## INSTITUTE OF CURRENT WORLD AFFAIRS

JEF-3

47/1 Ngamwongwan Road Bangkok 9, Thailand August 18, 1973

A Trip through the North

Mr. Richard H. Nolte Institute of Current World Affairs 535 Fifth Avenue New York NY 10017

Dear Mr. Nolte,

Thanks to the Queen's Birthday my wife Chumsri did not have to teach at the university for two days, so we were able to make a trip back through the North, where I had not been since doing research on Thai-tribal relations during the summer of 1970. We left on Saturday the 10th and returned late evening on the 15th. Chum is the best interpreter in Bangkok, so when my still "conversational" Thai failed me, she came to the rescue.

On my two-month stay in the North in 1970 I had been concerned to study the situation among the hilltribes during the previous decade, but on this trip we wanted to look at what is happening to the ethnic Thai in the mountain valleys of the North. Except for urban Bangkok, the North has the highest population density in the country; people are just running out of space in the valleys, and the pressure is on the foothills and the hillsides. The northern valleys thus give us some hint of what the Central Plain may look like with another decade of vigorous population growth (Thailand has one of the highest rates in Southeast Asia). At the same time, the mountains are a fantastic natural resource, if properly exploited.

More generally, my conclusion is that something must be done for Thai agriculture. The dream of underdeveloped countries is, we read, to build up light and finally heavy industry, in order to reduce the need for imported goods, to reduce reliance on primary products, and to get more people into an advanced sector where per man productivity is higher. This is fine as an ultimate goal, but practically speaking, for the next 50 years or so, most Thai are going to make their living from agriculture. Something has to be done for them too. As I have tried to point out in my earlier newsletters, there is plenty to be done that would not require financial investment -- the objection whenever anyone talks about focussing more effort on agriculture. There are other things to be said for agriculture too. For one, there are many good export possibilities, for example for fruit and fruit products, vegetables and vegetable products, and various types of beans producing edible and industrial oils. Second, if productivity could be increased in agriculture, it could generate a surplus which could be plowed back into national development, reducing the reliance on foreign aid. Third, rural life is deeply satisfying to most Thai, from what I can see, and the pressure to migrate comes from the very low incomes prevalent in Thai agriculture. (As an example, we had a going-away party for a friend at a restaurant specializing in northeastern food; it had a dance and floor show in traditional northeastern style, and the patrons, packed in, were obviously from the Northeast and mentally enjoying an evening "back home.")

Fortunately for our trip we had introductions to some of the cleverest and most progressive people in Thai agriculture in the North, and they were most gracious in answering our questions, feasting us, and putting us up. We first headed for one of the best-known farms in Thailand, that of Kamnan Chun (kamnan means village headman), located about 4 hours due north of Bangkok on a beautiful hard-surface road. (More later about the importance of these roads and some of the social consequences.) On the way we passed mile after mile of maize, which we found is rotated with soybeans, the main crop in this area.

Chun came to Phetchabun province to build his farm 34 years ago, at which time it was incredibly remote -- just jungle and wild animals. Even today, despite the new road, the name Phetchabun brings to the mind of Thai roving elephants, tigers and impenetrable forest. Two years later Chun's brother Sombat joined him, and together they hacked out the forest by hand, primitive tools, draft animals, and fire. The result is a farm of some 2800 acres, made by a family of self-made men. (What is more impressive is that the second and third generations continue to be just as interested and innovative -- they are all active in Chun's farm or others nearby.) The King himself has taken an interest in Chun's farm, having visited many times. As a gesture of support for their progressive work he has donated a bulldozer which they use for land-clearing.

Chun himself was down in Bangkok during our visit, since he retired some time back, but we were hosted by his younger brother Sombat. Sombat is exactly what an American would picture in his mind for a self-made successful farmer: self-reliant, convincing in expressing his convictions, somewhat conservative, but still compassionate toward those who have not yet "made it." He has travelled widely in the United States and is vastly admiring of American agriculture and particularly of American innovation, both by individuals and through government research and extension programs. I am afraid we took more of Sombat's time than the occasional tourist does: we spent 24 hours there, asking questions all the time except for the few hours we slept in his guest house.

Chun's farm demonstrates something interesting about innovation and its economic consequences. They made their fame, and their original profits, from fruit orchards, principally tangerines. These grow beautifully in Phetchbun due to the climate. Many other orchards then developed, just as an economist would predict, and Chun's farm is now out of the orchard business, and into horse breeding and sericulture, which Sombat indicates are far more profitable. The point here, which I will return to later, is that this kind of development inherently exaggerates income inequalities. How to modify the process of innovation to still enhance productivity without increasing inequality is a good riddle, and I have some ideas for a solution.

As I say, horse breeding and sericulture are the farm's two mainstays at the moment. The former is directed to a specialized market (Bangkok millionaires) and doesn't hold much promise for the poor farmers of the North, but the latter seems ideally adapted to the area, and Sombat is expanding as fast as possible. I must confess I had never before seen the process by which a worm's cocoon is turned into silk thread. An hour's tour revealed the process, which is a remarkable combination of the ingenuity of man and nature. Sombat imports hybrid worm eggs from Japan, which are laid out on branches cut from hundreds of acres of mulberry bushes. The hatched worms eat the mulberry leaves, at which point they are placed on a corrugated chicken-wire screen to spin their cocoons. The cocoons are then roasted to kill the worms and finally placed in hot water baths to locate the end of the long strand of silk. (The reason they import the hybrid eggs is that these produce a thread 1,200 meters long, while the local worms produce one only 300 meters in length.) Special locally designed machines, operated by village girls, then unwind the thread, twist and dry it, and prepare it for shipment to spinning mills in Chiengmai and Bangkok. The final product costs \$50 per kilogram.

Interesting as the ecological and technical processes are, what is more interesting is the way these fit into the human situation in the North. Sericulture is moderately labor intensive, requiring close care at two stages: hatching and raising the worms, and operating the machines to process the thread. Since world demand for silk is strong, this is one solution to the economic backwardness and population pressure in the North. The first stage at least still resembles the rustic life: production is organized around "family farms." Sombat recruits families to come as a unit; he provides land to build a house on, medical care, and all the inputs and technical knowhow to raise the worms. The families build their houses (complete with flower, fruit and vegetable gardens) and raise 8 crops of worms a year, each in their own compound. Since the process can be segmented this way, it strikes me that it could also be organized on a cooperative basis if there were some guaranteed market for the cocoons.

Sombat had a number of observations on the situation in Phetchabun which I would like to share. First is his concern for the low level of nutrition. Diets consist of a local water weed, rice, and shrimp paste: high on carbohydrates, low on protein. One of his pet projects is thus experimenting with fish raising to see whether it will be practical to introduce on a broad scale. He is now feeding the worm carcasses to fish in a pond seeded by the University of Agriculture. If successful this could be expanded without a lot of capital. The techniques are not complicated either and could easily be learned by villagers.

Unfortunately marketing is a problem, not just for fish, but for anything that a villager wants to sell, except perhaps rice: markets are imperfect, and the villager considers himself as at the mercy of the middleman. Certain products can be sold only to monopolies (for example, slaughterhouses are monopolies within a district or province). I have not been able to find an explanation for the persistence of these monopolies, except the obvious one. In any case, they are one ingredient in the system of exploitation in which the farmer finds himself. (I forgot to mention: major inputs such as fertilizer are also monopolies.)

Another major problem is the general low level of information among villagers in the area about modern techniques of production. One almost absurd example: many local people consider animal manure to be dirty and so do not use it on their fields but burn it. Sombat can buy practically unlimited quantities for 50 cents a truckload. (price around Bangkok: \$25.00). Sombat compares the situation in his province with rural America: in the United States there is a very active extension service in every state, which will bring modern techniques, seeds, and easy to understand written material right to the farmer's door. There is also vigorous research into the development of new seeds and production techniques, which is rapidly communicated to the people who need it. Even leaving aside the kinds of status bars to communication which I have discussed previously, there is simply much less effort devoted to agricultural innovation and communication in rural Thailand. The consequence for the farmer who must rely on his own resources is predictable: relative stagnation. The people who get ahead are the ones, like Chun and his family, who have education and the social standing to go and make demands on the bureaucracy (or to bypass it completely, dealing directly with foreign language sources).

To conclude, Sombat seemed quite aware of the special factors (beside hard work) which have made his family's farm so successful. As for the average farmer in the North, with a fourth grade education or less, he is pessimistic. In order for them to be enabled to exploit the advantages of modern technology, there must be, he is sure, a change of revolutionary dimensions in the government's approach to agriculture.

Our next stop was to be the farm of Chun's son, about 150 kilometers northwest, and higher in elevation. On the way though, we stopped at one particularly attractive little farm nestled between the highway and the foothills of the Phetchabun Mountains. The owner was growing cold-season vegetables such as broccoli, possible in Phetchabun even during summer due to the elevation. He was also experimenting with fish raising, just like Sombat. He indicated that the vegetable business was quite profitable, and that he had no trouble selling the produce thanks to the new road (still only about 5 hours to Bangkok if you drive at breakneck speed, as most truckdrivers do in Thailand). Something clicked here though, which it is worth remarking on. Although obviously long resident in Thailand, the gentleman was plainly of Chinese extraction. The marketing systems in Thailand are likewise dominated by Thai who are Chinese by origin, and this gentleman apparently had no difficulty dealing with his fellow Chinese and turning a good profit in the deal as well. But there is an incredible reluctance among ethnic Thai farmers to get involved in this marketing network, either as marketers themselves or as sellers. We have talked to farmers around Bangkok too, asking them why they do not get into some more profitable line of business than growing rice (for example growing vegetables). Several answers usually emerge, including lack of knowhow and lack of capital. But invariably they mention also marketing, you can only sell to the middlemen, who are all Chinese, and the price is no good, or at least uncertain. So the Thai, for the most part, stick to growing rice (which is a good way to stay poor in Thailand) and the Chinese grow and market the vegetables.

My guess is that the Chinese middleman is abused more than he deserves. Various sources suggest that the middleman system is <u>competitive</u>, which is still far from saying that markets as a whole are perfect. The reason is that there are many institutional burdens on commerce in Thailand (not just the monopolies mentioned above), and someone has to have a considerable amount of capital and ingenuity to deal with these obstacles. I refer, for example, to the numerous certificates, registrations, fees and bribes that are a part of doing business here. A farmer with fourth grade education could not do it, and so the Chinese, who are brought up from birth in cities, dealing with bureaucracies, perform a service that is much needed, at least given the present way of doing business here. Two solutions are obvious to me: either reduce the institutional burdens on commerce, or raise the educational level (and hence the status visa-vis a bureaucrat) of the Thai farmer. Why neither of these is done is an interesting question which I plan to explore in my next newsletter.

Well to continue with our trip, we made it to the "B-N Farm" (yes, in English for some reason) in about 2 hours, and had a pleasant visit talking to Mr. Bancherd, son of Kamnan Chun. The farm consists, I believe, of about 1000 acres, and the ultimate intention is to grow fruit trees. They are experimenting with various varieties of lichee and tangerine, but in the meantime they are growing cold-season vegetables for sale in the Bangkok market. Bancherd indicates that this is quite a profitable enterprise, since they sell directly to supermarkets (something not possible for a farmer obviously).

I think there are a couple of interesting points to note here. First, though

Sombat indicated that there was not enough money in vegetables and fruits to interest him, others still find it quite satisfactory and profitable (e.g. the Chinese farmer, and his own nephew). My inference from this is that the more this area is opened up to new techniques, the broader are going to be the income differentials: Chun's sericulture over Bancherd's orchard; and Bancherd's orchard over the Chinese farmer's vegetable farm; and the Chinese farmer's vegetable farm over the mass of subsistence farmers who fill the North, and still grow rice. This is perfectly consistent with what we know about capitalist economic development, but it is not out of place to think, in coming newsletters, how the human costs of this process can be reduced.

A second point to consider is one raised also by Sombat: the low level of knowhow about modern production possibilities. Bancherd had been in contact with many foreign seed companies and was conducting his own seed trials: no one seems to be doing this in his area, so he as an entrepreneur is doing it himself. But that doesn't help the Thai-speaking farmer who can't write to Burpee. Mind you, the technology is not complicated, and the capital requirements are not high. It just requires making what is already known available to new people, and arranging for marketing. This comes down, I think, to a question of human resources and how Thai management talent is being used in the Extension Service and the Cooperatives Department. This seems like a natural for promotion of cooperatives without requiring a large investment.

The third point of interest concerns the decision mechanism operating to determine what direction development takes in the North. Bancherd wants to move from vegetables to orchard crops as soon as possible, I think for two reasons. First, it is much less labor intensive than vegetable farming, and hence it requires less management time and causes less headaches for the investor. When the orchard starts to bear, he can quit and go to Bangkok. Second, it probably produces higher returns on invested capital than vegetable farming. So it is the perfect decision for the We should bear in mind, however, that most of the people in the North capitalist. are not capitalists but subsistence farmers. What they need is an enterprise which can absorb more labor than rice farming, and provide returns to labor, not capital. Vegetable farming would be very suitable. But the current decision procedure does not favor that outcome, because the people making the decisions are long on capital and reluctant to use labor where they can avoid it. What is needed to serve the interests of the farmers is a different institutional mechanism. As a first approximation, cooperatives come to mind.

The final point I want to make here is briefly stated: how can modern techniques of production, and high incomes to some, coexist side by side with stagnant techniques and subsistence returns to others--literally in the next field--not just this month or year, but for years and decades? That is a question I do not have the answer to yet. I think it is connected with all the points made above, but goes far beyond them. It is a question which I think is most urgent to understand, and I shall focus on it as time goes by.

We spent Sunday night in Phitsanulok and left at 6:30 Monday morning to visit the governor of Sukhothai province. Sukhothai is the site of an ancient capital of Thailand, at its peak seven centuries ago. The ruins there, which I explored in 1970, rival Angkor in size and interest, but most visitors don't get to see them because Sukhothai is not on any main routes by road, train or plane. On the way into town

we stopped to walk around the market, always a good way to get a feel for what is happening in an Asian city. We were surprised by the low prices of fruits and vegetables compared to Bangkok and made a note to ask about it. We arrived at the governor's house at 8:30, only to find that the newspaper reports about flooding were true: the governor's house, on the bank of the Yom River, was surrounded by 3 feet of water. Rather than driving in we took a boat across his lawn. We refreshed ourselves with some tea, chatted about family matters a bit (the governor is also Chum's uncle) and then got down to business. We asked first about the low prices in the local market for local staples (beans, bamboo shoots, a local squash, eggplant, bananas). It seems the fertile sandy soil of this northern valley produces beautifully, but the marketing system to Bangkok is not reliable. It is further to Bangkok than from Phetchabun, the road is not as good, and so the system just has not evolved to market produce, and in turn local farmers still plant low-value traditional crops. Still I believe the possibility is there, and it waits for some enterprising person to get the system going: someone with capital, vision, and the comfortable life situation to take risks: just what local farmers, individually, do not have. Another problem is water: occasionally too much, like the morning of our visit, more often not enough. The governor felt that if reliable prices could be worked out for agricultural produce, and if the water problem could be overcome, whole new production possibilities would come into view.

We could not stay in Sukhothai as long as we would have liked, since we had to arrive in Chiengmai, our next stop, before dark. It is not recommended travelling on the highways at night: if the ten-wheel trucks don't get you, the bandits may! So we paddled back out to the road and got on our way in mid-morning, and had lunch in Tak, another provincial capital I had visited in 1970. Not much had changed, except more of the beautiful old hand-carved teak houses had disappeared, to be replaced by "modern" concrete boxes. We stopped again in Lampang to look at some of the old buildings and were pleased to discover the Scandinavian Institute of Asian Studies, a center supported by the East Asiatic Company (long active in the North's natural resource industry) for visiting scholars. Some people will be coming out to Thailand soon to work on some of the same concerns as mine, and we shall be in touch then.

We arrived in Chiengmai just at dusk, had dinner, and collapsed from the effects of being on the road since early morning. Our first stop the next day was the farm of Mr. Sawaeng Tadthieng, the most famous farmer in Chiengmai. Sawaeng was formerly a government official but he left government service more than 20 years ago to go into vegetable raising, in order, he says, to prove that Thai farmers could grow vegetables too. As in other parts of the country, at that time in Chiengmai only Chinese residents grew vegetables: Thai stuck to rice. The farm has been extremely successful, so much so as to gain the attention of the King. The King in fact gave the land on which the farm is presently located (Sawaeng pays back on a long term interest-free loan). He has also driven over from his northern palace in Chiengmai to have lunch at the restaurant which Sawaeng has built to use some of his own fresh vegetables.

Again, though, the secret of Sawaeng's success (besides hard work, to repeat) is access to foreign-language sources of information about modern technology. Indeed, right while we were sitting in his office he whipped out half a dozen Japanese and American seed catalogs. Many of the seed varieties which he finds most suited to his area are not even sold in Thailand: he must import them himself. Similarly, he does his own experimentation since the agricultural support services for farmers are inadequate. At least partly, and perhaps mostly, because of Sawaeng's initiative, many Thai now grow vegetables around Chiengmai, gaining a much better income than if they had remained with rice. Vegetable farming is also more labor intensive than rice farming, and so it is part of the answer to the exhaustion of the land in the North. Yet despite this encouraging aspect, the real import of this story is that if you want to be a successful modern farmer in Thailand, you seem to need all the things Thai farmers don't have at present: education, status, capital, readily available technology in their native language, and the interest of the people on top. Sawaeng agrees with Sombat: the farmer will continue in bad shape unless the government drastically revises its policies. His own support has come from the King, but royal patronage is a perfect inverse index of government interest in an effort: the Royal Family is known for supporting those projects (like modern farming, or improvement of the livelihood of the hill tribes) which it feels the government is neglecting.

Our next stop was the University of Chiengmai, where I wanted to reestablish contact and find out what research projects are currently underway. Dr. Nibondh, the Dean of the Faculty of Social Sciences, was still in Bangkok, but I spoke with the Associate Dean, Dr. Pradit, as well as M. L. Bhansoon and Dr. Charles Keyes, a visiting professor from the University of Washington who has spent much time in Thailand. Together we reviewed the work that is going on there now; our thought is now that I will send on ahead some of my recent writings on Thailand, and then come up for some discussion sessions during the week of November 1 - 8, just before classes start again in the new term. That way we will have an opportunity for a good exchange of ideas, without anyone being pressed by teaching demands.

Our last stop was at an orchard specializing in the production of mango tree cuttings about 40 miles north of Chiengmai. One of Sombat's assistants had suggested it as an example of what can be done in the North, <u>if</u> you know what you are doing. It is run by two college graduates, a husband and wife, who unlike almost all of their fellow graduates have taken agriculture seriously, and used their education to further agriculture instead of as an escape from it. Their farm is quite small, only a bit over 4 acres, but it is filled with mango trees from which they make the cuttings for sale to orchards to propagate new trees. This is ideal country for mango trees: it is cool in the evenings, and the trees are happy on hillsides where you can't grow too much else. They are way behind in meeting customer demand, and the price is good, so the effort is very profitable.

What I find interesting about this is that it is the kind of low-investment project which is ideal for the North and could be easily expanded with the proper support. The land is free, the settler receiving title after clearing it and completing legal formalities; the technology is simple; demand is strong; and it is fairly labor intensive, using about 2 or 3 people per acre full time. Again, it is the educated and well-connected who have walked in to seize the opportunity, but it is the kind of low-capital, easily segmentable enterprise which could be of great benefit to the people who need it most, <u>if</u> the proper organizing talent could be made available. (It is obviously for this organizing and managerial input that the two college graduates are going to gain their rewards.) But for the ordinary farmer the enterprise is too vast, the technology unknown, the market unclear, and the status of the people he would have to deal with too high for him to consider it unaided. Unless some of these factors can be changed, he is just going to go on plowing his rice fields. So far in this letter I have discussed the North in terms of actual agricultural enterprises and real people. But we know some more general things about what is happening in rural Thailand, which I'd just like to mention briefly in this final page. The process of innovation that I have described has occurred particularly in response to the evolution of markets, and they have come about through the expansion of the road network. Thus far roads are a plus. But as we peer into the process we find, as I have tried to show here, that the way innovation is carried on in Thailand (and Thailand is not particularly exceptional) results in those who have getting more. Recent research by Dr. William McCleary, a visiting professor at Thammasat University, confirms this with sophisticated quantitative techniques. Using comparative income data for 1962/3 and 1968/9, McCleary finds that in almost every part of the country, inequality in the distribution of income is growing. It is interesting to note (although McCleary himself does not make the point) that inequality increased the most in the Northeast, where the greatest roadbuilding effort has taken place.

The usual explanation of this process, and in fact the rationalization for it, is that this increasing concentration of wealth is necessary to enhance investment, which <u>ultimately</u> will benefit the people at the bottom. In fact, this is to some extent borne out by the experience of a number of capitalist countries, as Kuznets' research shows. I would like to make two points, though. First, there are all kinds of innovations which can be made without a lot of financial investment, and so it is fallacious to argue that we should rely on this "automatic" mechanism of modernization. Second, even the most attractive cases of developmental success leave a social situation of enormous inequalities of all types: power, income, status, wealth. How this kind of situation can persist in a puzzle to me, and I plan to attack it in future newsletters. My hunch now is that looking at the beginnings of this process of growing inequality may help us to understand what to do about it.

Received in New York on August 27, 1973