Until a few decades ago the highlands of northern Thailand formed a world apart. Only by virtue of a vague and poorly demarcated border were its people a part of the Kingdom of Thailand at all. In fact, their homeland, comprising the provinces of Chiangmai, Chiangrai, Lamphun, and Mae Hong Son, is but one small section of a vast geocultural region of mountains and high valleys that includes China's Yunnan Province, as well as territories in Laos and Burma. Hill tribes like the Lahu, Lisu, Hmong, Akha, Karen, and Yao range widely over this area, mingling here and there with Chinese, Thai, Burmese, Vietnamese, and Lao. Over the centuries these ethnic groups have been drifting southward. Indeed, earlier migrations of this kind account for the present-day populations of most of Southeast Asia. But to the modern Thais who occupy the plains-wet rice farmers and members of a sophisticated, Theravada Buddhist culture-the motley array of hill tribes occupying the mountains to the north are not part of their civilization. Until recently the Thai viewed the rugged, chilly hilltops as the domain of savages and evil spirits. A few ventured into the region to trade, but most avoided it, including government officials who rarely bothered to register the inhabitants or collect taxes in these lands beyond the pale.

For their part, hill tribesmen valued their independence. They avoided subjugation to lowland kingdoms wherever possible and, guided by their own distinctive lore, adhered to the authority of their chiefs. Their small, isolated villages were embraced by a vast expanse of hills and trees. Through this region they ranged at will. Most farmed by slashing and burning the forest, planting rice and other crops upon debris-strewn, half-hectare patches of burnt earth. After a few years, when the virgin fecundity of their plots began to atrophy, they moved on. The forest seemed inexhaustible. Indeed, swidden (burned clearing) farming of this kind—a process some Southeast Asian hill farmers aptly call "eating the forest"—was well suited to the highland ecology so long as populations remained small and there were no other demands upon the forest. Fallow periods permitted regrowth of vegetation and soilrenewal, and the land could then be replanted. Although remote from cities and largely self-sufficient, hill peoples have long engaged in trade. Itinerant peddlers from the lowlands brought beads, jars, silver or gold pieces, and metal tools, which were paid for with products of the forest—rattan, gums and resins, as well as exotic feathers.

A hundred years or so ago hill farmers in the Yunnanese highlands and their fringes began cultivating opium poppies (*papaver somniferum*) in their swidden plots—the elevation of one thousand meters was ideal. The poppy was evidently introduced from China, where a huge market for opium had developed by the mid-nineteenth century. Secondary markets developed in the European colonies in Southeast Asia and in Thailand itself, where opium remained legal for licensed smokers until 1959. Many hill tribes used opium themselves, rejoicing in its unique medicinal properties and dreamy euphorias. (The Lahu believe that opium came from Na Ma, a beautiful maiden who descended from heaven.) In time opium became an integral part of the upland economy.

Over this upland world the government of Thailand exercised only the loosest suzerainty until the mid-twentieth century. "The hills," says Prince Bhisatej Rajani, director of the ROYAL PROJECT, "were out of sight, out of mind." Moreover, by this time parts of the area were under the defacto control of former members of the Chinese Kuomintang army, who in 1949 had retreated from the conquering Communists into the no-man's-land of upper Thailand, Burma, and Laos and remained there. During the 1950s, however, a variety of factors compelled the Bangkok-based government of Thailand to take a keener interest in its hilly borderlands and exercise a firmer hand. In mainland Southeast Asia such areas had become useful staging grounds and redoubts for insurgency movements seeking to secede from, or to overthrow, lowland governments. In Thailand, for example, Thai communists, affiliated with ideological compatriots in Indochina, found safety in the remote territories of the north, far from Bangkok and its soldiers. Penetrating the hill populations and their territories, therefore, became a matter of national security for Thailand's government.

Other events in the hills had begun to impinge on lowland life as well. The natural ecological balance of swidden agriculture depends upon plenty of open forest. As new migrants entered northern Thailand from southeast China and Burma, and as lowland Thai, driven by the search for open land, moved into the highlands as well, hill farmers were forced to recycle their swidden farms sooner—long before the fertility of their abandoned fields was restored. This led to the rapid deterioration of upland soils and made vast areas vulnerable to *imperatagrass*. Once rooted, *imperatagreempts* the growth of new forest. The increasingly unfavorable balance between the natural forest and its "eaters" was exacerbated by loggers—lowlanders who felled vast areas of virgin timber indiscriminately.

These changes in the upland ecology had far-reaching repercussions. Hill farmers compensated for weakened soil fertility and a diminishing food supply by growing more crops for cash so that they could *buy* food. Earnings from opium became more important. What is more, the incremental destruction of upland forests began to affect life on the heavily populated plains. The uplands of northern Thailand form the watershed for the entire country. They feed its rivers, including the great Chao Phraya, which waters the rice bowl of central Thailand and courses south to the capital at Bangkok. Less forest means greater runoff; barren, *imperata*-covered hills cannot absorb and store rain water. Instead it runs off precipitously into feeder streams and rivers, carrying away precious topsoil and causing floods below.

Slowly, Thailand's leaders awakened to the critical interdependence of its hills and plains.

A look at opium production provides an illustration of this. Throughout the life span of the Royal Thai Opium Monopoly—a revenue agency established in 1852 to tax and regulate the flow of opium to the kingdom's opium-smoking subjects—the Thai government imported opium from abroad. By the early 1950s, however, international sources of opium for nonmedicinal purposes were drying up. Iran and Turkey had withdrawn from the market, and after 1949 Mao Zedong suppressed the planting of opium poppies in China. Faced with a shortfall, Thai officials turned to hill tribe poppy growers within Thailand's borders.

Government agents now made periodic visits to opium marts in the hills and made purchases from the Kuomintang officers, who had organized the opium trade there and in neighboring Burma, and who, at the same time, were collaborating with Thailand in its anticommunist counterinsurgency campaigns. Stimulated by internal government buying, production expanded rapidly and the Thai uplands began to replace the older, more traditional sources of illicit opium on the world market. By 1960 Bangkok had become a major trafficking center in the world's narcotics trade. Opium grown in Thailand—and the northern areas of Burma and Laos, which, with northern Thailand, form the so-called Golden Triangle-was making its way in ever greater quantities from hill poppy swiddens into the world narcotics mainstream, passing from mountain to lowland via ragged, twisting trails on Kuomintang-organized mule-trains, and moved to market via secret, corruption-protected channels. This was followed by the introduction into Thailand of illegal laboratories refining opium into heroin. Thus

were the hills drawn into national and international patterns of commerce: opium produced in the swiddens of northern Thailand was manufactured into heroin in the lowlands and consumed in New York City.

In 1959 Thailand abolished the Royal Thai Opium Monopoly and declared opium cultivation illegal, along with the manufacture of its derivative products and their use. This did not have the desired effect. The opium trade simply went underground. In fact, the swelling demand for heroin in Europe and the United States, and among American soldiers in Vietnam, gave a huge boost to Southeast Asia's opium producers. Despite the official ban, therefore, opium production in northerm Thailand and other parts of the Golden Triangle actually increased and, by the late 1960s, was supplying half the world supply. Many of the hill farmers were now economically dependent upon their opium crop. This was true despite the fact that profits of the poppy farmers were infinitesimal when compared to the profits of the middlemen—Kuomintang officers in the highlands, Thai-Chinese syndicates in Bangkok, and international drug cartels.

About this time, the Thai government turned its attention to the social and economic problems of the hills. The Hilltribes Division of the Public Welfare Department began introducing health measures and schools into a few upland areas. At the same time, agricultural scientists at Bangkok's Kasetsart University began to study the complex problem of deforestation. Thiam Komkris, dean of forestry, set up a small reforestation project just outside Chiangmai, near Bhuping Royal Palace. Here Komkris substituted several temperate zone fruit trees from Australia, North America, Japan, and Korea for indigenous varieties. This idea came from a colleague at the university, Pavin Punsri, a plant scientist who had introduced commercial grape cultivation to Thailand and who now dreamed of reforesting the hills with income-generating orchards. There was not enough money to maintain the station, however, and by 1969 Komkris was faced with the possibility of having to close it.

During this same period, a fresh influx of refugees from Burma entered northern Thailand, hastening the depletion of the forest and increasing the people's dependency on opium as a cash crop.

It was the king himself, His Royal Majesty Bhumibol Adulyadej, who took the first step. During his frequent visits to Bhuping Palace he had come to know and love the highlands and was concerned with the plight of the hill people. He learned that despite revenues from opium poppies—cultivation of which was an open secret—hill farmers were far from prosperous. To his surprise he discovered that opium was not necessarily easier to produce or more profitable than other cash crops, just easier to market. The king also became aware of the nearby research station, its experiments and its problems. He reasoned that by helping hill farmers find better cash crops, they could be weaned from growing opium; at the same time, their livelihoods might actually improve. Intrigued with this hypothesis, he asked Kasetsart University to explore its potential in earnest, donating 200,000 baht (U.S. \$10,000) of his private fortune to underwrite the effort. Thus, in 1969 he set in motion the ROYAL HILL TRIBE ASSISTANCE PROJECT, which in 1980 was officially renamed the ROYAL PROJECT.

In a speech before the Rotary Club of Bangkok shortly thereafter, King Bhumibol stated his objectives: (1) "to give help to fellow men," (2) "to prevent and combat subversion," (3) "to prevent forest destruction," and (4) "to halt traffic of narcotics." "Opium," said the king, "seems to be the center of the problem."

One month later the Rotarians donated 306,700 baht to the king's campaign—the first of many private gifts to swell the ROYAL PROJECT's coffers. By the following year over a million baht had been raised. To administer his burgeoning program, the king appointed Cambridge-educated Prince Bhisatej Rajani, his distant cousin and a member of the royal family with the rank of *mom chai* (prince); the prince was the king's trusted friend and companion and a frequent guest at Bhuping Palace. The king's choice of Bhisatej signified his intention to make the PROJECT a particularly personal endeavor. From the beginning, it bore the stamp of his preference for maximum direct assistance with a minimum of red tape. Bhisatej proved to be the ideal leader.

Although Bhisatej had visited the hill tribes occasionally in the past, accompanying the king on his regular fact-finding tours, he now explored the highlands seriously. A helicopter lifted him to the most remote areas. For days on end he trekked from village to village, carrying his sleeping bag and other essentials in a backpack. Avoiding the pompous style of royal officials, who traveled with retinues and by elephant, he ate and slept in village homes, sharing in the local ways. In casual, face-to-face consultations he gained a practical knowledge of the hills and their people. Professor Punsri was his frequent companion on these explorations. Bhisatej named him superintendent and together they set the ROYAL PROJECT in motion.

In its first year of operation the PROJECT helped set up village schools and, here and there, introduced cooperative stores and rice banks. It subsidized a training course at Chiangmai University for border patrol policemen to teach them to double as school teachers; most importantly, it established an experiment station for temperate zone fruit trees at Suan Song Saen, 1,220 meters above sea level on the outskirts of Chiangmai. Here a team of plant specialists from Kasetsart set to work grafting Australian peaches to local root stock and began testing other temperate climate fruits—apples, pears, persimmons, and strawberries—for adaptability. Both Maejo Institute of Agriculture and Chiangmai University assisted in the PROJECT.

The ROYAL PROJECT's early work progressed by trial and error. Inevitably there were failures. The meticulously grafted peach trees failed to yield more than a handful of mature fruits; Australian peaches, researchers learned, require a longer period of chill than Suan Song Saen can provide. Other introductions, such as hybrid pigs, also failed. The animals were such voracious eaters that they attacked the village chickens.

Despite setbacks, the ROYAL PROJECT gained momentum. To advance research in temperate-zone fruit trees, Bhisatej and his advisers crisscrossed the highlands by helicopter searching for a better site. High in northwest Chiangmai Province, nestled hard by the Burmese border, he found Ang Khang Valley—a five-kilometerlong, fourteen-hundred-meter-high trough surrounded by peaks rising another two hundred meters. Yao and Lahu tribesmen in the area attested to Ang Khang's suitability for growing opium poppies—many of the hills were covered with them. But what attracted Bhisatej's attention was the proliferation of wild apples, peaches, and other fruits growing there. He realized he had found one of Thailand's chilliest spots with the country's longest frost period—an area eminently suitable for temperate climate trees.

Opium-dealing Kuomintang Chinese had recently established themselves in Ang Khang after having been driven from Burma, and there were still skirmishes in the area. For this reason most of the local tribesmen had left. Besides, much of the land had already gone over to *imperata* grass, the result of too much slashing and burning. Without disturbing the Chinese, Bhisatej set aside twenty-five hectares for a new research station.

The discovery of Ang Khang Valley was soon followed by another bit of good fortune. The king made it a habit to inform foreign diplomats about his efforts in the highlands, and he was quick to express his gratitude for gifts and donations that advanced them. Alert to his enthusiasms, Dr. Shen Chang-huan, the ambassador from the Republic of China (ROC) in Taiwan, notified his government about Thailand's need for fruit saplings, vegetable seeds, and expert assistance in developing mountain agriculture and recommended the ROC offer its assistance. His government listened; to explore the idea further it turned to the Vocational Assistance Commission for Retired Servicemen (VACRS), Kuomintang army veterans who for many years had been developing temperate-zone fruit plantations in Taiwan's own central highlands. VACRS selected Soong Ching-yun, deputy director of one of its farms, to visit Thailand and make an on-site report.

Soong and his small Taiwanese team set up a primitive base camp in the Ang Khang Valley and in early 1971 began planting saplings that had been airlifted from Taiwan. For seven months Soong watched his peaches, pears, persimmons, and plums blossom and thrive. His optimistic prognosis for the development of the area led VACRS to prepare a long-term assistance plan, and eventually to the formal establishment of the Royal Ang Khang Agricultural Station. Soong and his technicians agreed to stay in Ang Khang indefinitely and established a relationship with the ROYAL PROJECT so vital that it survived the break in diplomatic relations between the two nations in 1975. With their help, Bhisatej and Kasetsart's scientists developed Ang Khang into the centerpiece of the ROYAL PROJECT's plan to bring new cash crops to the hills.

Help for the PROJECT arrived from other quarters as well. Fifteen hundred apple saplings were provided by Australia, as well as rustresistant varieties of *arabica* coffee that had been developed in Papua New Guinea. (Bhisatej personally discovered the existence of this coffee one day while conversing with a Papua New Guinea district officer.)

The PROJECT also attracted the attention of the United Nations Development Program (UNDP) and the United Nations Fund for Drug Abuse Control (UNFDAC). Together the agencies established a fund to underwrite research programs—some seventy by 1988—connected with the ROYAL PROJECT's research centers. Under a UNFDAC program, for example, small teams of young graduates, led by Kasetsart-trained experts, fanned out into hill villages to introduce crops like coffee and kidney beans; the drug people worked separately from the program, with Prince Bhisatej providing liaison. Although this program was phased out after only a few years, it was important in pioneering a technique for introducing research "successes" into villages; the ROYAL PROJECT would use its organizational plan with great effect in years to come.

Moreover, this program led to a particularly serendipitous encounter. One day while visiting the UNFDAC offices, Bhisatej met four representatives of the Agricultural Research Division of the U.S. Department of Agriculture (USDA). They had come to Thailand scouting for government agencies interested in finding replacement crops for opium. The result was that the United States gave the program 3 million baht, "with no strings" as to its use. This windfall permitted a massive expansion of the ROYAL PROJECT. Bhisatej ploughed it into more research. Since then the United States has been the biggest contributor, funding twenty research projects at the cost of 23 million baht between the years 1973 and 1977 alone. It was primarily USDA money that supported studies on the practicability of raising strawberries, potatoes, onions, mushrooms, silkworms, dye plants, and pyrethrum—a variety of chrysanthemum used in making insecticides.

In addition to the above importations, PROJECT-affiliated researchers at Ang Khang and elsewhere have experimented with decorative ferns, ornamental pines, and herbs; bees; and pigs, mules, and other livestock. They have tested the adaptability of nectarine, apricot, oriental pear, pecan, walnut, and Chinese chestnut trees, and have tried planting grains and grasses suitable for fodder.

To reforest the hills and rehabilitate the Ang Khang watershed, the Royal Forestry Department introduced new, fast-growing acacias, pines, and cedars; and to connect the valley to outside markets the PROJECT persuaded the Rural Development Highway Department to construct a twenty-two-kilometer road to the lowlands.

As the ROYAL PROJECT expanded, Ang Khang became the model for other research stations spread throughout the highlands: Pang Dah and Inthanon Royal research stations; Sa Moeng Plant Garden; and Doipui and Khun Wan working stations. At these sites, researchers and volunteers from several Thai universities and government agencies worked hand-in-hand with the PROJECT's own small staff and its foreign helpers. Bhisatej's role as coordinator was crucial. Under his energetic but easy-going leadership the PROJECT advanced on all fronts at once. Slowly but surely, opium poppies began to give way to fruit trees, coffee bushes, and garden vegetables.

As the ROYAL PROJECT's research became increasingly advanced and thorough, Bhisatej turned his attention to outreach. He set up a network of demonstration sites and extension centers in the northern provinces. Some were attached to the main research stations, but most were sited in remote village areas. Here young graduates in agriculture, aided by four or five assistants trained at the PROJECT's main stations, introduced successful replacement crops to six to twelve villages in their immediate vicinity. Nowadays twenty-seven centers reach 270 villages throughout the highlands, bringing the results of the PROJECT's research directly to upland tillers. As Prince Bhisatej says of his teams, "they're in the villages and they know everybody." Alert to which new plants are best suited to each village's ecosystem and circumstances (e.g., degrees of remoteness), the extension team canvasses local farmers, asking if they would like to try to grow site-specific fruits, nuts, or vegetables. It then supplies them with the necessary plants or seeds, supervises the original planting, and monitors the crops' progress. There is a small charge for everything; the king firmly believes that nothing should be given away free.

Many of the ROYAL PROJECT's new crops require inputs and techniques unfamiliar to hill farmers. Bhisatej points out, for example, that when introducing strawberries to new areas, the extension workers not only provide the "runners" from the PROJECT farm but teach the farmer how to make and apply mulch, see to it that the plants are irrigated properly, and supply and supervise the application of fertilizers and fungicides. In consequence villagers learn to approach the PROJECT's extension workers when something goes wrong, and they in turn consult PROJECT experts if necessary.

The PROJECT runs a plant clinic where experts in plant diseases and predatory insects give practical advice. It also provides workshops and demonstrations for staffers and "key farmers" who will, it is hoped, become agents for innovation in their home villages. Through efforts such as these, the PROJECT has reached some thirty thousand hill farmers. The direct link between research and extension work is the key to its success.

Like human beings the world around, Thailand's hill tribes accept change reluctantly. Yet they are practical people who make rational adjustments to new circumstances. Taking up the cultivation of opium a few generations back was just such an adjustment. The ROYAL PROJECT's approach to weaning hill farmers from poppy growing appeals to this same sense of practicality. It shows farmers that by switching from poppies to peaches, coffee, or strawberries, they will be rewarded with both higher and more stable incomes—the latter because police interdiction of the opium trade makes that market unpredictable. However, the PROJECT itself is not involved in the enforcement of opium laws.

The PROJECT's approach is completely nonauthoritarian; it operates entirely by suggestion and example. The planting of flax provides a good example. Thailand's burgeoning linen industry has made this fiber-yielding plant potentially profitable to hill farmers; the PROJECT has conducted extensive research on its adaptability to upland climates and soils and found it promising. But, as Bhisatej points out, the PROJECT cannot make people grow flax; all it can do is tell its extension workers how flax is grown, the cost, the probable yield, and the approximate income per hectare. The extension workers go back to the villages and say: "We have a new thing called flax. Would you like to try it?" If the villagers want to try it, they will, but the PROJECT does not pressure them. The results, however, are there for them to see.

The farmers who have adopted PROJECT ideas have prospered. By 1988 those who had learned strawberry cultivation from the Royal Inthanon Station were earning the equivalent of U.S.\$2,000 a year—twice the average Thai income. Others, growing apricots, were earning U.S.\$1,000 from one-hectare orchards. Profits from coffee were even higher. For instance, Lao Law, a hill farmer who had sold his annual opium crop for around U.S.\$800, reported making U.S.\$2,400 from his first coffee harvest. As other hill farmers have observed that coffee, fruits, and garden vegetables yield profits two to three times higher than opium, they also have switched.

Simply introducing new cash crops to the farmers has not been enough, of course; they must be marketed. Here, too, the ROYAL PROJECT has helped. PROJECT staffers and volunteers buy fruits, vegetables, and other products directly from the farmers—paying the market price minus 20 percent to cover expenses—and in turn truck the produce to Chiangmai and Bangkok. Here PROJECT volunteers grade, package, and sell them. Supermarkets and hotels in Bangkok now routinely carry these fresh products from the hills.

In Chiangmai, Chiangrai, and Bangkok, the ROYAL PROJECT also processes the hill products—lychees, tomato juice, bamboo shoots, baby corn—into jams and canned goods, which it then distributes locally or exports. In Thailand the PROJECT sells its food products under the brand name Doi Kham, or Golden Mountain, which everyone recognizes as the logo of the king's PROJECT. Today Golden Mountain items net approximately U.S.\$115,000 a year!

Some buyers from the metropolis no longer wait for the ROYAL PROJECT truck to come to them, but go directly to upland growers. This is exactly what Prince Bhisatej desires—for the PROJECT's initiatives to generate economic development by their own momentum. Indeed, if all goes according to plan the ROYAL PROJECT will one day become redundant.

In the meantime the PROJECT keeps experimenting. A recent development is growing temperate zone flowers. These were luxuries, once available exclusively to those who could afford blossoms flown in from Holland. But PROJECT researchers found that carnations, chrysanthemums, gladioli, lilies, and even long-stemmed red roses grow beautifully in Thailand's mountains. To understand flower production and marketing, Bhisatej personally inspected the commercial flower-growing centers in the Netherlands.

Flowers are a perfect cash crop because they are lucrative and require little space. But to be profitable they must reach the market quickly; the PROJECT makes this possible. In upland villages farmers cut flowers early each morning and, to retain freshness, subject them to "quick cooling" in a refrigeration unit designed by PROJECT engineers. The flowers are then packed in a refrigerated truck and taken to the PROJECT's packing house on the campus of the University of Chiangmai, and then to Bangkok. Early the next morning, still fresh, they are for sale.

Not all hill farmers can grow flowers. Most of them are too far from roads to get the blooms to market quickly. Although the transportation infrastructure of northern Thailand has grown rapidly under ROYAL PROJECT urging (the actual work is carried out by regular government departments), most of the farms are still more than a day's distance from a road. In such areas the PROJECT recommends products that can be brought to market more leisurely, like coffee beans or, perhaps someday, cattle. A few pure-bred European beef cattle recently introduced to the mountains appear to be thriving. The ROYAL PROJECT is watching closely.

For a number of years the USDA was the major outside funder of PROJECT activities. This funding was eventually phased out, but the PROJECT still obtains about one-third of its annual budget of some 72 million baht from outside sources—with large grants from the United States, the UN Food and Agriculture Organization, the UNDP, and Taiwan, plus dozens of smaller contributions in money, plants, and animals from other countries. (Prince Philip of the United Kingdom, who came to Thailand to sail, pleased his royal host with a gift of prize hogs.) Another third of the annual budget continues to come from the king's purse, and the last from the Thai government, which assigns funds for the PROJECT to the king directly so that he can disburse them outside bureaucratic channels. In addition, PROJECT activities receive a "hidden subsidy" from the government, since almost all its programs require and receive cooperation-and often labor and materials-from government agencies. This is especially true with regard to the departments of Agriculture and Public Works. Moreover, of the more than five hundred people who now work regularly for the ROYAL PROJECT, only two hundred are paid directly by it. The vast majority of the rest are volunteers, eager to work on "the king's program." Most do this while on leave from other government departments-which continue to pay them—some for a few days at a time, others for extended periods. In addition, some full-time PROJECT staffers are paid from the outside. Taiwan, for example, provides salaries and allowances for Thai

workers at Ang Khang and Pang Dah research stations, as well as for its own technicians.

Indeed, Taiwan's contribution has been one of the most meaningful. Taiwan's commitment to the PROJECT came early and was prompted by several interlocking goals. These included enhancing the republic's relations with Thailand; helping deter Chinese communist infiltration into the northern mountain areas; and assisting ex-Kuomintang communities settled there. To accomplish these goals Taiwan's contributions have been targeted carefully to advance the goals of the PROJECT itself. The Ang Khang Research Station has blossomed under the comradely guidance of Taiwanese expert Soong who, along with researchers from Kasetsart University, lives at the station and continues to lead teams of experts sent yearly from Taiwan. Over the years he has become so familiar to Ang Khang's villagers that they call him "Papa Soong," a nickname also used by Bhisatej and the king himself. Besides sending technicians to Thailand, the ROC invites PROJECT staff workers to Taiwan for advanced training at VACRS's mountain farms. Fifteen go annually.

For Ang Khang, Taiwan has donated specialized equipment, set up a weather station and water management system, cleared a fire belt, and constructed cottages and storage sheds; it has also helped the ROYAL PROJECT set up stations modeled after Ang Khang. Moreover, the ROC has introduced new trees that can help retain the soil of the watershed, and special crops like fungi, peppermint, and pyrethrum. As gifts to the king, the ROC built a Chinese-style pavilion near his Chiangmai palace and a guest lodge at Ang Khang. The lodge is surrounded by flowers and vegetable gardens; apple, apricot, and pear orchards are planted on nearby hills once carpeted with poppies.

For his part, King Bhumibol has often expressed his gratitude to the ROC for its contributions. On the twentieth anniversary of the establishment of the Ang Khang Station, he conferred upon Soong his personal medal.

In talking about the PROJECT, Prince Bhisatej constantly draws attention to the central role of the king. Although many projects in Thailand bear the king's name, the ROYAL PROJECT is unique in being wholly under his personal direction. (Other projects with a royal imprimatur are actually handled by regular government departments.)

From the time of the PROJECT's inception, the king has shown a fervid interest. Bhisatej visits him regularly to keep him up-to-date, and at least once a year the king inspects its activities personally. He insists

upon meeting upland villagers face-to-face and sits casually with them on the floor of their dwellings. They speak openly to him. In this way he gains a candid impression of their circumstances and of their response to his initiatives. Besides Bhisatej, the king is sometimes accompanied by other members of the royal family, including the queen. The Princess Maha Chakri Sirindhorn has taken a special interest in the ROYAL PROJECT and frequently joins him in these visits. Aside from his personal attention and interest, his patronage is crucial in other ways. The Thai love and respect their king and are eager to serve him. For this reason, people eagerly volunteer their time and skill. For the same reason, royal patronage helps market the Golden Mountain products. Bhisatej attributes his own energetic stewardship to his personal respect and affection for His Majesty-to whom he ascribes profound feelings of empathy and concern for his subjects, feelings which arise, he says, not from a sense of noblesse oblige but from a deep concern for humanity.

Today the king's vision for the highlands is coming true. The ROYAL PROJECT is changing the life of Thailand's hill tribes. Although at first villagers accepted the PROJECT's substitute crops warily, they now come to its stations eagerly. Some farmers still grow opium poppies, it is true, but they do so mostly for their own use. About this the ROYAL PROJECT takes a lenient attitude. As Bhisatej says candidly, "What's the harm of letting [the old people] smoke?" As for commercial cultivation, Thailand's share of the gross output of the Golden Triangle is now less than 5 percent. From a peak of some 150 tons in 1969, the Thai hills now yield a mere twenty tons a year to the world market, a decline of 87 percent since the start of the ROYAL PROJECT. Thailand hopes that by the end of the century, opium poppies as a cash crop will have been completely eradicated in Thailand.

Reducing the supply of opium is of major consequence to the rest of the world, but for Thailand itself there is another, more profound consequence. Thailand's hills are no longer a world apart. By facilitating the replacement of clandestine opium poppies with new temperate-zone cash crops, the ROYAL PROJECT is drawing hill farmers into the mainstream of Thailand's legitimate national economy. Moreover, with the PROJECT's research stations and extension centers have come roads, schools, and other elements of a modern infrastructure. Hundreds of lowlanders have come too—agricultural experts, marketing specialists, teachers, foresters, bridge builders. All of this is hastening the integration of the hill peoples into Thai national life and into a sense of national identity, which the king personifies. The once semi-stateless Lahu, Lisu, Hmong, and other hill tribes are slowly becoming true citizens of Thailand. The ROYAL PROJECT is making this possible because for Thailand's hill tribes it fulfills an ancient need and dream—to prosper through farming. As the Lahu people say:

May the yield from one day's work in the fields not be exhausted in ten days;

May the yield from one year's work in the fields not be exhausted in ten years.

September 1988 Manila

## **REFERENCES**:

Bhisatej Rajani, Prince. "His Majesty's Policy on the Opium Fields of Thailand." Speech delivered to the Franco-Thai Chamber of Commerce, Bangkok, 13 September 1977.

\_\_\_\_\_. Interview by James R. Rush. Tape recording, September 1988. Ramon Magsaysay Award Foundation, Manila.

. "The Royal Project: Alternative to Opium Growing." Paper presented at Awardees' Forum, Ramon Magsaysay Award Foundation, Manila, 2 September 1988.

- Hoare, Peter W. C. "The Movement of Lahu Hill People Towards a Lowland Lifestyle in North Thailand: A Study of Three Villages," Contributions to Southeast Asian Ethnography, no. 4 (August 1985).
- Kirby, John. "From Opium to Fruit," Free China Review. Taipei: Kwang Hua Publishing, February 1989.
- McCoy, Alfred W. The Politics of Heroin in Southeast Asia. New York: Harper and Row, 1972.
- Royal Project. Ang Khang. Bangkok: Agricultural Cooperative Federation of Thailand, 1978.
  - \_\_\_\_. Participation of Kasetsart University in the Royal Project. Bangkok: Office of Highland Agriculture Project, Kasetsart University, 1982.

Thongtham, Normita. "The Fruit of Industry." Bangkok Post, 4 December 1983.

- Vocational Assistance Commission for Retired Servicemen. Twelve Years' Cultivation in the Northern Highland of Thailand. Report on the 12th Anniversary of the Assistance of the Republic of China to the Royal Northern Highland Agriculture Project of Thailand. Taipei: VACRS, 1985.
- Walker, Anthony. "Opium: Its Cultivation and Use in Lahu Nyi (Red Lahu) Village Community in North Thailand," Contributions to Southeast Asian Ethnography, no. 4 (August 1985).
- Visits to Royal Project offices and Royal Ang Khang Research Station. Documents provided by the Royal Project. Interviews with and letters from persons acquainted with the Royal Project and its work.

