

CHAROEN POKPHAND

A Pig-Raising Undertaking With  
Four Experimental Villages in the  
Center, East and North of Thailand.

Volume VI

## I

### Country Background

Thailand has a long tradition of agricultural production as a mainstay of the economy (the country's classic name, Siam, means 'golden' and refers to the golden rice harvest for which the country is noted). At present, out of a total population of around 50 million, approximately 70% are engaged in agricultural pursuits. Despite this fact, agricultural output constitutes less than 25% of the Gross National Product, indicating an agricultural sector still largely underdeveloped, with minimal use of modern inputs and technology.

The two case histories illustrate successful attempts to introduce modern agricultural practices by mobilizing small farmers around a technologically sophisticated corporate core, with demonstrably positive results for both the companies and the farmers associated with them.

### Three Major Problems

The major overall problems in Thai agriculture at present are three:

1) New land for farming, in the past frequently created by clearing woodlands--with the ecological consequences this entails--is becoming scarce. On World Food Day, 1983, the Minister of Agriculture, Narong Wongman, publicly declared that: "New land for farming in Thailand is getting scarce, and yields per hectare must be increased if the country is to remain an exporter".

2) Thailand's exports, overwhelmingly agricultural, constitute a very substantial sector of the Gross Domestic Product. Thailand's foreign trade--imports and exports--currently totals 48% of Gross Domestic

Product. This makes the country vulnerable to world economic conditions, particularly to the roller coaster conditions of international agricultural trade.

3) Thailand, despite appreciable government efforts to limit it, continues to have high population growth, now largely concentrated in the underdeveloped rural areas of the north and northeast, where children are still regarded as an investment in social security and an insurance for old age.

## II

### Company Background

#### History and Structure

Charoen Pokphand is a Thai enterprise that was started in 1921 as an organization selling vegetables. Today, the CP Group of Companies has proliferated into a range of agribusiness activities that involve fertilizer, agro-chemicals, pesticides and herbicides, tractors, animal feed, livestock operations in poultry and swine, crop farming, processing of farm produce, and, in allied manufacturing: jute-backed carpets, polypropylene, and packaging. In addition, the company maintains trading offices in New York and Brussels. It is the biggest agro-industry firm in southeast Asia.

In Asia, CP has operations in Indonesia, Malaysia, Singapore, Taiwan, Hong Kong, and the People's Republic of China. Indicatively, its joint venture in Singapore with the Singapore government is a swine-raising operation of gigantic proportions, now producing 75,000 head per year and scheduled to produce 250,000 head in the medium term.

From its operations in Thailand, the company exports frozen chickens to Japan, Singapore, the Middle East, Rumania and Germany; live pigs to Hong Kong and Singapore; casava and tapioca to the EEC; corn to Taiwan, Singapore, Hong Kong, Japan, Malaysia and Indonesia; fish meal to a number of Asian countries; and carpets to the EEC and the US.

Joint venture partners in the US are Arbor Acres (poultry); De Kalb (corn, seed and swine production); PIC (pig stock), and Continental Grain (feed mills).

The company has 10,000 employees worldwide; 6,000 in Thailand.

In terms of financial structure, the company is still privately held, with majority equity in the hands of the founding family and key executives. However, equity is being gradually spun off to all employees, and the company expects to go public within the decade.

#### Motivation

The company's motivation is grounded in a historic perspective, coupled with 60 years involvement in Thai farming. Until World War II, Thai farmers were overwhelmingly subsistence farmers who, because of their limited requirements, were largely self-sufficient. They had minimal connection with the money economy. Thailand's development activities after World War II introduced roads, communications and electricity to the farmers which, in turn, integrated them into the money economy, increasing their knowledge of and demand for consumer goods. The Thai government intended to raise, and succeeded in raising, the farmers' standard of living; but that standard of living could not be sustained by traditional production methods. New ways of earning money had to be found--by increasing yields, introducing new crops, and moving into new product lines in the livestock area.

CP, which considers itself primarily an agribusiness company, and therefore closely and inescapably connected with the fortunes of the country's farmers, monitored and moved with this evolution. The company recognized, as it moved along this path, that the material development of the farmers, with its symbiotic relationship with the development of the company, had social as well as economic aspects.

The group Vice President responsible for the company's livestock operations, in addition to a number of other product lines, is a former Deputy Minister of Industry. He delineates the company philosophy:

"For a private company, profit criteria are, of course, fundamental. But profit criteria can be paired with a concern for society and the recognition that the company is an integral part of the society in which it functions. Imaginative management sees the connection between the development of the country and the development of the company. For me, the classic example of imaginative management is Henry Ford's concept of producing a car cheap enough for his employees to buy. Within its own context, each company must come up with a comparable vision. Ours is that the development of the company and of the farmers with whom we work, both as producers and consumers of our products, are intertwined.

"I would add to this that both the production and the social measurements that define this relationship can--indeed must--meet investment criteria, by which I mean a respectable ROI."

### Strategy

As a result of this corporate philosophy, CP's outreach program is an integral part of corporate strategy. That strategy has three stages.

The first stage is for the company to organize small farmers around the corporate core to transfer modern technology through hands-on operations, with the company providing all the required inputs, and processing and marketing the product.

The second stage is for the farmers to become sufficiently knowledgeable and independent to employ the company as managers, marketers, or both.

The third stage, (which evolves when the children of the farmers who have participated in the first phase go to schools and colleges and acquire enough education to manage the family farm as well as the company could), is the stage at which the farmers become a major market for the company's products.

At present, CP is engaged in Phase 1, which it launched on a systematic basis in 1977. The company is experimenting with a number of socio-economic models and, by 1983, had created four model villages in four different locations. The four villages are primarily concentrated on pig-raising, but vary in terms of contiguous products (these range from growing corn and sorghum for feed, to cultivating vegetable gardens, to a newly introduced experiment with the growing of mangoes for export), as well as physical location and social organization.

#### Four Models

The first village project was launched in 1977, in the province of Chachoengsao, on the east coast, about 120 kilometers from Bangkok. The traditional crop in the area is casava, a crop that depletes the soil of nutrients and, after several years, produces arid land on which almost nothing else can be grown. The economic implication is that this land can be bought at a relatively low price.

The company bought 1,200 rai (500 acres) of this depleted casava land, partly from resident farmers and partly from absentee landlords. It then created an infrastructure for pig-raising on these 500 acres by leveling the land, cutting down trees, building a road, bringing in electricity, digging a well, and constructing houses for farmers and sties for pigs.

For all of this infrastructure work it hired local farmers who, with casava as their only crop, were underemployed eight months of the year.

With the infrastructure in place, the company recruited 50 farm families to participate in the pig-raising scheme. Thirty-eight of the families were given breeding stock to produce piglets, and twelve families were assigned the task of fattening of the piglets until they are ready for market. The company pays a guaranteed price for each piglet of 70 baht (B23:\$1) and a guaranteed price of B22.5 per kilogram for each fully fattened pig.

Each of the 50 families was given 10 acres of land, a house, a pig sty, and full supporting services--breeding sows, appropriate feed, veterinary services, and technical training--for their pig-raising or pig-feeding operation.

Land set aside for each farmer's house, pig sty, and family vegetable garden totaled two acres, leaving each farmer eight acres of land to grow crops of his choice. Some farmers continued to plant casava or rice, but most increasingly switched to the cultivation of feed crops for their pigs, i.e., corn and sorghum. By 1983, this first model village had its own small mixing plant to produce the feed for all of its pig-raising operations, depending on company supplies only for the concentrate needed for optimal animal nourishment.

The latest development in this first village is that the farmers have decided to switch part of their acreage into the production of mangoes for export, growing feed grains on the remainder, and also intercropping grains with the mango trees. The company is now considering setting up in the village a processing plant for the fumigation and packing of mangoes for export.

### The Recruiting Process

The company recruited the 50 farm families for the village, in careful cooperation with the government's district officers, from three groups:

First priority went to farmers in the vicinity, particularly working farmers who had sold their land, or part of their land, to the company.

Second priority went to landless farmers in the area who had good personal records as tenant farmers.

Third priority went to casual workers with good records of industry and dependability.

Candidates were identified initially by the heads of villages in the vicinity, who sent lists of candidates to the district officer. The district officer culled the list, and sent it on to the company for final selection.

### The Company/Farmer Contract

The company makes a contract (which runs for seven years) with each of the selected farm families. In the first year, in addition to giving the farmer a house, a pig sty, ten acres of land, and all the requirements for a first crop of piglets, the company furnishes the farmer with a basic stipend that will see him through the eight months it takes to raise a litter of pigs for sale. The farmer, in turn, commits himself to raising a minimum number of piglets, although he is free to--and the company encourages him to--produce as many above the minimum as he competently can.

After seven years, if he fulfills his contractual obligations, the farmer gets title to the land, to his house, to the pig sty, and to all other fixed assets.

For the families who engage in pig-fattening rather than pig-breeding, the same two-way commitment applies, except that the hog shelter that is used for fattening becomes the common property of the twelve families engaged in that enterprise.

#### Pay-Off For the Farmer...

For the farmers, the short-range economics of this arrangement are as clearly beneficial as the long-range returns. On the average, farmers in this area raising casava have an income of B500-700 a month. The farmers involved in the pig-raising project earn an average of B4,000 a month.

The social and developmental concomitants are unmistakable to a visitor to the village. Individual farmers have acquired big ticket consumer goods, ranging from refrigerators to television sets for the home, and from motorcycles to pick-up trucks for increased mobility. More important still, not only do all the children in the village attend primary school; many of them go on to secondary education, and a number of them are planning university careers.

A visit to the home of one farmer who had been a tenant farmer, growing mainly rice, before he was included in the project, revealed (in addition to a television set), a blackboard, and a literacy game with pink and blue plastic letters in his living room where, three evenings a week, he teaches his pre-school children, his wife and his mother, to read and write.

The economics of this farmer's life tell their own tale. As a tenant farmer he produced a rice crop worth about B30,000 a year, of which he got to keep B4,500. It took four months to produce the crop, and he spent the remaining eight months as a casual laborer, earning a total

annual income of B10-15,000. Now his pig-raising alone brings him B3,000 a month; and he is one of the farmers who, in addition to growing his own vegetables for family consumption, produces most of the fodder for his pigs and is participating in the mango scheme.

#### ...And A Particular Problem

He does, however, report a social problem that troubles him. His former neighbors, who are still tenant farmers and casual workers, no longer regard him as one of their own. They see him, with some suspicion and a great deal of envy, as a rich farmer with whom they no longer feel comfortable.

#### How The Company Copes

The problem is one that also challenges the company, which must deal with farmer mentality at both ends of the spectrum. Initially, the company must cope with the traditional habits and conservative attitudes of the farmers: who are reluctant to change production techniques that have been practiced for centuries, and even more reluctant to switch from food crops such as rice and casava (which they can, if necessary, eat themselves), to cash crops for which they have to relate to a volatile market. The way the company has addressed this problem is to give its farm families enough acreage to grow both food crops and commercial crops.

At the other end of the spectrum, when the farmers associated with the company's projects have demonstrably prospered, the company must cope with the problem of a surfeit of recruits. There are now many more farmers wanting to join CP projects than the company can handle, although its strategy calls for the creation of additional projects as its current experimental activities make increasingly clear what works best.

The company's second village project, launched in 1979, followed many of the same concepts as the first, but differed in some technical ways. In the first village, families and their land were grouped in four-family units to make possible optimal application of inputs such as insecticides. The insecticide spraying, however, turned out to be uncomfortable for the families during the spraying period and, in the second village, the company put the two acres of family housing, gardens and sties on one side of the village and the crop acreage on the other. It also tested new irrigation methods by building a canal and a pumping station from the river, to set up a linear sprinkling system that makes crop rotation possible.

The second village was established in the underdeveloped north, some 400 kilometers from Bangkok, where farmers traditionally grow rice. With the new irrigation system, the farmers can grow seed corn in rotation with their rice crop, which triples their income. The company provides the seed.

The third village project was started in 1980, at a location 200 kilometers north of Bangkok. In terms of product, it also combines the growing of seed corn on company-irrigated land with the breeding of pigs. It has, however, a different social organization. In the first two projects, farmers are allocated their ten acres of land on an individual basis, and assume title on an individual basis when their seven-year contract is up. The third village is organized as a common project, similar to the "kibbutz" system in Israel, where each of the participating families owns an equal share of the common project. Although it is too early to draw definite conclusions, there are

indications that this system does not work as well as Projects One and Two. Common ownership appears to generate less motivation from the individual farm families.

The fourth project, launched in 1981, is located across the river from Project Three. That project is designed for company employees who want to retire to the country with their families. The product lines are the same, i.e., pigs and corn seed, but the village is designed for 75 rather than 50 families.

The farmers in Project Four are former clerks, drivers, and blue-collar workers whose contract with the company runs for eight years (the extra year at the beginning is for training), before they become owners of the property.

"After that," a senior executive of the company explains, "we hope they will give us a management contract to do their farming for them."

#### Pay-Off For The Company

Because of its extraordinary flexibility and its broad range of activities, the company reports that its ROI has been satisfactory on each project from the very first year, and that it intends to continue its experimentations with different concepts, different models, and different ways of using the company's wide-ranging resources.

In another area of outreach activity, the company also cooperates with government enterprises such as the Electricity Authority of Thailand where it provides expertise on animal husbandry for people who have been displaced by the public flood control system, and with the Ministry of the Interior, which is trying to improve production and income of farmers in the backward regions through chicken-raising projects.

Given the socio-economic realities in which the four projects are established, and the company's own philosophy and approach, there has never been any separation between the production and outreach aspects of the enterprise. They are inescapably intertwined, and the company's financial and production calculations are based on this cohesion.

### Product Strategy

From a production point of view, the company's strategy is simple: To increase productivity through the introduction of modern technology for traditional crops, and the introduction of new agricultural products, using all available and appropriate inputs and technology.

A senior executive illustrates the principle:

"A corn farmer in the US gets a yield of 1.5 metric tons per rai. The traditional Thai farmer gets 350 kilograms per rai. The difference is due to the seed, fertilizer, farming methods, water, insecticides and herbicides, and mechanization. There is no reason for this discrepancy to continue. Thai soil is just about the best there is, and there is plenty of rainfall. The challenge is to approach the farmer with a packet of incentives that he can buy. This includes, in addition to the necessary inputs, appropriate financing, plus hands-on supervision and training. But even that package won't necessarily produce results. Farmers have deeply ingrained attitudes that have to be changed. Economic motivation, while very important, is not enough in itself. The reason for that is that farming--anywhere in the world--is not only a way of earning a living, but is also a way of life."

### Socio-Technical Calculations

The company's technical calculations are rooted in this recognition. In determining the optimum acreage per family and the optimum number of families per village, the company proceeded from an estimate of a desirable standard of living for the farmer. It began with a calculation of the farmer's basic spending needs on food, clothing, leisure activities and education, based on the average family size in the area.

To this was added a percentage for savings, and some percentage for consumer extras to provide the necessary margin of motivation. Starting with this figure, the company then determined which agricultural products would achieve this standard of living. In its experimental villages, it came up with a mixture of pigs and crops. Using again the basic yardstick of a desired living standard, it arrived at the number of pigs that would be required to achieve this figure.

The company then looked at its calculations from the consumer side and arrived at what quantity of feed grains the farmers would have to grow for their pigs, to produce animals that would meet market needs at a price consumers would find acceptable

A company executive pointed out that this kind of figuring differs from the approach the government takes toward increasing farmer income and providing development for rural regions.

"The government approach is that if they have raised a farmer's income from 50% to 100%, that is a great achievement and they are content with it.

"The facts of life, however, are that if you increase a poor farmer's income from B500 to B1000, that is still not enough to provide a decent living standard or an effective long-range motivation for the farmer and, above all, for his children. Our calculations are based on providing an incentive not only for the farmer to cultivate his land, but for him to be able to educate his children and have them want to stay on the land as well.

"In that way, you create a sound modern agricultural base for the country, which makes Thai products competitive on both the domestic and world markets, and turns farmers into the kind of consumers that industry needs to grow and prosper.

"From a corporate point of view, we are involved in every stage of the process. That is, we provide inputs and technology at the initial stage; management and processing at the second stage; marketing, new product lines, and relevant research at the third stage.

"Our experience so far is that we can meet our profit criteria at every stage of the process."

## Management Strategy

The company's management strategy is based on a comparable calculation. Experience showed that a village of 50-80 families is the optimum size for the type of hands-on management the company considers essential. CP management eschews a tall hierarchy, and embraces instead a flat, decentralized structure. For example, each village project operates as a separate profit center. It is staffed by young company managers, most of them college graduates, who put in 2-4 years living in the village, as an ingredient of both their training and the company's career plans for them. Since the company plans to expand its activities along these project lines, it needs to build a cadre of managers who can execute the expansion, and is convinced that the best training is on-site, hands-on experience.

At the same time the company makes every effort to insure that the village assignment is not a hardship post. It provides the best possible basic facilities for its corporate employees. There is a well-built, well-furnished house for managers, with modern plumbing, television, and pleasant eating facilities including, not unimportantly, a good cook. The company is aware that these young managers live away from their family and friends, and, in compensation, tries to make their living facilities more pleasant and their living standard higher than those of their counterparts in the city.

In addition, company compensation is between 2-300% higher than the salaries these young university graduates would earn in the public sector. It should be pointed out in this context, however, that public

sector salaries in Thailand are very low: comparable to the scale of compensation in Indonesia, rather than to the more adequate pay scales of countries like Singapore, Taiwan and Korea.

To find these young managers, the company has a comprehensive recruiting system that covers all relevant institutions of higher learning in Thailand. A network of scouts, supported by well-cemented relationships with professors and school administrators, identifies candidates during their second year at university. "White elephants," which is the Thai metaphor for the best and the brightest, are offered summer jobs during their sophomore year, which gives the "white elephants" an opportunity to find out what the company is like, and gives the company an opportunity to train the potential employees and to observe how they handle themselves and their jobs.

The "white elephants" who find themselves congenial in the CP stables are then offered a career path, which can include special training while they are still at school as well as special courses and research projects that are connected with the company and its activities.

After graduation, these young men are given formal training on company-owned farms: in general management, as well as in specialties like pig-raising, poultry cultivation, animal husbandry, veterinary science and nutrition.

CP's relationship with the universities is cemented by the fact that the company funds eighty scholarships a year: not only in agriculture, but also in the social sciences, economics, and administration. In another facet of the company's outreach program in the education sector, CP offers one scholarship a year in each of Thailand's seventy-one provinces for the education of a poor farmer's child either in primary or in secondary school

In terms of assignment after training, the company has found that the best policy is to assign its "white elephants" to the regions from which they hail, where they relate most easily to the people and their customs.

Finally, the company is now in the process of organizing a training center for farmers that offers formal courses in general management, including forward planning.

### ROI

The ROI for the company has three dimensions.

The first is a financial ROI that begins the very first year of operation. Tactically, the company considers the first five years of each project the developmental phase, after which the training and direct supervisory functions of the company are attenuated.

The second dimension of the company's ROI comes into play at that stage, when the company encourages the farmers to manage their own affairs via a Board of Directors made up of selected farmers, with the company assuming an advisory role, compensated by a management contract.

The third dimension, operative throughout both processes, is the company providing inputs such as feed and breeding stock, at a reasonable profit, and doing the processing and marketing--at a reasonable profit.

Long-range, the company sees the college-educated children of these prosperous farmers managing their own family farms, with minimal outside services in either technology of management, but becoming increasingly larger customers for the company's products, and sources of supply for the company's processing and marketing activity.

For the consumer, the pay-off of the entire process is a better product, more easily available, at a better price. CP's pig-raising enterprises illustrate this. The company developed a hybrid pig for Thailand that grows faster, requires less feed, and produces a higher percentage of meat than the traditional Thai pig. The company began to work on this and on the related technologies in the 1960s, and by the late 1970s was able to produce a locally-bred and -raised pig that is up to world standards in quality. Also, and with company encouragement, the technology spread. When CP started its pig-raising operations of the high-quality hybrid, its market share was 100%. Today its market share is 40% of an enormously enlarged base. At present, Thailand produces a hog population of 5-6 million head per year.

#### Cost

The company's initial investment in the first village project was \$1 million, and total investment in the four projects to date is in the vicinity of \$3 million. The financing has come largely from banks responding to feasibility studies prepared by the company.

#### Corporate Change

Technical and organizational changes are explained in the previous description of the four village projects.

Change at corporate headquarters consists mainly of less executive time required for the planning process and for negotiations with the banks as experience accumulates and success is demonstrated. At this stage, management resources required for operation-supervision are still extensive. Prospects are that, though, this kind of management requirement diminishes with the increasing technical and managerial

abilities of the farmers themselves, corporate managerial resources will, if anything, have to be increased as company activities expand into new projects, new areas, and new products.

### III

#### Policy Implications

##### For Companies

The CP experience demonstrates that it is possible to achieve both profit and social criteria, and meet relevant investment concerns for short-term returns as well as for long-term corporate growth.

##### For The Host Country

Until recently, the Thai government pursued what was essentially a welfare policy vis-a-vis the farmer. It treated the farmer as a backward child, poor and uneducated, and provided handouts in the form of free seed, subsidized fertilizer and support prices. But it offered neither the full package of know-how and services nor the motivation to make the farmer self-supporting.

In addition, the government's attitude toward the private sector in agriculture was that the private sector would exploit the farmer, and was therefore not to be trusted. This attitude is beginning to change as the government realizes that it cannot create meaningful rural development alone. At this stage, the government is thinking in terms of cooperation from the private sector in rural development, and has long-term intentions of encouraging private sector activity in agribusiness, with the government gradually pulling out. The kind of constructive cooperation that is possible is illustrated by CP's village projects and particularly by the farmer recruiting process, which involves the public sector in a very direct way, but leaves final decision to the private sector, where final responsibility for success of the project lies.

A conceptual difference remains between the government and the private sector of what rural development is and means. The government is still inclined to think of rural development as helping poor farmers in subsistence areas, while the private sector thinks of rural development as creating and supporting motivated farmers to cultivate products that meet market criteria.

The best functional division between the two sectors at this stage might well be for the government to prepare land and infrastructure in the rain-fed areas, with the private sector moving into areas where irrigation is possible and commercial farming can be organized effectively.

It would also be useful if the Thai Investment Board would provide the same tax and duty incentives for agriculture and agribusiness that it provides for industry.

In addition, government financial institutions that now exist for industry should have a parallel network of financial institutions for commercial agriculture: at present, government financial institutions in agriculture are limited to servicing subsistence farmers and farmer cooperatives.

Conceptually, what is needed on the government side is the recognition that any country, in order to industrialize successfully, must have a strong agricultural base. Sound development is not possible by leapfrogging the agricultural component. A sound agricultural base raises farmer income which, in turn, increases demand for consumer industries; and that, in turn, creates the need and market for heavy industry. All industrialized countries, and all successful developing countries, have followed this pattern.

### For The Donor Country

In the past, US policy has channeled AID funds only to governments and to the military. The new emphasis on the private sector, and direct contact with the private sector, with government encouragement and support, is likely to bring a positive dynamic to the entire aid process. The allocation of USAID resources to bringing together the private sector of the donor country with the appropriate partner in the host country will undoubtedly have more immediate and direct results than channeling funds to government organizations and institutions, where demonstrable development results may or may not be achieved.