late 1950s and early 1960s the growth in the number of village-based mechanical rice mills was phenomenal. While a study of this transformation has yet to be written, a few statistics can suggest the nature of what happened. According to yearbooks for the provinces of Mahasarakham, the number of small rice mills in Wapipathum district, Mahasarakham grew from twelve to 42, in Phayakkaphum Phisai district, Mahasarakham from fifteen to 62, and in Chiang Yun district, Mahasarakham from eight to twenty-five. 
between 1959 and 1962. Taking the three districts together, there was an increase of 268 percent in the four-year period of the number of small rice mills. Stated in another way, there was an increase of an average of 1.6 mills per tambon in these three districts in 1959 to an average of 5.0 mills per tambon in 1962. In a study made in Khon Kaen province in 1963 (at the time Khon Kaen was not significantly more developed than other provinces in the region), it was found that there were approximately eight small mills per tambon (Long et al. 1963:18). New mills continued to be constructed at a rapid rate during the 1960s and 1970s and smaller mills were replaced by larger ones. Although not strictly comparable to the Khon Kaen data, the change can be indicated by some statistics from Muang district, Mahasarakham for 1979. According to district office records, there were in 1979 179 mills, of which only 48 were small, an average of 22.4 mills per tambon. In a twenty-five year period there had been a radical alteration in the rural economy of the Northeast such that by 1980 most villages had at least one rice mill and many had two or more; a quarter of a century before mechanized mills had been all but unknown in the villages. With rare exception the mills are owned and operated by villagers rather than by people living in towns.

A very similar pattern could probably be traced, if the data were available, for the proliferation of village-based shops. In the study made in Khon Kaen in 1963 it was found that "every tambol visited had at least two general stores selling such items as palm sugar, rice, salt and detergents" (Long et al. 1963:17). In 1979 in Muang district, Mahasarakham, according to district records, there were a total of 164
shops, or an average of 20.5 per tambon. While the two statistics are not directly comparable, they do provide a sense of the growth of the rural commercial sector in rural northeastern Thailand. It also should be noted that there has been a significant change in the character of village shops; the largest have expanded their stocks considerably and have offered villagers goods of much greater cost than those that were offered to villagers twenty years ago. Again, with rare exception village shops are owned and operated by villagers, some of whom have taken on these roles as full-time occupations rather than as means to supplement income gained through farming.

A third area in which there has been significant entrepreneurship by villagers has been in the acquisition of trucks and buses used for transporting goods and people to and from market centers. While some villagers in communities near major roads had begun to acquire motorized vehicles by the early 1960s, most such vehicles have been acquired in the past decade or so. As reported above, in Muang district Mahasarakham the average number of vehicles owned and operated by villagers grew from an estimated five per tambon in 1963 to 22 per tambon in 1979. In all likelihood similar changes occurred throughout the rural Northeast. The major variable is the quality of roads that run through particular districts. The owner-operators of locally-owned trucks and buses are mainly villagers and are often, I suspect, people who also own and operate rice mills or shops.

While rice mills, shops, and trucks or buses have absorbed most of the entrepreneurial capital invested by villagers, some capital has also been used by a few villagers to acquire public address and other audio-
visual equipment that is rented out at temple fairs and other celebrations, to establish cassava chipping plants, and so on. As electricity is extended into the countryside, other types of enterprises are beginning to emerge. A recent study describes an unusual jewelry-cutting enterprise that was set up villagers in a community in the Phayakkaphum Phisai district of Mahasarakham province:

The origin of jewelry cutting in Ban Yang Sri Suratch is that some villagers went to work in ruby lapidary processing in Chantaburi and Bangkok. They returned to the village and started this activity 4 years ago when electricity became available. Of the total 198 households in the village, 40 households are now engaged in this activity, but there are only 30 households in the farm season. (Pitaksit et al. 1981:26)

Cases such as this one underscore the fact that northeastern villagers have themselves played an active role in effecting the transformation of the economy of the region.

This role has, nonetheless, remained a limited one. In Ban Nong Tyn and Ban Tae, as in most other rainfed agricultural communities in northeastern Thailand, entrepreneurial activities till today support only a few families. This fact, like the fact that few villagers have been able to find full-time non-farm employment in places near their homes, is to be interpreted not as a function of some traditional value, the adherence to which leads villagers to spurn new types of occupations. On the contrary, given the opportunity northeaster villagers have shown themselves to be
markedly inclined to shift into non-farm jobs. The limitation lies, thus, not within the world of villagers but in the larger political-economic framework that encompasses the northeastern economy.

11. Economic Change and Underdevelopment in Northeastern Thailand

Although the basis for economic change had been created in the pre-World War II period, the economy of northeastern Thailand began to undergo a marked alteration only from the mid-1950s on. At the outset of this period, most northeasterners still produced primarily for home consumption and realized little disposable cash income from the sales of agricultural products or from wages earned in either on-farm or off-farm employment or from private businesses. According to a World Bank report, in 1962/1963 seventy-five percent of all families in the region had incomes below a poverty line of 150 baht per month per person in 1975/1976 prices (International Bank for Reconstruction and Development 1978:iii). In one sense this statistic is a false one since a concept of "poverty line" is really appropriate only for an economy in which most products consumed are purchased with money. Until the late 1950s and early 1960s most families in northeastern Thailand were only marginal participants in a cash economy. Such families, with rare exceptions, were nonetheless able to produce most of what they needed in the way of foodstuffs, clothing, and shelter. This was possible because the Northeast was a relatively underpopulated land of smallholders with almost no tenancy or landlordism.

During the 1960s an increasing number of northeastern farm families accorded more and more emphasis to those economic activities that would yield
cash income as distinct from products that could be consumed at home. This change was initially brought about through two means. On the one hand, northeasterners—mostly young adults—sought temporary employment in the rapidly developing urban setting of the Bangkok metropolitan area or, less commonly, in other centers of economic growth. On the other hand, many families also began to devote considerable efforts to producing cash crops—notably rice and kenaf and later cassava—or to raising animals for the market. These changes, in turn, through generating higher cash incomes brought increasing demand in rural communities for goods and services offered through the market system. In response to this demand, a significant number of northeastern villagers throughout the region became rice millers, shopkeepers, truckers, and other types of local entrepreneurs.

While there was little non-agricultural development in the Northeast prior to the 1970s, there has been during the past decade some significant diversification of the economy. As new types of enterprises have been created, most notably in the two major centers of the region—Nakhon Ratchasima (Khorat) and Khon Kaen—villagers have moved to take up employment in them. In sum, the Northeast has experienced during the last quarter of a century both economic growth and economic diversification.

The transformation of the northeastern economy is to be explained with reference to a number of factors. Unquestionably one of the major driving forces behind the changes in the northeastern economy has been the rapid population increase. While population growth rates have declined significantly in the past few years, they were for most of the period among the highest in the world. Between 1947 and 1979 the population of the region grew from 6.2 million to 15.8 million. The incentive to
produce more is hardly problematic in families with six to eight dependent children. The expansion of cultivated land in the region has been almost directly proportional to the expansion of the population. Yet northeasterners have not simply cultivated more land to produce enough to meet their needs; they have also changed their economic patterns. Such change has been made possible in great part by the marked improvements in the economic infrastructure of the region. The new network of good roads and highways built by the government in the 1960s and 1970s has greatly facilitated participation of villagers in the market economy. Although only a small number of villagers have benefited in their agricultural pursuits from the major irrigation projects built at government expense, increasing numbers have been able to take advantage of employment opportunities created by the provision of hydroelectric power to new regionally-based industries and by the electrification of rural communities. Since the late 1960s probably the vast majority of northeastern farmers have also increased production by adopting, albeit in a rather limited way, the new high yield varieties of rice developed through government-supported research and the chemical fertilizers and insecticides associated with the high yield varieties as part of the "Green Revolution." In adopting the "Green Revolution" package, in diversifying agricultural production, in seeking jobs in centers of economic growth, and in establishing new enterprises at the village level northeastern villagers have shown themselves, as Behrman wrote regarding their increasing production of several crops for which there was an expanding market, willing to respond "rationally and substantially to economic incentives" (Behrman 1966a:337). While some
have disputed his conclusion (see Bell and Tai 1969, as cited in Ingram 1970:264), there can be little question but that northeastern villagers have often taken a positive role in attempting to take advantage of opportunities created by the market. As I have argued above, the values that shape the economic behavior of northeastern villagers have proven in many cases to stimulate capitalistic behavior and rarely to retard such behavior.

By actively seeking to take advantage of the new economic opportunities created in the transformation of the northeastern economy over the past twenty-five years, many, perhaps a majority, of northeastern farm families have seen improvements in their standards of living. Such improvements are reflected in several statistics found in a study made by the World Bank in the late 1970s. According to this study, the "typical" agricultural household in the "upper Northeast" (including the provinces of Udorn, Nongkhai, Sakon Nakhon, and Nakhon Phanom) realized a 38 percent increase in real income between 1962 and 1976; the typical agricultural household in the "lower Northeast" (Buriram, Surin, Siaket and Ubon provinces—Yasothon had not yet been separated from Ubon) experienced a 44 percent increase in real income; and the typical agricultural household in the "mid-Northeast" (Nakhon Ratchasima, Chaiyaphum, Khon Kaen, Kalasin, Mahasarakham, and Roi-et provinces) realized a dramatic 100 percent increase in real income for the same period (International Bank for Reconstruction and Development 1978:39). At the same time, that is, between 1962/1963 and 1975/1976, the percentage of northeasterners living below the poverty line (defined as 150 baht per month per person in 1976 prices) dropped from 75
percent of the total population of the region to 38 percent (International Bank for Reconstruction and Development 1978:iii).

The particular cases of Ban Nong Tyn and Ban Tae provide further evidence of the improvements experienced by households in rainfed agricultural communities in recent years. The average annual cash household income in current prices rose in Ban Nong Tyn from 2,043 baht/household (348 baht per person) in 1963 to 15,369 baht per household (2,398 baht per person) in 1980 in Ban Nong Tyn. Although the data do not exist to permit a similar comparison in time for Ban Tae, the average annual household cash income of 20,558 baht (3,421 baht per person) in 1980 in Ban Tae must also represent a significant change from income levels of the early 1960s. As can be seen from Tables XXVI, XXVII, XXIX, villagers in Ban Nong Tyn and Ban Tae used their cash incomes in 1980 in more or less comparable ways. The increased cash income has permitted villagers to invest more in productive activities and in educational and health services as well as in traditional ritual activities. As villagers have gained more disposable cash income, they have also used some monies to improve their housing and to acquire consumer goods. As can be seen from Table XXX most houses in the two villages were built within the previous nine years, and approximately a quarter of the houses in each village were built within the three years prior to 1980. Table XXXI also shows that houses in Ban Nong Tyn in 1980 were typically built of better materials than they were in 1963. Whereas in 1963 about half of all households (50.6 percent) had at least some corrugated iron roofing, in 1980 all but one household had such roofing. In 1963 only nine percent of houses in Ban Nong Tyn had any wood siding; in 1980 43.3 percent of all households contained at least some wood siding and many of these were visibly of better quality than were wooden houses.
<table>
<thead>
<tr>
<th>Type of Expenditure</th>
<th># Households Making Expenditure</th>
<th>% Households Making Expenditure</th>
<th>Total Expenditure for Expenditure Category</th>
<th>% of Total Expenditures</th>
<th>Average Expenditure per Household Making Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Investments</td>
<td>125</td>
<td>98.4</td>
<td>146,789.30</td>
<td>16.4</td>
<td>1,174.31</td>
</tr>
<tr>
<td>Rice Seed</td>
<td>2</td>
<td>1.6</td>
<td>360</td>
<td>40.1</td>
<td>180.00</td>
</tr>
<tr>
<td>Other Seeds</td>
<td>17</td>
<td>13.4</td>
<td>1,265</td>
<td>0.1</td>
<td>74.41</td>
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<tr>
<td>Fertilizer</td>
<td>125</td>
<td>98.4</td>
<td>123,390.30</td>
<td>13.8</td>
<td>987.12</td>
</tr>
<tr>
<td>Tools</td>
<td>105</td>
<td>82.7</td>
<td>15,316</td>
<td>1.7</td>
<td>145.87</td>
</tr>
<tr>
<td>Other^h/</td>
<td>100</td>
<td>78.7</td>
<td>6,458</td>
<td>0.7</td>
<td>64.58</td>
</tr>
<tr>
<td>Livestock Investments</td>
<td>67</td>
<td>52.8</td>
<td>323,319</td>
<td>36.2</td>
<td>4,385.66</td>
</tr>
<tr>
<td>Buffalos</td>
<td>19</td>
<td>15.0</td>
<td>134,310</td>
<td>15.0</td>
<td>7,068.95</td>
</tr>
<tr>
<td>Cattle</td>
<td>12</td>
<td>9.4</td>
<td>54,164</td>
<td>6.1</td>
<td>4,513.50</td>
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<tr>
<td>Pigs</td>
<td>9</td>
<td>7.1</td>
<td>129,780</td>
<td>14.5</td>
<td>14,420.00</td>
</tr>
<tr>
<td>Chickens</td>
<td>9</td>
<td>7.1</td>
<td>1,390</td>
<td>0.2</td>
<td>154.44</td>
</tr>
<tr>
<td>Ducks</td>
<td>30</td>
<td>23.6</td>
<td>3,215</td>
<td>0.4</td>
<td>107.17</td>
</tr>
<tr>
<td>Other^c/</td>
<td>6</td>
<td>4.7</td>
<td>460</td>
<td>0.1</td>
<td>76.67</td>
</tr>
<tr>
<td>Hire of Labor^d/</td>
<td>42</td>
<td>33.3</td>
<td>27,448</td>
<td>3.1</td>
<td>653.53</td>
</tr>
<tr>
<td>Taxes (land)</td>
<td>119</td>
<td>93.7</td>
<td>5,728.50</td>
<td>0.6</td>
<td>48.14</td>
</tr>
<tr>
<td>Social Expenditures</td>
<td>127</td>
<td>100.0</td>
<td>379,027</td>
<td>43.7</td>
<td>2,984.46</td>
</tr>
<tr>
<td>Education</td>
<td>77</td>
<td>60.6</td>
<td>167,380</td>
<td>18.7</td>
<td>2,173.77</td>
</tr>
<tr>
<td>Health</td>
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<td>100.0</td>
<td>126,142</td>
<td>14.1</td>
<td>993.24</td>
</tr>
<tr>
<td>Medical^e/</td>
<td>61</td>
<td>48.0</td>
<td>86,435</td>
<td>9.7</td>
<td>1,416.97</td>
</tr>
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<td>Medicines</td>
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<td>95.4</td>
<td>35,930</td>
<td>4.0</td>
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<td>Curing rites^f/</td>
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<td>46.5</td>
<td>3,777</td>
<td>0.4</td>
<td>64.02</td>
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<tr>
<td>Rituals^g/</td>
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<td>100.0</td>
<td>96,506</td>
<td>10.8</td>
<td>759.89</td>
</tr>
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<td>Ordination</td>
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<td>96.9</td>
<td>25,970</td>
<td>2.9</td>
<td>211.13</td>
</tr>
<tr>
<td>Wedding</td>
<td>120</td>
<td>94.5</td>
<td>24,701</td>
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<td>205.84</td>
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<td>Funerals</td>
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<td>30,592</td>
<td>3.4</td>
<td>247.62</td>
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<tr>
<td>Other^h/</td>
<td>120</td>
<td>94.5</td>
<td>15,243</td>
<td>1.7</td>
<td>127.02</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>127</td>
<td>100.0</td>
<td>893,313</td>
<td>100.0</td>
<td>7,033.96</td>
</tr>
</tbody>
</table>
TABLE XXVII: Selected Expenditures by Households in Ban Nong Tyn, Amphoe Myang, Mahasarakham, 1980 (cont.)

Notes: (a) Informants were asked regarding expenditures made during the previous year on farm investments, labor costs, taxes, and social expenditures. No effort was made to obtain complete expenditure accountings from households.

(b) Other includes rope, push-carts, and repairs to equipment.

(c) Other consists of fish.

(d) A total of 391 persons were reported to have worked for others. Of these 204 were employed as wage-laborers at an average wage of 114.94 baht per laborer. The remaining 187 were part of work forces mobilized through labor exchanges. An average of 21.40 baht per person was expended on food and drink for those participating in labor exchanges.

(e) Medical expenses consisted of payments to doctors and other Western-style practitioners and of costs of hospitalization.

(f) Curing rites consisted of spirit exorcisms, tying of the "vital essence" and treatments by leaders of the "ordained-in-the-dhamma" movement.

(g) Ritual expenditures included both the expenses incurred in sponsoring rituals and those incurred in contributing toward the expenses of rites sponsored by others.

(h) Also included in this category were expenses associated with memorial rites for the dead.

(i) Most of the expenses under other consisted of donations made to communal rituals (e.g., chot kathin and bun phra wet).
<table>
<thead>
<tr>
<th>Type of Expenditure</th>
<th># Households Making</th>
<th>% Expenditures</th>
<th>Total Expenditure for Expenditure Category</th>
<th>% of Total Expenditures</th>
<th>Average Expenditure per Household Making Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Investments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice Seed</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other Seed</td>
<td>81</td>
<td>69.3</td>
<td>6,862</td>
<td>0.4</td>
<td>84.72</td>
</tr>
<tr>
<td>Fertilizer</td>
<td>106</td>
<td>90.6</td>
<td>197,350</td>
<td>12.7</td>
<td>1,861.79</td>
</tr>
<tr>
<td>Insecticide</td>
<td>93</td>
<td>79.5</td>
<td>20,937</td>
<td>1.4</td>
<td>225.13</td>
</tr>
<tr>
<td>Manure</td>
<td>81</td>
<td>69.2</td>
<td>81,595</td>
<td>5.3</td>
<td>1,007.35</td>
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<tr>
<td>Rice Bran</td>
<td>95</td>
<td>81.2</td>
<td>17,627</td>
<td>1.1</td>
<td>185.55</td>
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<tr>
<td>Hormones</td>
<td>33</td>
<td>28.2</td>
<td>1,981</td>
<td>0.1</td>
<td>60.03</td>
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<tr>
<td>Tools</td>
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<td>69.2</td>
<td>22,343</td>
<td>1.4</td>
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<tr>
<td>Livestock Investments</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Buffalos</td>
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<td>17.1</td>
<td>145,950</td>
<td>9.4</td>
<td>7,297.50</td>
</tr>
<tr>
<td>Cattle</td>
<td>9</td>
<td>7.7</td>
<td>101,350</td>
<td>6.5</td>
<td>11,261.11</td>
</tr>
<tr>
<td>Pigs</td>
<td>16</td>
<td>13.7</td>
<td>25,980</td>
<td>1.7</td>
<td>1,623.75</td>
</tr>
<tr>
<td>Chickens</td>
<td>8</td>
<td>6.8</td>
<td>1,566</td>
<td>0.1</td>
<td>195.75</td>
</tr>
<tr>
<td>Ducks</td>
<td>13</td>
<td>11.1</td>
<td>981</td>
<td>0.1</td>
<td>75.46</td>
</tr>
<tr>
<td>Other-c/</td>
<td>14</td>
<td>12.0</td>
<td>13,291</td>
<td>0.9</td>
<td>949.36</td>
</tr>
<tr>
<td>Craft Investments-d/</td>
<td>11</td>
<td>9.4</td>
<td>42,700</td>
<td>2.8</td>
<td>3,881.82</td>
</tr>
<tr>
<td>Hire of Labor</td>
<td>57</td>
<td>48.7</td>
<td>99,720</td>
<td>6.4</td>
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<tr>
<td>Taxes (land)</td>
<td>96</td>
<td>82.1</td>
<td>8,321</td>
<td>0.5</td>
<td>86.68</td>
</tr>
<tr>
<td>Social Expenditures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>49</td>
<td>41.9</td>
<td>211,050</td>
<td>13.6</td>
<td>4,307.14</td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical-e/</td>
<td>112</td>
<td>95.7</td>
<td>182,788</td>
<td>11.8</td>
<td>1,632.04</td>
</tr>
<tr>
<td>Medicine</td>
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<td>49.6</td>
<td>97,844</td>
<td>6.3</td>
<td>1,686.97</td>
</tr>
<tr>
<td>Curing Rites-f/</td>
<td>109</td>
<td>93.2</td>
<td>59,060</td>
<td>3.8</td>
<td>561.83</td>
</tr>
<tr>
<td>Rituals-g/</td>
<td>59</td>
<td>50.4</td>
<td>25,684</td>
<td>1.7</td>
<td>438.71</td>
</tr>
<tr>
<td>Ordination</td>
<td>12</td>
<td>10.3</td>
<td>76,592</td>
<td>3.7</td>
<td>4,716.00</td>
</tr>
<tr>
<td>Wedding</td>
<td>86</td>
<td>73.5</td>
<td>101,590</td>
<td>6.6</td>
<td>1,181.28</td>
</tr>
<tr>
<td>Funerals-h/</td>
<td>107</td>
<td>91.5</td>
<td>127,330</td>
<td>8.2</td>
<td>1,190.00</td>
</tr>
<tr>
<td>Other-i/</td>
<td>110</td>
<td>94.0</td>
<td>80,455</td>
<td>5.2</td>
<td>731.41</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>117</td>
<td>100.0</td>
<td>1,548,359</td>
<td>99.9%</td>
<td>13,233.84</td>
</tr>
</tbody>
</table>
TABLE XXVIII: Selected Expenditures by Households in Ban Tae, Amphoe Uthumphonphissai, Sisaket, 1980 (cont.).

Notes:  
(a) Informants were asked regarding expenditures made during the previous year on farm investments, labor costs, taxes, and social expenditures. No effort was made to obtain complete expenditure accountings from households.  
(b) Other includes purchases of turkeys, geese, and fish, construction of a fish pond, and purchases of animal feed and medicine.  
(c) Consists entirely of purchases of dyes for making of silk cloth.  
(d) A total of 1,543 persons were reported to have worked for others. As the average per worker was 64.63 baht it is probable that a large percentage of this work force was mobilized through labor exchanges rather than through hire for wages.  
(e) Medical expenses consisted of payments to doctors and other Western-style practitioners and of costs of hospitalization.  
(f) Curing rites consisted of spirit exorcisms, tying of the "vital essence" and dispelling of fateful omens.  
(g) Information on ritual expenditures in Ban Tae was obtained primarily with reference to rituals sponsored by the individual or household incurring the expense. There is probably under-reporting of the contributions made by persons to the expenses of rituals sponsored by others.  
(h) Also included in this category were expenses associated with memorial rites for the dead.  
(i) Most of the expenses under other consisted of donations made to communal rituals.  
(j) Percentage totals less than 100.0 owing to rounding.
### TABLE XXIX: Comparison of Selected Expenditures by Households in Ban Nong Tyn, Amphoe Myang, Mahasarakham and Ban Tae, Amphoe Uthumphonphisai, Sisaket, 1980.

<table>
<thead>
<tr>
<th>Type of Expenditure</th>
<th>% Households Making Expenditure</th>
<th>% Total Expenditures</th>
<th>% Households Making Expenditure</th>
<th>% Total Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Investmentsa/</td>
<td>98.4 16.4</td>
<td>93.2 22.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice Seed</td>
<td>1.6 0.1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other Seeds</td>
<td>13.4 0.1</td>
<td>69.3 0.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fertilizer</td>
<td>98.4 13.8</td>
<td>90.6 12.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insecticide</td>
<td>n.a. n.a.</td>
<td>79.5 1.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manure</td>
<td>n.a. n.a.</td>
<td>69.2 5.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice Bran</td>
<td>n.a. n.a.</td>
<td>81.2 1.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hormones</td>
<td>n.a. n.a.</td>
<td>28.2 0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tools</td>
<td>82.7 1.7</td>
<td>69.2 1.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>78.7 0.7</td>
<td>0 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Livestock Investments</td>
<td>52.8 36.2</td>
<td>35.0 18.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buffalos</td>
<td>15.0 15.0</td>
<td>17.1 9.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle</td>
<td>9.4 6.1</td>
<td>7.7 6.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pigs</td>
<td>7.1 14.5</td>
<td>13.7 1.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chickens</td>
<td>7.1 0.2</td>
<td>6.8 0.1</td>
<td></td>
<td></td>
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<tr>
<td>Ducks</td>
<td>23.6 0.4</td>
<td>11.1 0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Otherb/</td>
<td>4.7 0.1</td>
<td>12.0 0.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Craft Investmentsc/</td>
<td>0 0</td>
<td>9.4 2.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hire of Labor</td>
<td>33.3 3.1</td>
<td>48.7 6.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxes (land)</td>
<td>93.7 0.6</td>
<td>82.1 0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Expenditures</td>
<td>100.0 43.7</td>
<td>100.0 49.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>60.6 18.7</td>
<td>41.9 13.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>100.0 14.1</td>
<td>95.7 11.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ritual</td>
<td>100.0 10.8</td>
<td>98.3 23.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total** 100.0 100.0 100.0 99.9d/

**Notes:**
(a) More specification of farm investments was made in the interviewing in Ban Tae than in Ban Nong Tyn. No informant in Ban Nong Tyn, it should be noted, volunteered information on investments in insecticides, manure, rice bran, and hormones (the other category included costs of rope, push-carts, and repairs to equipment).
(b) Includes cost of fish and (for Ban Tae only) costs of turkeys, geese, construction of a fish pond, and purchases of animal feed and medicine.
(c) Consists of purchases of dyes for the making of silk cloth.
(d) Percentage totals less than 100.0 owing to rounding.
TABLE XXX: Age of Housing in Ban Nông Tyn, Amphoe Mường, Mahasarakham and Ban Tae, Amphoe Uthumphonphissai, Sisaket, 1980.

<table>
<thead>
<tr>
<th>Age of Housing (years)</th>
<th>Ban Nông Tyn</th>
<th>Ban Tae</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>0-3</td>
<td>31</td>
<td>24.4</td>
</tr>
<tr>
<td>4-9</td>
<td>45</td>
<td>35.4</td>
</tr>
<tr>
<td>10-17</td>
<td>36</td>
<td>28.3</td>
</tr>
<tr>
<td>18+</td>
<td>15</td>
<td>11.9</td>
</tr>
<tr>
<td>Average age</td>
<td>9.1 years</td>
<td>8.7 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristic of Housing</th>
<th>Ban Nong Tyn 1963</th>
<th>Ban Nong Tyn 1980</th>
<th>Ban Tae 1980</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td><strong>Roofing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leaf</td>
<td>4</td>
<td>4.5</td>
<td>1</td>
</tr>
<tr>
<td>Thatch</td>
<td>36</td>
<td>40.4</td>
<td>0</td>
</tr>
<tr>
<td>Leaf &amp; Thatch</td>
<td>2</td>
<td>2.2</td>
<td>0</td>
</tr>
<tr>
<td>Corrugated Iron</td>
<td>36</td>
<td>40.4</td>
<td>126</td>
</tr>
<tr>
<td>Corrugated Iron &amp; Other</td>
<td>10</td>
<td>11.1</td>
<td>0</td>
</tr>
<tr>
<td>Unavailable</td>
<td>1</td>
<td>1.1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Walling</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thatch</td>
<td>1</td>
<td>1.1</td>
<td>0</td>
</tr>
<tr>
<td>Woven Bamboo</td>
<td>79</td>
<td>88.8</td>
<td>70</td>
</tr>
<tr>
<td>Woven Bamboo &amp; Wood</td>
<td>4</td>
<td>4.5</td>
<td>16</td>
</tr>
<tr>
<td>Wood</td>
<td>4</td>
<td>4.5</td>
<td>39</td>
</tr>
<tr>
<td>Corrugated Iron &amp; Other</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Plasterboard</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Unavailable</td>
<td>1</td>
<td>1.1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>89</td>
<td></td>
<td>127</td>
</tr>
</tbody>
</table>
in 1963. Ban Tae houses are typically even better than those in Ban Ngng Tyn. Some of the types of consumer goods that villagers in both communities have purchased are shown in Table XXXII. Of particular note is the acquisition of electrical appliances by villagers in Ban Tae, a community that had had electricity but a few years. Through letters I have learned that since electricity was brought to Ban Ngng Tyn in 1980 there has been a similar spate of buying of electrical appliances and that similar statistics could probably now be generated for that community as well.

Although the standard of living has improved for many households in rainfed agricultural communities in northeastern Thailand, the region still remains markedly underdeveloped, especially in comparison to rural central Thailand and to urban areas. Indeed, in important respects the economic situation of the rural northeasterners has deteriorated relative to these other areas even while there has been real economic growth. As Table XXXIII shows, while the northeastern shares of the non-agricultural sectors of the Gross Domestic Product of Thailand increased in all but manufacturing between 1960 and 1969, these shares have all shown declines since 1970. From Table XXXIV it can be seen that there has also been a decline in the 1970s in northeastern per capita income taken as a percentage of the per capita income of the whole kingdom and a comparable decline, at least since 1975, in northeastern per capita income taken as a percentage of per capita income in Bangkok. These declines are a continuation of declines that also occurred in the 1960s, as can be seen from Table XXXV.

Poverty is still a much more conspicuous feature of rural northeastern
TABLE XXXII: Possessions of Households in Ban Nong Tyn, Amphoe Myang, Mahasarakham, and Ban Tae, Amphoe Uthumphonphissai, Sisaket, 1980.

<table>
<thead>
<tr>
<th>Possession</th>
<th>Ban Nong Tyn</th>
<th>Ban Tae</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Ox-cart</td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>Pushcart</td>
<td>118</td>
<td>92.9</td>
</tr>
<tr>
<td>Bicycle</td>
<td>79</td>
<td>62.2</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>3</td>
<td>2.4</td>
</tr>
<tr>
<td>Truck/car</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>Water Pump</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>Gun</td>
<td>52</td>
<td>40.9</td>
</tr>
<tr>
<td>Sewing Machine</td>
<td>23</td>
<td>18.1</td>
</tr>
<tr>
<td>Radio</td>
<td>120</td>
<td>94.5</td>
</tr>
<tr>
<td>Electricity(^a)</td>
<td>111</td>
<td>87.4</td>
</tr>
<tr>
<td>Electrical Appliance(^b)</td>
<td>na</td>
<td>na</td>
</tr>
</tbody>
</table>

Notes: (a) Electricity was being installed in Ban Nong Tyn during the period when the survey was being made. The question that was asked was whether or not electricity would be installed in the house when it was available.

(b) In Ban Tae the question was asked whether a household had electrical appliances other than lights. Such appliances included irons, fans, and in rare cases refrigerators and television sets. In Ban Nong Tyn the question was asked whether an electrical appliance would be acquired, but the data did permit the construction of a realistic statistic to compare with that from Ban Tae where electricity had existed for several years.
TABLE XXXIII: Changes in the Northeastern Shares of the Gross Domestic Product of Thailand

<table>
<thead>
<tr>
<th>Sector</th>
<th>1960&lt;sup&gt;a&lt;/sup&gt;</th>
<th>1969&lt;sup&gt;a&lt;/sup&gt;</th>
<th>1974&lt;sup&gt;b&lt;/sup&gt;</th>
<th>1975&lt;sup&gt;b&lt;/sup&gt;</th>
<th>1976&lt;sup&gt;b&lt;/sup&gt;</th>
<th>1977&lt;sup&gt;b&lt;/sup&gt;</th>
<th>1978&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>27.1%</td>
<td>24.7%</td>
<td>24.5%</td>
<td>25.9%</td>
<td>25.4%</td>
<td>24.7%</td>
<td>24.3%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>10.1</td>
<td>8.3</td>
<td>6.7</td>
<td>6.6</td>
<td>6.1</td>
<td>6.3</td>
<td>6.1</td>
</tr>
<tr>
<td>Construction</td>
<td>15.1</td>
<td>21.4</td>
<td>17.3</td>
<td>18.3</td>
<td>18.0</td>
<td>18.1</td>
<td>17.7</td>
</tr>
<tr>
<td>Transportation &amp; Communication</td>
<td>7.5</td>
<td>11.0</td>
<td>11.0</td>
<td>8.9</td>
<td>8.4</td>
<td>8.1</td>
<td>8.0</td>
</tr>
<tr>
<td>Trade</td>
<td>14.6</td>
<td>15.7</td>
<td>13.2</td>
<td>14.2</td>
<td>13.5</td>
<td>13.1</td>
<td>12.5</td>
</tr>
<tr>
<td>Services</td>
<td>14.2</td>
<td>16.1</td>
<td>15.1</td>
<td>15.1</td>
<td>14.6</td>
<td>14.6</td>
<td>14.4</td>
</tr>
</tbody>
</table>


Thailand. Northeast Regional Development Center, Planning Division, National Economic and Social Development Board, Sarup saphap setthakit lae sangkhom phak tawan-9k chiang nya chapho cangwat khatlyak phaitai khrongkan PPD (Summary of the Economic and Social Character of the Northeastern Region with Special Reference to Those Provinces Selected for Inclusion in the PPD Program). Bangkok, 1981, Tables 1 and 2.

Notes: (a) 1960 and 1969 figures at constant 1962 prices.
(b) 1974-1978 figures at current prices.
(c) 1978 figures based upon estimates.

Not all sectors have been included, so percentages do not total to 100.
TABLE XXXIV: Per Capita Income, Northeastern Thailand in Comparison with Whole Kingdom and Bangkok

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Capita Income,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeastern Region</td>
<td>2,410</td>
<td>2,870</td>
<td>3,434</td>
<td>3,460</td>
<td>3,693</td>
<td>4,465</td>
<td>4,991</td>
</tr>
<tr>
<td>Per Capita Income,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whole Kingdom</td>
<td>5,455</td>
<td>6,613</td>
<td>7,077</td>
<td>7,132</td>
<td>7,830</td>
<td>8,879</td>
<td>12,067</td>
</tr>
<tr>
<td>Per Capita Income,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangkok</td>
<td>14,813</td>
<td>18,179</td>
<td>16,277</td>
<td>17,978</td>
<td>21,114</td>
<td>25,128</td>
<td>30,167</td>
</tr>
<tr>
<td>Northeastern Per</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capita Income as % of</td>
<td>44.1%</td>
<td>43.4%</td>
<td>48.1%</td>
<td>44.2%</td>
<td>41.6%</td>
<td>42.5%</td>
<td>41.3%</td>
</tr>
<tr>
<td>Whole Kingdom Per Capita</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeastern Per</td>
<td>16.3%</td>
<td>15.8%</td>
<td>21.1%</td>
<td>19.2%</td>
<td>17.5%</td>
<td>17.8%</td>
<td>16.5%</td>
</tr>
<tr>
<td>Capita Income as % of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangkok Per Capita</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Notes: (a) The two sources give different figures for 1975, 1976, and 1977. Those of the second source have been taken as presumably they should be more accurate. Except for the figures for Bangkok, the figures from the second source are higher than those in the first.

(b) Based on estimates for 1979.
TABLE XXXV: Gross Regional Product of Northeastern Thailand in Comparison to Gross Domestic Product of Whole Kingdom

<table>
<thead>
<tr>
<th></th>
<th>1960&lt;sup&gt;a&lt;/sup&gt;</th>
<th>1969&lt;sup&gt;a&lt;/sup&gt;</th>
<th>1974&lt;sup&gt;b&lt;/sup&gt;</th>
<th>1975&lt;sup&gt;b&lt;/sup&gt;</th>
<th>1976&lt;sup&gt;b&lt;/sup&gt;</th>
<th>1977&lt;sup&gt;b&lt;/sup&gt;</th>
<th>1978&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast GRP</td>
<td>10.1</td>
<td>18.9</td>
<td>41.3</td>
<td>47.3</td>
<td>51.6</td>
<td>56.0</td>
<td>63.2</td>
</tr>
<tr>
<td>(Billions of baht)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand GDP</td>
<td>56.0</td>
<td>112.3</td>
<td>271.4</td>
<td>297.2</td>
<td>337.5</td>
<td>383.1</td>
<td>444.2</td>
</tr>
<tr>
<td>(Billions of baht)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast GRP as %</td>
<td>18.0%</td>
<td>16.8%</td>
<td>15.2%</td>
<td>15.9%</td>
<td>15.3%</td>
<td>14.6%</td>
<td>14.2%</td>
</tr>
<tr>
<td>of Thailand GDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Notes: (a) 1960 and 1969 figures at constant 1962 prices. (b) 1974-1978 figures at current prices. (c) 1978 figures based on estimates.
society than it is of almost anywhere else in the country save the less populous North. A World Bank report has concluded that:

The proportion of the country's population living in absolute poverty has declined from about half in the early 1960s to a quarter in recent years. Nonetheless, the latter figure means that more than 11 million people in Thailand today remain in absolute poverty. The large majority, over 90%, of these poverty households live in the rural areas. In fact, nearly three-quarters of all poverty households—about 8 million people—are in the rural North and Northeast, most of them farmers growing rice under rainfed conditions. By contrast, only 11% of urban households are estimated to be living in poverty, most of them the unskilled worker families. (International Bank for Reconstruction and Development 1978:iii)

In Ban Nong Tyn and Ban Tae, if one were to take an annual cash income of less than 10,000 baht per year per family as the poverty line (roughly equivalent to the line as drawn by the World Bank), then in 1980 49.5 percent of families in Ban Nong Tyn and 39.2 percent of families in Ban Tae were below the poverty line (see Table XXXVI).

The situation in the Northeast is likely to get worse in the next decade unless there are marked improvements in the economy that are of a different order than those that have occurred thusfar. Because of the population explosion of the postwar period (and the population continues to grow, albeit at a much lower rate than in the 1960s), an increasing number
### TABLE XXXVI: Income Distribution of Households in Ban Nong Tyn, Amphoe Myang, Mahasarakham and Ban Tae, Amphoe Uthumphonphissai, Sisaket, 1980

<table>
<thead>
<tr>
<th>Income Category</th>
<th>Ban Nong Tyn</th>
<th>Ban Tae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Households</td>
<td>%</td>
<td>Number of Households</td>
</tr>
<tr>
<td>0- 999</td>
<td>4</td>
<td>3.1</td>
</tr>
<tr>
<td>1,000- 4,999</td>
<td>22</td>
<td>17.3</td>
</tr>
<tr>
<td>5,000- 9,999</td>
<td>37</td>
<td>29.1</td>
</tr>
<tr>
<td>10,000-19,999</td>
<td>38</td>
<td>29.9</td>
</tr>
<tr>
<td>20,000-49,999</td>
<td>23</td>
<td>18.1</td>
</tr>
<tr>
<td>50,000-</td>
<td>3</td>
<td>2.4</td>
</tr>
<tr>
<td>Total</td>
<td>127</td>
<td>99.9</td>
</tr>
</tbody>
</table>

### TABLE XXXVII: Income Distribution of Households in Ban Nong Tyn, Amphoe Myang, Mahasarakham, 1963*

<table>
<thead>
<tr>
<th>Income Category</th>
<th>Number of Households</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0- 399</td>
<td>22</td>
<td>18.3</td>
</tr>
<tr>
<td>400- 799</td>
<td>29</td>
<td>24.2</td>
</tr>
<tr>
<td>800- 1,199</td>
<td>22</td>
<td>18.3</td>
</tr>
<tr>
<td>1,200- 1,699</td>
<td>18</td>
<td>15.0</td>
</tr>
<tr>
<td>1,700- 2,499</td>
<td>12</td>
<td>10.0</td>
</tr>
<tr>
<td>2,500- 4,299</td>
<td>9</td>
<td>7.5</td>
</tr>
<tr>
<td>4,300-11,999</td>
<td>5</td>
<td>4.2</td>
</tr>
<tr>
<td>12,000-</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100.0</td>
</tr>
</tbody>
</table>

of people must find productive work other than on the family farm. In the past, surplus members of households were able to homestead on previously uncultivated land. Today the land frontier of the Northeast has all but closed. The prospect, thus, is for an increasing number of people living in the region who are landless or lack sufficient land to support their families. To date the economic transformation of the Northeast does not appear to have exacerbated class differences within northeastern rural society because even the poor have been able to improve their situation by taking advantage of some of the new opportunities create. This conclusion is born out by data from Ban Nong Tyn that show that the poorer segment of the population in 1963 have gained more in the general increase in income that was evident in 1980 than have the better off segment (compare Tables XXXVI and XXXVII). Whereas in 1963 18.3 percent of households had, in effect, no cash income, only 3.1 percent of households in 1980 were in the same position. There has been a similar upward skewing of the economic situation of other low income groups in 1963. Class differences are likely, however, to become more marked as poor villagers find fewer and fewer opportunities to begin cultivation of new lands. Small holders will also find it increasingly difficult to accumulate any spare income beyond that which they need to purchase necessities.

So long as rural northeasterners were benefitting from economic growth, the widening gap between their standard of living and that of urban people both in towns in the region and in Bangkok and that of rural people in Central Thailand could be tolerated. If now the economy of the Northeast stagnates or grows so slowly as not to generate adequate productive employment for all who seek it, then the contrasts between the life as it is known in
village and life as it is observed by northeastern villagers when they travel to Bangkok or to local towns will likely become the cause of considerable discontent.

Similarly, villagers who find their situation increasingly difficult are likely to become increasingly intolerant of the authoritarian stances taken by government officials. Since the early 1970s, villagers have been more willing than they were in the past to organize and participate in protests against the actions taken by government officials. While there was a decline in such protests after the 1976 coup, they have begun to resume in the past few years.

The continuing high incidence of poverty and the widening gap between economic conditions in the rural Northeast and those in rural central Thailand and in the urban areas of the country point to the appropriateness of characterizing the Northeastern economy as being one of persistent underdevelopment. The causes of underdevelopment in the Northeast are several. Many officials would be happy to lay the blame for underdevelopment at the feet of villagers themselves, arguing that village culture is so traditional as to serve as a barrier to villagers taking advantage of the opportunities open to them. The evidence I have presented demonstrates quite the opposite. Villagers in northeastern Thailand have taken an active role in seeking to improve their own and their families' well-being with cash income gained from new agricultural endeavors, off-farm wage labor, and entrepreneurship. Indeed, there is evidence, as I have shown, to suggest that the particular values of northeastern villagers are in at least a significant number of cases conducive to capitalistic economic activity.

One clear cause of underdevelopment can be traced to the rapid growth
of the population of the region over the past quarter of a century. The doubling of the population has not only, however, created extraordinary pressures on existing resources, but has also served as an engine of development. Population pressures have been all the more marked because of the relatively limited technological changes that have taken place. Given the type of ecological adaptation that villagers have been constrained to make by virtue of the particular soil, water, and weather conditions of the region, there is little doubt but that "environmental factors" (Ruttan et al. 1966, as cited in Behrman 1968 b:160) have contributed to their state of underdevelopment. Yet neither population pressures nor environmental factors can be said to be, as some officials and aid advisors have claimed, the primary causes of the underdevelopment of the northeastern region. Of probably greater significance are the structure of the relationship of villagers to the world market and the effect of government policies toward the region.

The integration of northeastern villagers into a world economy has been predicated upon their production of crops for which, in addition to being suitable given local environmental conditions, there is a sufficient market demand, marketing facilities exist and are accessible, and marketing information reaches producers in efficient ways. It has long been conventional wisdom in Thailand, as in most other Southeast Asian countries, that market integration has been hindered by Chinese middlemen through their efforts to maximize profits at the expense of producers. Such wisdom is belied by the facts. Chinese middlemen (as well as non-Chinese middlemen) have shown themselves very interested in stimulating the expansion of
production among farmers and have been the best sources of information about market demand and prices (cf. Behrman 1968:162). Moreover their profit margins have typically been quite small. Indeed, as I have argued above, there has been something an elective affinity between Chinese merchants and northeastern farmers, despite the jokes of the latter regarding avaricious Chinese.

The limited possibilities in producing for the market have been much more important than other factors in shaping the relationship which northeastern villagers have with the world economy. Kenaf and cassava were adopted as cash crops because they could be produced without any significant changes in traditional means of production. In responding to the demand for cassava and kenaf, however, villagers have subjected themselves to marked fluctuations in world market prices, fluctuations that have not been stabilized by government price supports. In the fact of such fluctuations, most northeastern farmers have continued to devote more effort to producing rice for which the market has been far more stable. In so doing, they have been at a disadvantage vis-à-vis farmers in central Thailand where environmental factors—both natural and man-made in the form of irrigation systems—are much more favorable to rice production than are those in the Northeast. While the "Green Revolution" has permitted northeastern farmers to increase yields of rice, they have not realized increases comparable to those in Central Thailand. Thusfar, there have been no similar technological changes introduced for other major cash crops in the region and yields in kenaf and cassava have dropped steadily.

Marketing facilities and concomitant access to markets have improved
significantly as a consequence of the creation of a new road system in the region. Yet, northeasterners remain at a disadvantage vis-à-vis farmers from central and southeastern regions of the country who have better access to the Port of Bangkok. Northeasterners will probably always be less well-integrated into the world market than are Central Thai villagers unless the government institutes policies that will compensate for the better situation of Central Thai rural people relative to both environmental factors and marketing and port facilities. To date, far from instituting such policies, government policies have tended to favor the urban population and farmers in central Thailand.

There is consensus among those who have studied the effects of public policies on the northeastern economy that these policies have not been sufficient to overcome the persistent state of underdevelopment in the region. At the outset of the period when the Thai government began to show concern about "the northeastern problem," Platenius observed that the centralized form of government in Thailand tended to preclude the design and implementation of policies tailored specifically to regionally-specific problems (Platenius 1963:99ff). Although in the 1960s the government attempted to overcome this structural limitation by creating national committees to deal with regional problems, the results were not positive. In a review of regional development planning for the Northeast during the 1960s, Phisit concluded that:

The public development programs and resources allocated to the Northeast have not produced much change in the structure of the regional economy. A series of ad hoc
regional policy measures of short-term character, a public allocation pattern which was thinly scattered over a large area, and other so-called accelerated rural development programs under the first two Plans have so far proved to be ineffective either in promoting long-term regional growth or in reducing the regional income gap. These partial regional development efforts did not become an instrument for the spatial coordination of public investment activities, but, instead, seemed to reinforce existing interregional differences in welfare. The planners were unable to translate national economic growth into increases in the income of the Northeast and to restructure new spatial relations for the region. (Phisit Pakkasem 1973:44)

Other policies also have often worked to the disadvantage of northeastern villagers, especially those living in rainfed agricultural communities. The large government investment in irrigation projects has had the effect of transferring real income "from surplus rice producers who do not benefit from irrigation . . . to those who do benefit" (Behrman 1968 b:163). This emphasis on large-scale irrigation projects has drawn government monies away from development of smaller scale projects more suitable to the majority of northeastern communities. Government investment in agricultural research and in the communication of the results of research to villagers through extension programs have not been equal to the need, although there does appear to have been some improvement in this regard in the last decade
(Behrman 1968 b:164; Regional Planning and Area Development Project 1979:16-17). Such improvements notwithstanding, the government has yet to invest the needed amounts in bringing animal disease under control despite the fact that since at least the late 1950s it has been advised that the Northeast might expand beef production for export. To this day, the market for cattle from the Northeast remains a local one.

Government policies have not, at least until quite recently, served to provide incentives for industrial development away from the Greater Bangkok Metropolitan Area. A new port on the southeastern coast, a port that would provide northeastersners with better access to world markets than does the port of Bangkok, has been very slow in being developed. On balance, thus, Thai government policies to date have tended to contribute to the underdevelopment of the northeastern region rather than to effecting changes that would reduce the disadvantageous situation of northeastersners relative to most of the rest of the population of Thailand.

While no "quick fix" for the problems of underdevelopment in northeastern Thailand could be instituted even assuming the best will on the part of all concerned, certain elements of a long term solution are discernable. For one, there is clear need for technological changes that will permit villagers to realize higher yields from the land they now cultivate. Without higher yields of rice, the amount of surplus that will be available for marketing will decline as more rice is consumed by a growing population cultivating essentially a fixed amount of land. There is also need to increase or stabilize yields of other cash crops; without this change or without a shift to other crops, real income will begin to decline. Innovations that will permit the cultivation of cash crops heretofore unimportant
in the northeastern economy also appear possible (cf. Regional Development and Area Planning Project 1979 passim), but await the means that will bring them to villagers. In a similar vein, the knowledge to control serious cattle diseases like hoof-and-mouth disease exists, but the effort that would need to be mounted to effect such control has yet to be supported at an adequate level of financing. In the past few years there has been a shift in emphasis in government policy away from investment in large-scale irrigation projects toward support for smaller projects that appear to be more appropriate given the environmental conditions of the Northeast. Insofar as these projects are designed to fit local conditions and are not built on the basis of a few standardized models developed in Bangkok, then they may have a markedly beneficial effect for many villagers in the region. The creation of significant numbers of nonfarm jobs within the region would unquestionably serve to augment the cash incomes especially of those families that are landless or have insufficient land for their needs. The Rural Employment Generation Project, like its predecessor, the Tambon Development Project, may prove to be temporarily effective, especially insofar as it entails the direct transfers of central government monies into the local northeastern economy. But in the long run, the demand for nonfarm jobs can best be met by the expansion of the nonagricultural sectors of the northeastern economy. The potential for such expansion can be improved by the government through the institution of favorable investment policies for the Northeast relative to other regions and through the more rapid development of the southeastern port area.

Finally, the movement on the part of the Thai government over the past few years towards some degree of real decentralization could, if speeded up, serve to give effective power to local leaders who are much more sensitive
to local problems and accountable to local people for their actions. Through decentralization, if properly instituted, northeastern villagers will be accorded a better opportunity to participate in the efforts to overcome the problems of underdevelopment, an opportunity that they would welcome and would be most capable of meeting.
FOOTNOTES

1For a description of a rather typical marketplace in a northeastern town—that in Pan Phai, a district center and important railhead in Khon Kaen province—see Chulalongkorn University, Social Research Institute (1980:87–93). For a more analytical and detailed account of a marketplace—one while in a district town in the north-central province of Phitsanulok is still similar in most respects to those in northeastern Thailand—see Preecha (1980, chap. 4). Preecha's study is based upon field research in Wang Thong district, Phitsanulok in 1974–75.

2Data from the district office, Cha Sarakham.

3One of the curious side effects of the resettlement of Lao refugees in the United States has been the creation of a market for northeastern Thai glutinous rice in this country. In 1979 Japanese-type sweet rice, a glutinous variety actually produced in the United States, practically disappeared from the market as there were insufficient supplies to meet the demands of Lao refugees. Glutinous rice from northeastern Thailand began to be imported in significant quantities and sold at prices that were more than twice as much as would be paid for the same rice in markets in Thailand.

4Even in 1963 villagers in Ban Mong Tum made most of their own rope. By 1980, villagers bought the rope they needed.
According to Virginia Thompson (1941:398, 399), the government had shown some interest in stimulating commercial tobacco production in northeastern Thailand prior to World War II.

Figure calculated from data given in the *Census of Agriculture 1963* (Thailand. National Statistical Office, Office of the Prime Minister 1965:32) and in Silcock (1970:28).

I find it somewhat curious that while official statistics are regularly generated for most cash crops, including legumes that have not yet reached the commercial significance of tobacco, there is a clear paucity of statistics on tobacco production.

These incomes do not figure in my analysis of income in Ban N Yong Yun in 1963 since they were obtained after I did my economic survey of the village.

During World War II then Prime Minister Phibun Songkhram had instituted sumptuary laws that prescribed the wearing of Western-style clothing. Until the Queen Mother and the Queen began to adopt traditional clothing for their public appearances, few middle or upper class women in Thailand wore traditional clothing.

Mr. Suriya Smutkupt will analyze the silk cooperative in Ban Tae in much greater detail in his forthcoming Ph.D. dissertation at the University of Washington.

The discrepancies in the statistics probably reflects the fact that many rural mills are unregistered.
Statistical information on commerce in northeastern Thailand is conspicuously missing from most of the standard sources that I have consulted. This lacuna may well be explained by the facts that most commercial enterprises are owned and operated by people who are mainly ethnically distinctive (Chinese and, to a lesser extent in the Northeast, Vietnamese) and that there are many "special relationships" between government officials and owners of commercial firms.

All statistics have been derived from two provincial yearbooks (Cangwat Mahasarakham 1960, 1963). Although Mahasarakham had a total of eight districts at the time, comparable information was available on only three. I am not overly confident of the reliability of these statistics, but I do think that they are suggestive of the changes that were occurring. In 1959 there were a total of twenty-two tambons in the three districts; in 1962 the number had increased to twenty-six.

I find it difficult to compare these figures with other income figures reported in other studies because of the different methods used to generate them and the different construals of what constitutes "income." According to the recent World Bank study, the average income of rural households in 1975/1976 for the whole of the Northeast was 16,530 baht (International Bank for Reconstruction and Development 1978:54). The same study also reports that the total net income in 1976 of "typical" agricultural households in the "mid-Northeast" (an area including Mahasarakham province) was 12,330 baht while that for the "lower Northeast" (an area including Sisaket province) was 9,980 baht (International Bank for Reconstruction and
Development 1978:39). Not enough information is given to determine why there is such a difference between these figures, but I suspect that the latter figures do not take into account any imputed value of rice or other farm products consumed at home. Thus, these figures presumably for cash income alone, would be more comparable to those obtained from the surveys carried out in Ban Nong Tyn and Ban Tae. Even then, the four year difference in time when the studies were made would need to be taken into account to make such a comparison.

A National Statistical Office study based on a survey carried out in rural communities in northeastern Thailand in 1975/1976 indicates that current monthly income of households was 1,289 baht, of which 661 baht was cash income and 628 baht was "non-money income" (reported in Chulalongkorn University, Social Research Institute 1980:25). Using these figures, then the average annual cash income of rural households in the Northeast in 1975/1976 would have been 7,932 baht. It is probable that given the intensive nature of the research carried out in Ban Nong Tyn and Ban Tae that the cash income figures generated would be somewhat higher than those that would have been produced in a general survey in which these two villages might have been included.

As noted in the tables, no effort was made to obtain complete expenditure accountings from households in either village.
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Usher, Dan

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Socioeconomic Change in Rainfed Agricultural Villages in Northeastern Thailand

Research carried out under Grant No. AID/DSAN-G-0213 by Dr. Charles F. Keyes, University of Washington

The report consists of the following:

Part I: Introduction and Social Bases of Production
87 pages + iv + 4 pages of references cited + 19 page appendix

Part II: Order and Social Action in Northeastern Thai Village Culture
99 pages + iii + 3 pages of references cited

Part III: Development and Underdevelopment in Rural Northeastern Thailand
192 pages + v + 15 pages of references cited

While the three reports are paginated consecutively, they can be read together or as separate studies. The first part provides a discussion of the methodology of the research project and an analysis of the ecological conditions that constrain the economic activities of villagers living in rainfed agricultural communities in northeastern Thailand. The second part presents a detailed interpretation of the world of the village as shaped by both traditional and modern cultural influences. It is the author's argument that it is impossible to institute programs of planned change that are effective without understanding how villagers look at the world in which these changes are to take place. The third part examines the characteristics of the politico-economic environment in which northeastern villagers live and discusses the adaptation that they have made to this environment.

It is the author's hope that the report will be useful in both Washington and Bangkok. He notes that since this is a report based upon primary research and not a contract report based upon primary research and not a contract report connected with a specific project, it contains no detailed list of recommendations. He does, however, address general development policy questions at the conclusion of Part III.

Dr. Keyes is interested in receiving and responding to any comments on the report. He plans to use this project as the core of a book on the changing agrarian order of rural northeastern Thailand.
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SUBJECT: Executive Summary of "Socioeconomic Change in Rainfed Agricultural Villages in Rural Thailand"

An executive summary of the report submitted by Dr. Charles Keyes will not be written by Gerald Hickey.

The report will benefit the work of the mission director in Thailand, Jerry Woods, and the anthropologist Mr. Grandstaff, and they may choose to write an executive summary. They may, however, only incorporate the material into their work without adding an executive summary on to Dr. Keyes report.