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ALTERNATIVE AGRICULTURE IN ISAN: A WAY OUT FOR SMALL-SCALE FARMERS

A Thesis Presented

by

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TABLE OF CONTENTS

I. INTRODUCTION II. THAI DEVELOPMENT: THEORETICAL AND EXPLANATORY CONSIDERATIONS A. Thai Society: A Marxist Perspective 4 B. Human Ecology 6 C. Political Economy 8 III. THAI HISTORICAL PROCESS: SOCIAL, ECONOMIC AND POLITICAL CHANGE IN RURAL THAILAND
 II. THAI DEVELOPMENT: THEORETICAL AND EXPLANATORY CONSIDERATIONS A. Thai Society: A Marxist Perspective B. Human Ecology C. Political Economy III. THAI HISTORICAL PROCESS: SOCIAL, ECONOMIC
A. Thai Society: A Marxist Perspective 4 B. Human Ecology 6 C. Political Economy 8 III. THAI HISTORICAL PROCESS: SOCIAL, ECONOMIC 9
B. Human Ecology 6 C. Political Economy 8 III. THAI HISTORICAL PROCESS: SOCIAL, ECONOMIC 9
,
A. Changing Landscape: The Opening of Thailand to the World Market
B. Welcome into the Fold: Isan is Incorporated into the Thai State
C. Cash Cropping in Isan: 1950's Onward D. Contesting Alternatives
IV. TIME FOR CHANGE: A CONVERGENCE OF FACTORS SUPPORT ALTERNATIVE AGRICULTURE
A. Buddhism and Alternative Agriculture B. NGO's and Alternative Agriculture 1. Case Study: IPM Training in Phichit, Thailand (1994)
C. Collaboration: Horizontal and Vertical
V. ALTERNATIVE AGRICULTURE 33
A. Integrated Farming 1. Viboon Khemchalerm 2. Chiang Thaidee 3. B. Natural Farming 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3
C. Organic Farming D. Agro-forestry 3'

BIBLIOGRAPHY

I. INTRODUCTION

The pictures on the cover of the World Bank publication, The East Asian Miracle: Economic Growth and Public Policy (1993), speak directly to the rapid economic change experienced in Thailand over the past decade. The upper picture shows the green of rural Asia--terraced rice fields with banana and papaya trees planted on the bunds. The bottom picture is that of industry--a gray port scene, freighters at dock loading and unloading cargo. Labeled a high-performing Asian economy (HPAE) the book analyzes those policies—open trade accompanied by export growth, investment in human capacity, macroeconomic stability, and efficient labor and financial markets--that have laid the foundation for the booming economy. Approaching Thai development from a different viewpoint, Gohlert (1991) writes, "Thailand's economic advantages in the international economy are purchased at the expense of the industrial workforce and the farmers. In fact, government policies do not only compound the problems of underdevelopment, they are part of the problem (23)." There is a vast literature in support of Gohlert's view much of it written by Thais working in the field of rural development—which documents the effects of a development process that places economic concerns over social concerns. As a result of these policies, Thailand grapples with the problems of rapid urbanization, increased deforestation, and farmer protest.

Much of the data in this paper is specific to the Northeast of Thailand. Referred to as

Isan, this region is the largest of the five regions that make up the nation. Bordering

Cambodia and Laos, the area is settled predominantly by ethnic Khmer and Lao, though

migration into the area beginning in the 1950's brought many who identify themselves as ethnic Thai. Although per capita income of villagers doubled from 1988 to 1994, the figures are approximately one third less than income levels of villagers in the North and just half that of those in the Central region. The majority of those in the rural areas are farmers. Bernstein (1988) makes an interesting statement, one which must be considered in this study of Isan agriculture: "...different types and degrees of 'subsistence' production are *determined* by the different forms of integration in capitalist economy, rather than the other way around (112)." Though the region experiences periodic drought and vast areas of low soil fertility, Silcock (1970) acknowledged the region suffers not so much from geographical factors as it does from "historical factors creating an agriculture inappropriate to the climate and terrain (148)." As 19.356 million persons live in the region—approximately one third of the total national population—issues of economic integration and market-oriented agricultural practices are central not only to Isan, but also the nation.

The purpose of this study is to: (1) provide an overview of agricultural development in Isan; (2) describe those historical forces which have created an agricultural system that is neither ecologically or socially sustainable; and (3) describe the emergence of a new form of agriculture identified as "alternative". The study will be organized as follows: Section II outlines three theoretical approaches that contribute to a holistic understanding of agricultural development. Section III examines those historical factors that have created the present agricultural system in Isan. Section IV identifies those forces that support the emergence of a new form of agriculture. Section V briefly describes alternative

agriculture. Section VI provides data suggesting that Thailand must seriously consider support of alternative agriculture in order to avoid social disruption.

II. THAI DEVELOPMENT: THEORETICAL AND EXPLANATORY CONSIDERATIONS

The aim of this section is to identify and describe three approaches to the study of both historical data and contemporary events impacting on rural life in Thailand. Dominant development theories--modernization, dependency, and world systems-- are passed over in favor of approaches that come closer to meeting Andre Gunder Frank's (1979) call for more "historical, holistic and structural approaches (103)." Nonetheless, the reader will immediately identify a key component of the world systems approach—production of commodities and purchase of finished products as well as dependency on the capital and technology of the capitalist or core states-- in the material presented here.

The first approach taken is Marxist—an approach that understandingly may be viewed as overly rigid. This is included simply because it provides a radically different interpretation of Thai history. Chattahip et al. notes the importance of history: "A social scientific theory which neglects to examine historical change and to emphasize inquiry into the evolutionary process is incapable of analyzing the causes of social phenomena (Reynolds and Hong 1983, 79)."

The human ecology approach identified by Rambo and Sajise is included because it brings forth the notion of relationships in a broad sense, allowing the researcher to examine the interactions between environment, society, and economics and their impacts on an agricultural system. A statement by Allen (1993) reveals this most fundamental relationship: "Agriculture does not exist and cannot function except at the intersection of society and nature (2)." Furthermore, this approach may be applied not only to the explanation of past events but, more importantly, used to identify those factors which may prevent or facilitate the formation of new agricultural systems.

Inclusion of political economy is crucial in dispelling the notion that economics exists outside the influence of the political process. Clearly, small farmers have been strongly affected by policy crafted by international bodies as well as by that of the Thai government. These three approaches will serve us well as we progress from an examination of Thai history to a discussion of the current reality facing small-scale farmers.

Thai Society: A Marxist Perspective

Hong Lysa (1984) describes three different approaches that have been taken in the study of Thai history. The first two--the religious-structural perspective and the Chulalongkorn viewpoint--share many similarities, making use of kingship, religion, custom, and tradition to describe harmonious or congruous relationships between different levels of society while downplaying class rivalry and various forms of dissent. Reynolds (1987)

describes this court-written history as simply "the elite's conception of its own past (11)." Wilson (1978) emphasizes that while Thai historians have amassed information regarding the chronological, dynastic, local, and regional past, they are weak in the areas of society and economy. This history "supports a specific Thai identity and a specific Thai view of the world and their place in it (170)." Therefore, the third approach which Hong Lysa identifies--a Marxist perspective with its unit of analysis not the monarchy, but rather social formation with emphasis on the economic, the political and the social--is truly radical.

Thai intellectual Jit Phumisak brought forth this radical perspective in his 1957 piece, *The Real Face Of Thai Feudalism Today*, in which he clearly laid out how the *sakdina* class (literally those with control over the fields) maintained complete control over the life of the peasant. Reynolds characterizes Jit Phumisak's writings as overturning the traditional understanding of Thai history:

By attributing avaricious, rather than pious, motives to that class, by exposing religious and cultural values as instruments of rule rather than sources of spiritual and social security, and by demonstrating how this social formation finally stagnated in conditions that were detrimental to human welfare and production (12)...

Employing Marxist thought, with its emphasis on ownership over the means of production, Jit Pumisak easily identified classes based on the ownership of land. Those with large landholdings were able to obtain not only political power but also economic power over those who were landless or slaves. Imperialism and the penetration of foreign capital into Thailand led only to further exploitation of the peasant class. The description of *sakdina* and their economic, social, cultural, and political characteristics in

his analysis of history from the formation of the Thai state in the Sukhothai period (1300's) through the 1950's continues to stimulate much discussion about and research on Thai society.

Pumisak's perspective may be seen as "deterministic, unilineal, and finalistic" as he describes the different stages Thai society has passed through. However, this alternative approach is important in that it has implications for how rural Thais view themselves vis a vis their urban counterparts and, for those from Isan, their perception of the state, Much of the writing on Thai society supports Wilson's (1959) statement that "emphasis upon class solidarity and class conflict, upon economic rewards and material values, upon discipline and revolution in politics which is the heart of Marxism—all this is alien to Thailand (86)." Nonetheless, Piker (1975) raises an important point when he notes that while there has always been clearly defined class divisions in Thailand, their existed no social class distinctions between villagers. The writer suggests that, as a variety of influences create farmers without claim to their own land, this class will begin to perceive social distinctions between themselves and their landed neighbors. Piker writes: "Whereas traditionally hierarchical distinctions between villagers were determined mainly by degree of seniority within kin units, they now depend upon the ownership of the means of production (320)."

Human Ecology

Kirch (1994) asserts that the researcher investigating change in agricultural methods "must adopt a strategy that incorporates both process and history as necessary and complementary elements of explanatory theory (322)." Furthermore, he poses questions that have relevance to agricultural change:

What impels agricultural change along particular pathways of development? How is it that people are persuaded, cajoled, or coerced to work harder, often for reduced returns (321-22)?

Although his work does not explicitly employ either human or political ecology approaches, these approaches can offer a framework with which to answer these questions. Rambo and Sajise (1984) describe a human ecology approach to agricultural systems that 1) makes use of a systems viewpoint as it relates to both human society and nature; 2) describes both the internal functioning of these systems and their interactions with each other; 3) examines networks and hierarchies found in each of the systems; and 4) enhances understanding of the dynamics of system change. Applying this approach to agricultural areas, these researchers make a statement that encompasses much of the theoretical underpinnings of political ecology:

No individual farmer exists in isolation. Instead, virtually all of his decision making is done in terms of his relationships with other levels in the social systems hierarchy—the area he plants will reflect the size and age structure of his household, along with the norms of his community regarding exchange of labor to help him out at peak work times. The crops he plants will reflect the demands of the provincial market, which in turn influenced by the national and world economy. Whether or not he uses fertilizers or pesticides is determined by national decisions about price structures while availability to him of high yielding variety seeds is due to the existence of an internationally supported agricultural research institute (17).

Bernstein (1988) supports this thesis, noting that to appreciate a farmers actions, one must analyze the "circuits of economic activity extending far beyond these individual units of production, of how their social and technical conditions of production are determined within broader structures of social relations (65)." Specifically, Ghai et. al.

(1979) assert that an understanding of (1) the rate of surplus extraction from the agricultural sector and (2) the linkages between investment and labor absorption into non-agricultural sectors is required to properly evaluate an agricultural system.

Among a list of relevant future research areas, Rambo and Sajise call for "analysis of relationships between changing agro-ecosystems and the quality of human life" again questioning "conventional development planning" with its assumptions of a linear relationship between greater production and betterment of the agricultural classes (22). These researchers speak of "building variability into both ecosystems and social systems" and describe this as a "task of formidable difficulty in a world system that increasingly encourages both ecological and cultural homogenization (23)." Shiva (1993) confronts this directly with her statement: "... the monoculture mind creates the monoculture crop (39)." Whereas Rambo and Sajise mention "some of the most troubling issues in human ecology research—the issues of social, economic, and political dominance and exploitation (18)", these concerns are often seen to exist in the purview of political economy.

Political Economy

Political economists deny that economics exists in isolation from society according to so called "natural laws". There is a large body of work covering the many interpretations of political economy, yet it can be extrapolated that proponents of the approach generally assume political processes have much influence over national economy: "The state or nation is the essential actor (Hamilton 1994, 188)." Thrupp (1993) describes a political

economy approach concerned not only with economic and political-power relations, but also one that takes social-structural formations into consideration. This approach supports the thesis that Gohlert (1990) posits, namely, that a study of rural poverty must take into account both "external" factors, such as the world market for agricultural goods, as well as those "factors and circumstances inherent in Thai society, culture, and history (19)."

III. THAI HISTORICAL PROCESS: SOCIAL, ECONOMIC, AND POLITICAL CHANGE IN RURAL THAILAND

Through application of approaches outlined earlier, I examine those historical forces that have shaped the processes of land-use change as well as interrelationships between state, capital, and rural society during the period 1855-1980's. For the purpose of this paper, I address only the following three topics: 1) the signing of the Bowring Treaty in 1855; 2) the effects of the consolidation and centralization of Thai bureaucracy in the late 1880's; and 3) the new movement of capitalist agriculture into Isan from the 1950's onward. Hirsch (1990) states: "Rural development must be seen in terms of processes such as state formation, establishment of centralized control, capitalist development of agriculture, or alternatively of reaction or resistance to and negation of dominant processes (6).

During the period 1855-1990, cultivated land expanded from 10 to 150 million rai (1 rai =3/5 acre) spurred on by a population that blossomed from an estimated three million to a current total of 56 million. Subsistence farming rapidly gave way to a capital-intensive

agriculture producing for national and international markets. Spread of the Green Revolution technology--with its package of high yielding seeds, pesticides, and chemical fertilizers--in the 1960's contributed to economic differentiation in rural areas. From an organization primarily dedicated to tax collection, the Thai bureaucratic system expanded its reach to touch almost every village in the nation. Amid this change, people still practice Buddhism, attempt to incorporate *samuk*, or pleasure, into their lives and, for the most part, still have a "reverence for authority", a trait Bowring viewed as the "groundwork of all Siamese institutions and habits (124)."

Changing Landscape: The Opening of Thailand to the World Market

In place of the old wants satisfied by the production of the country, we find new wants, requiring for their satisfaction the products of distant lands and climes (Karl Marx).

What can we consume? We are a small country. An alliance with England is the intimacy of a poor man with a great prince: the prince gets all the benefits, the poor man makes all the sacrifices. (Statement by the Thai prime minister in 1855, from: Bowring 1969, 466).

Although Thailand had extensive trade relations for many centuries with China, most writers point to the Bowring Treaty of 1855 with England as definitive in transforming the Thai economy and bringing Thailand into the world economic system. Bowring espoused a free trade interchange which would provide "in the long run, a wiser and better policy than that of restraints and impediments", noting among the many benefits of such an agreement that "all fertile countries had their superfluities, which other nations were desirious of obtaining in exchange for superfluities of their own (265-66)."

While the Thai government at the time held sway over vast territory, the country was thinly populated with much of the population based in Bangkok, the Central Plains. coastal regions, and river valleys in the North and Northeast. Bishop Pallegoix describes the upcountry reaches in the early 1850's as "little better than a desert—a few huts by the side of the stream—neither towns nor soldiers... Rice was found cheap and abundant, everything else was wanting (Bowring, 21)." Bowring writes of a "fertile and feracious jungle, which has to be reclaimed, but when reclaimed would no doubt be magnificently productive (6-7)." This reclamation process was rapid. One provision of the treaty, the removal on the prohibition of the export of rice, was most critical in transforming rural areas. Bowring noted "already the prospect of large foreign demand is extending the field of cultivation (203)." Hong Lysa cites the Central Plain region, at the time the primary rice-producing region, in 1850 producing not more that 10% of its rice for export-- a figure that grew to 20% in 1860 and then climbed to 40% by 1885. Much of this response was attributed to peasants' desire for imported goods (150). Feeny (1982) provides corroborating data revealing that rice exports climbed approximately four times from 54,432 metric tons, in 1857, to 223,776 metric tons, in 1885 (128).

Tomosugi (1980) describes the change encountered by society as a result of the treaty as "abrupt, rather violent (118)." In return for rice exports, the country was flooded with cheap imports that quickly led to the demise of many cottage industries. Though the peasants participated in this new economy, the benefits did not reach them. Hong Lysa cites Chatthip, a Thai whose work explored Marx's Asiatic Mode of Production:

...the growth of dependent commodity production played a crucial part in shaping Siam as a semi-dependent economy. This development resulted as a larger part of the economic surplus being absorbed by merchant capitalists, landlords, and foreign factors

In contrast, Phongpaichit and Baker write of those living in the frontier regions outside the central plain as possessing "a high degree of self-sufficiency, egalitarian social ethic, resistance to government intervention, traditions of mutual assistance, and great mobility (3)." Villagers practiced a subsistence agriculture producing rice, vegetables, fruits, tobacco, and the cotton that they used to make cloth. Turton (1987) writes that it may be a mistake to exaggerate the level of village autonomy prior to penetration of the capitalist economy, yet nevertheless adds that there existed "associations of entire communities for themselves, for their own social reproduction (80)." The writer notes the importance of "horizontal" inter-village relations and the reciprocal and redistributive exchange common among families and communities. Shields et.al. describe resource exchange as "weaving an invisible web of relationships between individuals and families which binds a community together and contributes to its sustainability." Those rice-producing areas closest to Bangkok quickly experienced the growth of a tenant-landlord system and the subsequent abandonment of the tradition of reciprocity. Tomosugi states, "The removal of the norms of reciprocity caused farmers' lives to be desolate (133)." We are reminded again, however, that farmers in outlying districts, such as Isan, continued to work communally and always had the capacity to strike out further into the frontier in search of unsettled land.

Although trade was not an important consideration for most of the rural population, it nevertheless existed prior to the signing of the Bowring Treaty. Bowring describes

Chinese traders living in Thailand: "There is no district too remote to be explored by them, no object too small to escape their notice—they are awake to everything which is to leave lucre in their hand (322)." Still, the Isan region was able to maintain much of its traditional practices; they were removed not only from centralized political control, transportation between the region and the central plain was difficult and slow.

Welcome into the Fold: Isan is Incorporated into the Thai State

Starting in 1867, Thailand began the process of ceding much of its territory in what is now Cambodia and Laos to France, culminating in the total loss of territory in those two countries as a consequence of treaties signed in 1893 and 1904. As a result of losing so much territory, King Chulalangkorn instituted a number of administrative reforms with the aim of consolidating control over its more distant areas. In 1893, the Ministry of Interior was created and, with it, the incorporation of the highest level of traditional leaders into the civil service as "governors". Lower-level officials were also brought into the civil service, their salaries no longer paid in tribute money but instead by the central government. As the traditional leaders died, administrators from the Central region whose allegiance was to Bangkok replaced them. Keyes (1967) notes: "To the extent that this process was followed, Northeasterners experienced for the first time the subordination of local political interests to central Thai objectives (17)."

To support this administrative consolidation, communication and transportation networks were developed. Telegraph service was initiated in the early 1900's. Keyes cites a report

written by Smyth in 1895 relating the difficulty of travel in and between regions. It took approximately three weeks to travel by oxcart from Nongkai in northern Isan to the region's largest city, Khorat. From there, another eight days of travel were needed to reach Bangkok. Completed in 1900, a new rail line reduced travel time between Bangkok and Khorat to one day. The rail line was extended in 1926 and 1933, facilitating the movement of goods and people throughout the region. These lines spurred on the opening of new land for rice production; it also led to converting lands used for glutinous rice, the rice traditionally eaten in Isan, to the production of white rice.

Keyes (1967) asserts that although communication and transportation links brought

Northeasterners into "more intimate contact" with the Central region, the expansion of
primary education to the region played the most important role in incorporating rural Isan
into the Thai state. After many years of research on Thailand, Keyes (1991) adds: "For
most villagers, formal education, however, point them away from their communities

(120)."

Cash Cropping in Isan: 1950's Onward

"The uplands settler was borne along by the forces of urban capital (Phongphaichit and Baker, 48)."

"The expansion of monocultures has more to do with politics and power than with enriching and enhancing systems of biological production (Shiva 1993, 7)."

Isan in the early 1950's was still largely forested and thinly populated—land was up for grabs. The area witnessed an influx of migrants fleeing the tax collector and the more

populated Central Plain in search of a piece of land. An explosion of clearing and planting took place—more than 100 million rai of land was cleared to grow a variety of crops for the market. This process was facilitated by 1) the opening of new roads throughout the region financed by the U.S. government and the World Bank, and 2) merchants eager to lend money to the new migrants. Rogers and Itharattana (1982) note that capital "is in short supply in the Northeast, with large amounts being borrowed from relatives, institutions, and merchants (113)." Phongpaichit and Baker document the large increase in land used for rice production in Isan in the period 1950-1990. A figure of 16.3 million rai in 1965-67 is slightly higher than the 13.1 million rai recorded in 1950-52, but little compared to the figure of 30.6 million rai planted in 1989-1990 (34). Similar increases can be seen in land planted to corn--125,000 rai in 1950 to 3.107 million rai in 1990--and cassava --no production in 1950 to 5.947 million rai in 1990 (54). Much of this production was exported to Europe to be used as animal feed.

Though much of the agriculture was practiced by small landholders, Phongpaichit and Baker note that subsistence or semi-subsistence agriculture existed for either a short time, and in some areas, not at all. This rampage of the land has not gone unnoticed—Isan now suffers through longer periods of drought with less than half the region receiving sufficient rain for agriculture (Ekachai 1990, 21). Pluckett (1986) writes a piece that clearly reveals fundamental flaws in cash cropping as practiced in Isan:

The trend to monocultural cropping is universal. It is most advanced in the temperate world, but also occurs in the better lands of the Third World, areas endowed with better soils, a good water supply, and proximity to markets. Isolated areas, such as remote jungle regions, and many marginal zones suffering from frequent drought, are still strongholds for multiple cropping (34).

Ekachai quotes Abbot Khamkian Suwanno of Chaiaphum, a province in Isan: "They destroyed the forest to get land to plant tapioca for sale, because it was quick money. They weren't interested in planting or growing what they could eat. When tapioca prices fell, they ended up in hunger and indebtedness (67)." Declining prices for many cash crops, increased borrowing for those inputs necessary for modern agriculture--machinery, pesticides, and fertilizers--and the desire for consumer goods have trapped many farmers in a cycle of debt.

Contesting Alternatives

While many researchers identify the contemporary ecological and socio-economic problems facing Isan, this brief outline reinforces the notion that they are the result of a variety of historical factors. Encouraged to settle in forested areas to act as a buffer against the spread of an emerging communist ideology in rural Isan, these same villagers are now blamed for deforestation. Government policy in the 1990's has included the forced relocation of entire communities, with the associated destruction of temples and schools. Their crime—living in areas recently declared national parks. Likewise, an economic policy that supported the export of commodity crops in pursuit of foreign exchange to be used for industrial expansion has created difficulty for small-scale farmers and by extension, society as a whole. Rogers and Itharattana (1982) note that although promotion of individual commodities leads to different labor requirements, promotion of rice generally requires a lower input of labor. They explain:

Promotion of a given commodity through price policy or related programs may change the production and rural employment patterns significantly. In a region where unemployment or underemployment is a major problem, promoting a crop plan that reduces employment further could have serious impacts (112).

While migration from the area was not unheard of even in the 1890's, it cannot compare with the flood of farmers which now descends on Bangkok and other urban areas in search of work during the increasingly difficult dry season. In an attempt to stem this flow of workers from Isan, the government has instituted many programs offering work in rural areas, but implementation has been for the most part ineffective. Recent reports suggest that the work that they would be seeking is disappearing. Unemployment for unskilled workers is expected to rise dramatically in 1998 due to relocation of labor-intensive production to countries with lower labor costs. While farmers' groups routinely appeal to the government for rice price supports, and Rogers and Itharattana note that the most effective policy to raise the incomes of Isan farmers would indeed be to raise the price paid for rice, this addresses only short-term problems without tackling their underlying causes. Furthermore, studies show that increases in price lead to increased monocropping and its related usage of greater technology and chemical inputs.

The present dilemma is perhaps most easily illustrated by the following information reported by Kakwani and Krongkaew (1996): Food prices in Isan increased by about 26.2% in the period from 1990-1992. This compares to only about 15% in other regions and 10.2% in Bangkok. Though this steep climb in food prices may be attributed to a variety of factors, it cannot be denied that by increasing production for the market at the expense of growing their own food, small-scale farmers are placed at considerable risk.

This statement by Shiva leads us into considering the alternative to the present situation

in Isan:

Ecological erosion and destruction of livelihoods are linked to one another. Displacement of diversity and displacement of people's sources of sustenance

both arise from a view of development and growth based on uniformity created

through centralized control (143).

The present system accrues benefits primarily to the traders and millers involved in

selling and processing the grains, but offers only uncertainty to small-scale farmers

involved in production. The future of small-scale farming in Isan faces two possibilities:

(1) a combination of technological, economic, and ecological factors will make it

increasingly difficult to produce for the market, resulting in farmers searching for work in

the industrial sector; or (2) a new form of agriculture that sustains the farmer

economically while maintaining and improving the local agro-ecosystem will be adopted.

The following sections explore how alternative agriculture can play an important role in

the formation of a stable society in Isan. The roles of religion and education will be

explored, as they are seen by many as integral to the transformation of the agricultural

system.

IV. TIME FOR CHANGE: A CONVERGENCE OF FACTORS SUPPORTS ALTERNATIVE AGRICULTURE

18

The preceding section provided an overview of how the present agricultural system developed. The second of the two scenarios described above will be further explored in this section which explores the roles that Buddhism and non-governmental organizations can play in supporting alternative agriculture.

Ramitanondh (1996) creates a framework useful to the study of agricultural adaptations, whether modern, traditional, or alternative, categorizing them as: "(1) goals, organization, and management, (2) technologies and practices, and (3) life philosophies that underlie agriculture (or 'worldviews') (31)." The first two categories will be considered later in the paper in sections addressing the work of non-governmental organizations and in an overview of alternative agriculture. The writer acknowledges that addressing the third category--creation of a new worldview--is difficult, yet necessary if farmers are to adopt a new way of farming. Natural farming expert, Shigenobu Kanayama, gives support to this notion as he suggests that natural farming is essentially a mentality, not merely technique (Ekachai 1990). The role that Buddhism can play in the creation of a worldview that supports alternative agriculture is addressed in the following section.

Buddhism and Alternative Agriculture

19

Somboon suggests that Buddhism is "ultimately the most influential institution in the village, and the abbot the person who yields the greatest motivational power (Gohlert, 154)." Furthermore, Turton (1987) notes that the village temple, with its monks and community rituals, is often the "last important 'traditional' institution to remain after other forms of cooperation and collective participation have been destroyed (81)." Although much of the activity traditionally carried out at the temple has been transferred to government institutions, the temple still remains at the center of community life.

Practiced broadly since the founding of Sukhothai in the late thirteenth century,

Buddhism developed in a manner that incorporated traits indigenous to the Tai peoples.

Bowring records his impression of the religion in 1855: "Modern Buddhism in all of its forms represents the gross corruptions and adulterations of a simpler and truer philosophy (287)." Reforms in the late 1800's established the Thammayut order in an attempt to return to a strict adherence to scriptural precedents. An act passed in 1902, unifying the *sangha*, or monastic order, into a national institution has allowed the state to make use of the religion to legitimate its power. Together with Nation and King, Buddhism is described as one of the three pillars of society.

Though Buddhism is central to the life of most farmers, many of its tenets have been swept away by a rise in materialism and money worship. Yet, cooperation with others, respect for the environment, and striving for self-sufficiency instead of elusive wealth are important if a farmer is to experience contentment. Prayudh Payutto (1996), a Buddhist monk, describes contentment as "having the time and energy lost in ministering to selfish

desires, and using it to create and nurture true well being (101)." However, one finds the antithesis of contentment in the villages of Isan. Social critic Sulak Sivaraksa (1993) offers his opinion of Thai society: "The cause of suffering is always greed, hatred and delusion.... For most of the Thai people, greed has become the standard value (240)." Academic and former student leader Theerayuth Boonmee supports this: "Villagers are now in the situation of 'super-greed. They will never listen to anyone saying that they should not be materialistic (Tangwisutthijit and Koonphol 1989)." Bhikkhu Buddhadasa, an influential monk who has addressed social issues for many years, names the problem:

It is almost laughable simply to speak of solving the problems of hunger, illiteracy, and illness, because these are not the real problems at all; they are only symptoms. The fundamental problem is the lack of religion *sasana* and moral principles *siladhamma* in modern society (Gohlert 147).

In contrast to Bowring's observation that monks in 1855 seemed not to care about the conditions of those in the community, Abbot Khamkian states that monks cannot deny social responsibility: "And we are also to blame if the villagers are trapped in indebtedness. It is our duty to show the way (Ekachai 1990, 67)." Likewise, Sulak Sivaraksa (1993) describes the role that monks he identifies as "the poorest of the poor"—those with little alternative but to join the monkhood--can play in human development:

... I have asked them not to use the monkhood merely for social mobility but to remember their roots. They have suffered so much, your family relations are now broken and your sister has had to become a prostitute. The monkhood could do a great deal if you have that social commitment, personal commitment. Buddhism teaches you to confront suffering, not avoid suffering. And in my country there is a lot of suffering (58).

Although still a minority within the *sangha*, I describe a process that some monks, often labeled "development" monks, have used to better their communities. The initial phase makes use of Buddhist teachings. Sulak Sivaraksa (1996) identifies two types of Buddhism. The first type, Buddhism with a capital B, he identifies as established Buddhism which places emphasis on karma and the underlying assumption that an individuals present life is the result of actions in a previous life. This form of Buddhism, one that may be used to explain oppression as bad karma, is decried by Marxist historian Jit Pumisak as playing into the hands of the oppressor class. Sulak identifies Buddhism with a small b as non-established, or one that confronts structural and cultural violence instead of attributing inequality to karma or the insufficient accumulation of merit in a past life. Although it would be a mistake to place development monks firmly in either of the of the two forms of Buddhism Sulak identifies, these monks have developed consciousness or awareness among villagers. This awareness can then lead to an alternative development.

The level of greed in society is an important issue that monks engage within a dialogue that encompasses basic tenets of Buddhism: compassion, suffering, contentment, merit making, and impermanence. Sulak (1996) describes the development of two Buddhist concepts, *bhavana* (mindfulness) and *samadhi* (concentration) as leading to the liberation from suffering caused by greed, hatred, and delusion. Through the training of the mind, one achieves *samatha* (tranquility) and *vipassana* (insight training). This insight training can be developed into analytical thinking as one gains an understanding of causal relations. This discussion does not lead to rapid change; after all, farmers are still

enmeshed in a society that is decidedly materialistic. Abbot Khamkian reinforces the notion that change takes time, noting that "repetition and continuity are essential to instill new awareness (Ekachai 1990, 67)."

Development monks understand that simply starting dialogue with farmers will not support them in their daily life if they continually struggle with the problems of debt, environmental degradation, and migration. The monks reinforce Buddhist concepts as they transform the physical environment surrounding their temples. This transformation is not witnessed in the new construction of temple buildings, but instead, in the rejuvenation of the natural surroundings. Many monks have planted a mix of trees on temple grounds and surrounding areas in an attempt at repairing the damage caused by deforestation. Concurrently, they have explored growing vegetables without the use of chemicals to demonstrate to farmers that this type of agriculture is possible. Abbot Khamakian realizes that farmers can't afford to take risks and try new farming techniques without any proof that they will succeed: "We have to show them concrete examples that work... Villagers are realistic people. They have to see to believe (Ekachai 1991, 68)." Farmer Khamkhai Sittiya echoes the Abbot's words: "We are practical people. We don't change just because others tell us to. We only change when we see for ourselves that it will work (Ekachai 1995, 36)."

Monks throughout Isan have been instrumental in community development. Rice banks, buffalo banks, and revolving loan funds are among the projects that have been developed

at a number of temples. Abbot Visit Nangdakan of Roi-et province shares his view of development suggesting that Buddhism can play an important role in sustaining projects:

Development has to be human first. I do not think that to help the villagers increase their incomes is automatically development. If that income does not contribute to all other aspects, it may be harmful... If the rice bank is set up only for its own purpose, it will not go far. It has to be linked with all the other activities. It has to be based on religion. Without a religious foundation it will not work as the villagers will quarrel sooner or later and will come to a dead end (Gohlert, 179-180)."

Abbot Visit Nangdakan speaks of applying "Buddha's principles" to all of his social and development activities. Likewise, Abbot Khamkian describes his development activities as necessary to his primary concern of teaching meditation leading to spiritual liberation:

"If there are obstacles to this, such as the villagers' poverty and indebtedness, compounded by their own greed, vices, superstitions and ignorance, then I have to help them overcome these problems first so that I can accomplish what I set out to do (Ekachai 1991, 68."

Through their work, which combines cooperative efforts, demonstration and teaching by doing, and the application of Buddhist precepts to daily life, development monks have contributed to a change in worldview among farmers. If Buddhism plays a strong role in changing the worldview of farmers, it is the work of the NGO community that has contributed to the development of the technologies, practices, and management skills necessary for the transition to alternative agriculture among small-scale farmers in Isan.

Non-governmental Organizations and Alternative Agriculture

This section examines the work of the NGO community as it relates to alternative agriculture. Attention will be paid to the manner in which these organizations facilitate

the learning that must occur if farmers are to effectively make the transition from an agriculture that relies heavily on off-farm inputs and prescriptive solutions, to an agriculture that relies on the problem-solving ability of the farmer. A short case study describing a training on Integrated Pest Management (IPM) held in 1994 is included in order to examine the issues of technology transfer and participation of farmers in the planning process.

NGO's became actively involved with the promotion of alternative agriculture in Isan during the mid 1980's. This time period corresponded to both a rise in the number of indigenous NGO's overall, as well as to the realization that community development efforts that disregarded farming were not wholly effective. Khamkhai Sittiya explains that while she is not against different income generating projects, she doesn't think they address the root problem; noting, "We are basically farmers. Farming is what will save us from hunger (Ekachai 1995, 36)." At the same time that NGO's recognized the need to work with farmers in the development of a sustainable agricultural system, a number of individuals who had successfully experimented with alternative agriculture became recognized as experts. These pioneers—including Chiang Thaidee, Maha Yoo Sunthornchai, and Wiboon Khemchalerm—have played a key role as resource persons to NGO's and farmers interested in alternative agriculture.

Gohlert (1990) provides an example of this early wave of NGO's which based their work on an alternative development paradigm emphasizing indigenous culture, folk wisdom, and traditional technologies. The Center for Culture and Development (CCD) was

established in 1985 as a result of a several years of dialogue around issues of bureaucratic power, participation, and alternative approaches to development among a group of mainly college educated development professionals. After a process of setting priorities and obtaining financial support, this Isan–based NGO implemented a plan with five working groups adhering to a philosophy that sought to address community needs through community-led action. Four of these groups—Traditional Doctors and Medicine, Village Leaders and Adult Institutions, The Interreligious Group for Social Development, and the Traditional Wisdom Center—were all mutually reinforcing not only to each other, but also to the work of the fifth group, the Small Farmer Network. Therefore, integrated or alternative agriculture was not approached as independent from or peripheral to community concerns, but instead as a key component to recreation of community and traditional knowledge. Direct exchanges between the communities in the four provinces that CCD worked in allowed for each community to learn directly from each other's experiences.

The Alternative Agriculture Network (AAN) was created in 1990 in response to many activists in the NGO movement recognizing the importance alternative agriculture could play in community development efforts. This network was developed in order to increase the sharing of experiences between NGO's, to present information about sustainable agriculture to the public, and to help develop policies that support small-scale farmers involved with alternative agriculture. Although the NGO's that belong to the network come in with different interpretations of and approaches to alternative agriculture, all share the underlying notions that farmers can contribute to ecological enhancement as

well as a belief that farmers who possess economic autonomy can overcome economic exploitation (Levin and Panayakul 1995).

Case Study: Integrated Pest Management (IPM)
Training in Phichit, Thailand

This short case study provides an example of collaboration among indigenous NGO's, international NGO's, a multi-lateral organization, and the Thai government in implementing a five-month long training in IPM. After an introduction of IPM, mention will be made of the following areas: initial planning phase, development of curriculum/schedule, learning process/transfer of technology, and the trainer/trainee relationship. The training described in this study is not suggested as a model; it is included as a vehicle to explore some of the logistical and pedagogical issues inherent to a transformation towards a more sustainable agriculture,

There are many interpretations and definitions of IPM, a technology often viewed as a transitional stage towards a sustainable agriculture. The IPM Working Group defines IPM in a manner consistent with those involved in the planning of the training:

The core of IPM is the development of a set of practices that maintain pest populations at a level below that which causes economically significant losses; it emphasizes minimal intervention—particularly with synthetic biocides—and husbandry of natural regulating mechanisms be they biological or cultural (Natural Resources Institute 1991, 2."

IPM emerged as a technology in response to pesticide resistance and the "inherent instability of such a unitary approach to pest management (NRI, 2)." McKnight (1995) raises Ivan Illich's notion of "specific counterproductivity" in his work on community;

this concept that a service technology can produce the inverse of its stated purpose can be applied to pesticide use over time. Extensive pesticide use on rice in Thailand has not led to eradication of pests; instead, as it has killed off the pests' natural predators, it has contributed to more serious crop damage. Furthermore, pesticide use has caused damage to local ecosystems and to the farmers themselves—fish in rice fields have been killed, water for household use has become contaminated, and farmers have suffered poor health after repeated applications of pesticides and herbicides.

Due to ecological and health issues as well as the economic losses incurred through government subsidies to the pesticide industry, the Food and Agriculture Organization (FAO) has promoted the use of the IPM technology. Though this technology had been introduced into Thailand and was promoted by the Thai Department of Agricultural Extension (DoAE), FAO was interested in replicating programs that had been successfully instituted by NGO's in Indonesia. At the same time, staff from the Regional Initiative on Sustainable Agriculture (RISA), a program housed at Save the Children/Thailand, carried out a needs assessment with small-scale farmers and NGO's in the lower North region focusing on training needs. The needs assessment revealed that there was a need for a training that would contribute to farmers and NGO staff workers knowledge on ecological farming. Through a six-month consultation period between numerous Thai NGO's, farmers' organizations, specialists at various research stations, DoAE, FAO, and World Education; a tentative curriculum was developed.

The curriculum was developed to be responsive to farmers who wished to move beyond an understanding of the characteristics of agro-ecosystems to a more macro overview of organic farming. Attention was paid to farmers schedules as well as the rice growth cycle in order to structure an effective training. At the same time, trainers developed a training that paid close attention to activities that contributed to farmers analytical skills as IPM "is essentially non-prescriptive. The practitioner must 'think' and not 'do' IPM (NRI, 2)." In other words, the curriculum needed to offer farmers the tools and ability to select from among a variety of options in order to come to a decision most appropriate to his or her situation.

An editorial in the ILEIA Newsletter (1991) notes that in order to attain agricultural sustainability "people must think ecologically, in terms of complex interactions, processes and adaptations to changing conditions" adding:

...learning for sustainable agriculture cannot be confined to learning particular techniques isolated from a real human setting. Rather, it means learning how to assess complex situations, how to solve problems from a holistic perspective, how to work together with others in seeking shared goals, and, above all, learning how to continue to learn. These are skills required on all levels, from the farmer to the international policy-maker (3).

In order to achieve the goals of the IPM training, the facilitators utilized a participatory approach which corresponds closely to the 'interactive participation' Pretty (1995) identified in a seven-level typology of participation he developed:

Participation is seen as a right, not just the means to achieve project goals. The process involves interdisciplinary methodologies that seek multiple perspectives and make use of systemic and structured learning processes. As a group takes control over local decisions and determine how available resources are used, so they have a stake in maintaining structures or practices (1252).

"Theory, hands-on practice, discussion, and exchange of ideas", was how one farmer explained his style of learning. A second farmer added that when he experienced problems in his rice field and shared those with other farmers in his group, he was able to gain new insights which made it easier for him to solve problems. Much of the training was spent in the rice field in order to root theoretical concepts in the reality of the rice field's agro-ecosystem. Throughout the training, much knowledge was shared among members in the group; in this way farmers who came into the training thinking that knowledge came from experts realized that they, as individuals and as a group, held valid knowledge. When farmers needed specialized information, outside specialists were invited to share their knowledge. However, instead of simply disseminating a science that held no meaning to the farmers, efforts were made to place this outside information into concepts and relationships that the farmers were familiar with. Sikana (1993) speaks of a synthesis where "new elements from the outside are transformed by the farmers to become part of their own knowledge system." Avoided was the linear, one-way transfer of technology from the experts, a model which Roling (1990) notes "reflects inadequate understanding of the nature of knowledge systems (17)."

Necessary to the success of the training was mutual respect and trust between trainers, facilitators, and farmers. While some of the people involved in the training had prior experience working with each other, many persons were initially uncomfortable interacting with those outside of their familiar group. An atmosphere appropriate to learning and interaction was created through the use of group dynamics activities. Furthermore, as farmers realized they held knowledge that could help others, they

became more open. Trust was evident when a farmer with a fourth grade education felt comfortable in offering advice to the expert educated at the Ph.D. level.

Collaboration: Horizontal and Vertical

The training described above was a considerable undertaking involving coordination among many organizations and external (FAO) funding. More typical of the work that individual NGO's carry out with farmers is the formation of farmers groups. These groups have successfully started rice banks and marketing cooperatives. Training in alternative forms of agriculture often takes place in an area accessible by surrounding farmers, usually on a farmer's land. Learning takes place as farmers notice changes on the demonstration plot, question their own farming practices, and begin to experiment on their own. Levin and Panyakul point out, however, that those farmers receiving support from NGO's are already open to experimentation, noting that some have Buddhist training or prior experience working with NGO's. Therefore, those farmers who consider shifting away from conventional agriculture may see lack of resources as a barrier.

In completing the loop from producer to consumer, many NGO's have taken on the critical role of establishing alternative markets for organic produce. Although those farmers involved in alternative agriculture place importance in providing for their families needs first, many continue to offer their surplus to the market in exchange for the cash income necessary for survival in a cash economy. NGO's have worked to form and educate consumer groups in urban areas about the quality of their food as well as

31

environmental damage caused by excessive chemical use in rural areas. Chusakul (1996) writes that the establishment of a medium sized rice mill by a network, the Committee to Support Cooperation Among Northeastern Rice Farmers, has benefited both producers and consumers. After rice is purchased from farmers and milled, it is sold directly to non-rice growing farmers and slum residents in Bangkok.

Gohlert writes "the interface between religion and the NGO community in Thailand is significant because it strengthens the foundation for an alternative development paradigm based on Buddhist principles (164)." Mention should be made of the CCD described earlier in the section, as one of its component groups, the Interreligious Group for Social Development, seeks to revitalize the role the temple plays in village life. This group funds small projects at the temple in order to forge Buddhist teachings with community development. This NGO is one of many that infuse Buddhist teachings with its development work. A final example demonstrates the roles that Buddhism and the NGO community can play in support of alternative agriculture. Through collaboration between local NGO's, a temple, and a Swiss organization that has a network of stores selling goods from the developing world, OS3, farmers in Surin province have a steady market for their organic jasmine rice. The Swiss organization helped provide necessary funding for the rice mill which is based at a temple. As there is no middleperson between the farmers groups and the OS3, farmers producing in a sustainable manner receive above market price for their rice production.

V. ALTERNATIVE AGRICULTURE

This section briefly defines different forms of alternative agriculture and shares the experiences of farmers who practice integrated farming, an approach most suited to small-scale farmers in Isan. Alternative agriculture may be seen as an umbrella term that includes the following types of agriculture: integrated, natural, organic, and agro-forestry. While there are differences between each of these branches of alternative agriculture, a commonality is the non-use of chemical herbicides and pesticides. These methods may in some or many respects be "sustainable", a term that is interpreted in many manners. The Alternative Agriculture Network defines sustainable agriculture as follows:

... Agricultural production and peasant livelihood that contributes to the rehabilitation and maintenance of ecological balance and the environment, with just economic returns, promoting a better quality of life for farmers and consumers and fostering the development of local institutions for the benefit and the survival of mankind.

Inherent in this definition is the idea that alternative agriculture is not simply an economic activity, it is truly a way of life with impacts on the larger environmental and social systems

Integrated Farming

This form of farming draws heavily on traditional mixed or multiple cropping systems.

Francis (1986) notes that multiple cropping contains parallels to naturally occurring plant communities, listing the following characteristics which are "desirable for the limited-resource farmer":

1. Genetic diversity in plant species

- 2. Resulting diversity in the insect and pathogen populations associated with crops.
- 3. Nutrient cycles that are relatively closed, with much of the nutrient requirements of succeeding crops supplied by a previous crop or cover crop residue (in low-input systems).
- 4. Vegetative cover over the land much of the year.
- 5. High total use of available light and water through the year because of the presence of growing crops.
- 6. Low risk of complete loss of crops in a given season or year because of the different ecological niches they occupy and the different patterns of demand for growth factors.
- 7. High levels of production stability (compared to monoculture) (359).

Though this description of multiple cropping provides much of the theoretical underpinning of integrated agriculture, it makes no mention of the role animals play in the nutrient recycling process. Integrated farming makes use of all farm resources, using the waste from on activity as an input for another activity. An example of this is the placement of a chicken coop over a fishpond; the chicken manure becomes a protein source for the fish. Integrated farming depends on a healthy ecosystem, numerous crops and animal raising, and a strong understanding of the symbiotic relationship inherent in the nutrition and energy flows occurring in the system. For those successfully practicing integrated agriculture, off-farm inputs are kept to a minimum. While it is economically viable in the long run, Ramitanondh notes that short term returns on integrated farming are often not enough to pay off the existing debt most farmers carry. Furthermore, regeneration of soil fertility is a process that takes time, time that farmers faced with debt often don't have.

Integrated Farming: Viboon Khemchalerm

Viboon Khemchalerm is famous for developing a model of farming that stresses self-

sufficiency. "The key words that sum up my thinking are 'help yourself'. The way I did

this was to stop farming for sale—there was never any profit in it anyway." He believes

that farmers need to study their own land to understand what will grow on it and be

unafraid of failure. After losing much of his land and a car to debt brought on by cash

cropping, he started over with a small piece of land and a mistrust of the market, "a

system that benefits only the rich." His wife adds, "I remember everyone saying that

my husband was crazy to grow plants just for food. We lived like an ancient people—

growing our own vegetables and fruit to trade for rice. No pesticides or fertilizer."

Though his farm is regularly visited by farmers interested in adopting his methods, he is

rarely there as he spends much time on the road sharing his experiences with farming

groups and NGO's throughout the country. Reflecting on his change from a farmer who

once appreciated the life of a wealthy man to one who is content with self-sufficiency, he

shares the following:

What I have tried to teach are ideas based on Buddhism. Help yourself and depend on yourself. Many farmers called upon the government to change society

but that won't work. We must change ourselves (Vejpongsa 1995, 32).

Integrated Farming: Chiang Thaidee

Chiang Thaidee was born in 1928 in Surin. Similar to Viboon Khemchalerm, he faced

problems of debt in his farming operation. He chose to leave farming and worked in a

number of different occupations before returning to the land in 1971. Early on he

35

decided to dig a pond as a catchment area for the rain that fell heavily at times, not at all at others. Despite ridicule from neighbors who considered this activity crazy, he continued to dig more, lining a growing network of ponds with lime and manure to hold water over the dry season. Slowly he introduced fish into the ponds and planted a variety of trees, herbs, and vegetables. Chickens, ducks, and chickens were added later. Now he has a farm that provides not only for his families needs but one that generates an annual cash income of approximately US \$10,000, a figure substantially higher than farmers with more land practicing monocropping. Moreover, he has come to the realization that this type of farming produces more than simple monocropping owing to its diversity of crops and vegetables over space and time.

Natural Farming

Japanese farmer Masanobu is credited for spreading the concept of natural farming to Thailand. This type of farming, like organic farming, places much of its emphasis on returning vitality or life back to the soil. This is accomplished through the use of mulching and application of organic fertilizers to the soil. Microorganisms and earthworms will return helping create a more aerated and rich soil. Furthermore, Fukuoka calls for no tillage, application of pesticides, or weeding. As this type of farming is relatively new to Thailand, it is still unclear whether the philosophy developed for a temperate climate will be viable in Thailand's tropical climate.

Organic Farming

Organic farming is well known in Thailand. This type of farming puts much emphasis on soil regeneration through inter-cropping and the application of both green and organic manures. Like all the mentioned forms of alternative agriculture, organic farmers create and maintain fertile soil in order to grow healthy plants able to withstand pest damage. Levin and Panyakul note that it takes from three to five years to rehabilitate soils that are low in organic matter.

Agro-forestry

Agro-forestry combines crop production together with planting of trees. In highland regions, these trees help control erosion as well as provide materials for building and fodder for animals. In lowland areas, farmers typically plant a mix of trees to provide not only the above resources, but also for a mix of fruit for home consumption as well as the market.

VI FUTURE POSSIBILITIES

This research has explored the development of agriculture in Isan, suggesting that alternative agriculture can lay a role in the creation of a stable society. It was outside the scope of the paper to provide a detailed examination of government policy towards small-scale farming. Nonetheless, much of the writing on small-scale agriculture suggests that

the Thai government can play a constructive role in supporting a transformation to a more sustainable agriculture. Recent inclusion of NGO staff, development monks, and farmers into national level planning can be seen as a step in the right direction. The following selected policy statements, included under strategy five in the summary of the Eighth National Economic and Social Development Plan (1997-2001), demonstrate that alternative agriculture is receiving some attention at the national level:

- 1. To modify the current structure of agricultural systems to encourage integrated farming, agro-farming, natural farming, or sustainable farming, to encourage farmers self-reliance and re-establish environmental balance;
- 2. To encourage the promotion of non-chemical and environmentally-friendly agriculture as well as the promotion of alternative farming products that produce safe food for consumers;
- 5. Small farmers who chose to farm must receive protection and support from the government so that they are able to produce crops of their choice and earn sufficient income for a decent standard of living

Furthermore, in response to the European Union's demand for chemical-free foods, the Deputy Permanent Secretary of the Ministry of Agriculture stated:

The ministry is ready to support farmers to convert from current production, which is highly reliant on chemical fertilizers and pesticides, to organic systems. The current budget is enough to promote organic farming in the country (Ridmontri 1996).

At the same time, however, the government follows a policy that supports agri-business and industry. Seen as backward and unprofitable, policy has effectively accelerated a move out of subsistence farming towards either specialized farming or a move out of the sector all together. Choice (1995) notes that in an attempt to narrow the increasing income gap between those in the farming and industrial sectors, the government funds training programs giving farmers the skills to enter the industrial sector. The writer suggests that this policy is shortsighted—this sector is experiencing turmoil as low-skilled jobs move to neighboring countries with lower labor costs.

Despite the fact that the current government is led by the New Aspiration Party, a party that derives most of its electoral power from voters in Isan, problems for those involved in small-scale agriculture have increased. In May, 1997, 20,000 farmers rallied in Isan and demanded that the government address issues such as land rights, compensation for land used for government infrastructure projects, and loan repayment.

Earlier this year, more than 10,000 farmers from Isan participated in a protest lasting several months outside the parliament building in Bangkok seeking redress to the issues mentioned above.

While farmer activism is important if society is to truly develop, it is equally important for these farmers, in coordination with those forces that support them, to explore new forms of sustainable agriculture. The transition to a sustainable agriculture will be difficult yet, necessary if small-scale farmers in Isan are to remain on the land. The following statements by a farmer reinforce notions not only of self-help, but also of a return to those ideas and traditions that are at the heart of rural Isan society:

We experiment with integrated mixed farming, organic farming, and so on... Mothers and daughters are meanwhile trying to recover weaving skills and other handicrafts. We hope the crafts can help s to stay in our homes instead of migrating to Bangkok. We are not waiting for jobs anymore but rather making jobs for ourselves.

If we can recover our family farming through alternative livelihoods we are enriching our culture—the culture of love and care among family members, of sharing among community people, and of living in peace with the natural environment (*Bangkok Post* 1991).

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