ABSTRACT

In recent decades, Thai elites have ecologically marginalized hill tribe farmers in northern Thailand. A region-wide population boom has fueled a ‘land grab’ by the elites and forced hill tribe farmers to live on less land with few off-farm options. The marginalized farmers are less secure in their livelihoods, and as a result, there has been conflict over resources between them and governmental authorities and ethnic Thais. This paper analyzes the hill tribes’ marginalization in order to assess the risk of heightened social conflict in the region. I chose hill tribe villages in the Mae Sa Valley as a “best-case” example of hill tribe “progress” in the past 30 years. The valley has exceptional locational advantages for economic development and it has had a long history of developmental assistance. The findings suggest that, even in this best-case example, ecological marginalization has hindered the advancement of the hill tribes in the region. Thailand’s government must recognize that the stability of its northern border depends in part on a wise environmental policy—one that conserves the forest and protects the security of people who live in it. Otherwise, heightened alienation, adversity and conflict between the hill tribes and competing elements of Thai society seem likely.

Key words: opium, human ecology, resource capture, social conflict, environmental security, Thailand

INTRODUCTION

Thailand’s mountainous northern borderland stretches for about 1,000 kilometers across five provinces (Fig. 1). The provinces were once part of the infamous Golden Triangle, a region where minority hill tribes in the conjoined border areas of Thailand, Burma (now Myanmar) and Laos produced most of the world’s opium. An addictive drug in its own right, opium is also the source of heroin, a more powerful drug and the drug of choice among addicts worldwide.
Since 1957, opium has been an illegal crop in Thailand (Geddes 1976, 106). During the
1960s and 1970s, illicit opium and heroin production fostered crime, financed armed
insurgencies, and threatened the security of the nations in the Golden Triangle region.
Some of Thailand's hill tribe villages became even greater threats to stability of the coun-
try when they sided with the now-defunct Communist Party of Thailand to wage an
armed revolt against the government (Sommart 1997). At the urging of Thailand's King
Bhumibol Adulyadej, the government began introducing alternative cash crops in the early
1970s to combat the growing drug and insurgency problems. The insurgency ended in
the early 1980s and the opium substitution program virtually replaced opium with other

Today, the Thailand government presents the hill tribes’ new ‘opium-free’ economy in
optimistic terms (Royal Project Foundation 2006). Contrary to the glowing review, how-
ever, a region-wide population boom over the last thirty years has fueled a ‘land grab’
by the elites and forced hill tribe farmers to live on less land. The resulting environmental
degradation and lack of non-farm options are making the livelihoods of the hill tribes less
secure. This study describes how Thai elites have ecologically marginalized the hill tribe
farmers. Ecological marginalization refers to a rural population's loss of access to land
and renewable resources to more powerful interest groups. This marginalization has
led to social conflict over resources between the farmers, governmental authorities, and
ethnic Thais. The conflict has ranged from negative social interaction (e.g., arguments,
criticism, hostility, unwanted demands), and occasional physical violence. As we shall see,
the hill tribes have few off-farm options, in part because government policies restrict their
travel, land use rights, and citizenship. Hill tribe participation in public protests against
government forestry policies in recent years is evidence of the frustration and insecurity
they feel regarding their marginalization (Chupinit 2005, Yanuar 2005).

Despite Thailand’s well-documented de-
cline in population fertility rates since 1990,
the pressure of population growth and grow-
ing resource scarcity in the hill tribe areas of
northern Thailand is not going away any time soon. The population fertility rate of the hill tribes has been declining, but it is still well above the minimum natural replacement rate (Gray et al. (2005). For more than three decades, the government of Thailand has been promoting social and economic development of the hill tribes in an effort to integrate them into Thai society. Will the social and economic progress of the hill tribes counter future ecological pressures? Alternatively, are the hill tribes’ present insecurities going to heighten and accelerate future social conflict in the region? I attempt to answer these questions by examining hill tribe villages in the Mae Sa Valley in northern Chiang Mai Province. This paper focuses on the impacts of population growth and resulting social and economic changes in the valley from the early 1970s to the present. The study ends with a discussion and final remarks concerning the ongoing conflict and future hill-tribe security in the border region.

I selected the Mae Sa Valley for study because the hill tribe people living there have had extraordinary opportunities for interaction with Thai lowlanders, much more than many others in northern Thailand. The Mae Sa Valley Hmong began receiving developmental assistance in the early 1970s, at least a decade before government aid reached the majority of hill tribe people in the region. By the end of the 1970s, the valley had road access to lowland markets and was within the sphere of economic influence of Chiang Mai, northern Thailand’s largest city. The valley’s physical access remains advantageous compared to highland valleys in the region in general. Rika Fujioka (2002) reported recently on improving educational opportunities in the hill tribe villages of the region. The report found that, “...distance to villages is a major obstacle” and that it is “extremely difficult to extend services to a large number of these widely scattered villages, as it requires a high investment in terms of personnel and financial resources.” Fujioka goes on to state that “there still remains a large area [in northern Thailand] not covered by service agencies (Fujioka 2002, 18).”

The Mae Sa Valley’s relative location forms a double-edged sword. The hill tribe people in the valley have had a great opportunity for social and economic integration, but simultaneously the valley’s location makes them more vulnerable to ecological marginalization by Thai elites. Despite the paradox, the hill tribe peoples’ success in dealing with the pressures of ecological marginalization is probably greater than that of hill tribe people living in other areas of the region. They have had the comparative advantages of early access to markets and early governmental assistance. I therefore use their level of marginalization as a “best case” standard for gauging the marginalization of hill tribe people elsewhere in northern Thailand.

Thomas Homer-Dixon’s model of ecological marginalization and its linkage to social conflict is the conceptual basis of my analysis. He describes how a decrease in the quality and amount of a society’s renewable resources due to population growth can force powerful groups to grab more resources, “such as crop-land and forests, that are easy to privatize and divide into saleable units (that are, in economists’ terms excludable)” (Homer-Dixon 1999, 74). This outcome, which he calls “resource capture,” can produce dire environmental scarcity for poorer and weaker groups. According to Homer-Dixon’s model, population growth usually drives marginalization of the weaker groups—more population growth leads to more resource capture and to greater resource scarcity and marginalization. Migration by the marginalized population to less desirable land eventually occurs, but the cycle continues due to unrelenting population pressures. Homer-Dixon and others argue convincingly that the coupling of resource capture and ecological marginalization can drive violent social conflict between ‘haves and have-nots’ (Homer-Dixon 1994, 1999, Kaplan 1994, Homer-Dixon and Blitt 1999, Manwaring 2002, Eddy 2004, Winter, et al. 2006). The Thailand situation differs from the model slightly. The government rather than private enterprise has been the primary agent of resource capture, although private investors have often been beneficiaries of governmental actions.
A great deal of scholarly research connects social conflict to resource scarcity (Grundy-Warr 1990, Kaplan 1994, Homer-Dixon 1999, Kaimowitz 2005). Homer-Dixon and Blitt have concluded that the connection between demographic pressures and environmental scarcity is—in varying degrees—the underlying cause of complex conflict (1999). Peluso and Watts (2001), conversely, have compiled a collection of studies that show social conflict in several countries and regions resulting from non-population variables, such as inefficient economics, unjust social systems, repressive governments, and even warfare (2000). In fact, Peluso and Watts assembled their volume specifically to counter the Malthusian premise of Homer-Dixon’s model. The two approaches to explaining environmental insecurity and social conflict remains a subject for debate. I take the middle ground; I believe that the two volumes demonstrate that both approaches have merit on a case-by-case basis. In Thailand’s case, I have chosen to use Homer-Dixon’s model as a basis for the analysis, because other authors have linked environmental insecurity to population growth in the region (Anan, 2000, Buergin, 2001, Chupinit and Prasert 2005, Cooper 1984, Kundstadter 1986, Kundstadter et. al. 1993, Walker 2001, Vandergeest 2003, Yanar, 2005). My study provides a more in-depth case study of this linkage and clarifies the urgency with which Thailand must act in order to diffuse peacefully the emerging social conflict along its northern border.

The Hmong ethnic group makes up nearly all the hill tribe population of the valley. Thailand has six major ethnic hill tribe groups living in 20 provinces for a total population of about 800,000 people. About 500,000 of this total are concentrated in the five borderland provinces. In addition to the Hmong, the Yao, Lahu, Lisu, and Akha grew opium along the border until the 1980s. These five hill tribes have a total population of about 300,000 people living in border provinces. Originally from China, they began arriving in Thailand from Burma and French Indochina in the 1880s. They tended to settle along China-to-Bangkok caravan routes, in areas above 1,000 meters where climate was favorable for cultivation of opium, which, by then, was the major cash crop of the Hmong (Culas and Michaud 2004, 67, Crooker 1985, Michaud 1997). The Karen, a sixth major group, includes most of the remaining 200,000 hill tribe people living in the borderland. This group migrated from southern Burma into Thailand and began settling in Mae Hong Son and Chiang Mai provinces about 200 years ago or more (Kunstadter and Kunstadter 1993). The earlier Karen arrivals found lower valley bottoms and slopes underpopulated and available for settlement. They were not prominent opium producers, although the other hill tribes often hired them to work in opium fields. Some Karen villages eventually located at higher elevations in order to be close to their opium-growing employers or because population growth and resource scarcity forced them to move there.

In this paper, I assume that the Hmong in the Mae Sa Valley are trying to adapt to ecological marginalization in ways similar to the other hill tribe ethnic groups. At first glance, this assumption might appear to be problematic. In the 1960s and 1970s, there was considerable research dealing with how and why the Hmong, for instance, are different from the Karen in their usage of resources. The studies labeled the Karen as conservative farmers and Hmong as shameless, slash-and-burn farmers who are less willing or unable to change their wasteful use of the forest (Geddes 1976, Keen 1976, Sanga 1970, Young 1966). These early studies suggested that such divergent peoples could not adapt similarly to growing pressures of ecological marginalization. However, most recent research suggests that the growing competition for increasingly scarce resources has given all the hill tribes significant social and economic incentives to manage their resources better, as they try to achieve sustainable agriculture and permanent settlement. These studies demonstrate how hill tribe people are flexible in adopting strategies to increase cash incomes and elements of Thai culture, Some of the adaptations are through commercial means,

None of the recent studies constitutes an in-depth, up-to-date longitudinal study of hill-tribe marginalization like the one I am presenting here. The baseline information includes several primary sources from the early 1970s, including hill tribe population censuses conducted by the former Tribal Research Centre in 1971 and 1974 (TRC 1971, TRC 1974). Other sources of information are the studies of F. G. B. Keen, who also collected data about the hill tribes in the valley in 1971 and 1974 (1971, 1974, 1976). Keen’s data are exceptionally useful, as he provides early information about living conditions of hill tribe villages in the early 1970s, which is rare. Furthermore, the four Hmong villages that Keen studied still exist today. I have focused primarily on three of them—Mae Sa Mai, Bauk Chan, and Pha Nok Kok—for which data from the recently closed Tribal Research Institute are available for comparative analysis.¹ My comparisons with Keen’s fourth village, Nong Hoi, are less frequent, as equivalent modern data is spotty. Government reports and the work of other scholars were valuable sources of information too. Additionally, since 1982, I have undertaken nine field investigations in northern Thailand and conducted interviews in approximately forty hill tribe villages, and I have drawn some of my conclusions based on these investigations.

SETTLEMENT OF THE MAE SA VALLEY

The Mae Sa Valley is about 30 kilometers north of the city of Chiang Mai, Thailand’s second largest city and the northern region’s center for tourism. Situated in the northeast section of the Inthanon Range, the valley is in the Mae Rim District of Chiang Mai Province (Fig. 1). Two tambons (administrative subdistricts) make up the valley—Pong Yaeng Nai and Mae Raem. A descent down narrow roads from the rugged rim of the Mae Sa watershed—where hill tribe villages are—to where the Mae Sa stream empties into the Mae Ping (Ping River) is emblematic of the hill tribes’ relative social isolation from Thais living in the valley and adjoining lowland. As we shall see, in addition to social separation, this descent reveals palpable differences in economic conditions among Hmong, hill Thais, and lowland Thais.

Two general groups of Thais compete with the Hmong for land, water and soil resources. “Hill Thais” are ethnic Thai people who started emigrating from the Mae Ping lowland in the late nineteenth century to live in small, underdeveloped highland settlements. Anchalee Singhanetra-Renard (1982) documents the early hill Thai settlement of the Mae Sa Valley. She describes how they migrated to the valley several decades—at least—before the hill tribes did. They came from lowland villages near the juncture of the Mae Sa and Ping rivers. At first, their settlements were work camps for lowlanders seeking to supplement subsistence incomes. They stayed temporarily in the camps to pick and ferment leaves of the wild tea plant (Camellia sinensis) in order to make miang for sale in the lowlands.² By the 1920s, the work camps—Kong Hae, Pong Yaeng Nai, Mae Mae, and Mae Raem—became permanent settlements of subsistence farmers. According to Singhanetra-Renard, in addition to collecting tea, the hill Thais grew rice and vegetables in small, irrigated plots on flat land and in swiddens on sloping land. She describes how the hill Thais gradually settled higher up the valley slopes, above elevations where wild tea
can grow, seeking more land for their swiddens. In the early 1940s, they founded Ban Pang Ha and Ban Mae Ki, the highest Thai villages in the valley, at 810 meters and 925 meters, respectively. The hill Thais conducted commerce with itinerant traders who came from the lowlands by foot and oxcart along a tenuous dirt track. According to Keen (1974), the Thai government upgraded the track to an all-weather road, giving traders with pickup trucks rapid, all-season access to the valley in 1974.

Today, the majority of Thais living in the valley are not hill Thais. Most Thais today are urban Thais, because they reside in larger settlements that possess modern urban functions. Such settlements are centers of prospective employment, education, and health care for Hmong, as well as hill Thai people. This second group of Thais began appearing in the valley in the early 1980s, when I first visited the valley. Investments from businesses outside the valley were just beginning to pour in, creating jobs and spurring a phenomenal rise in population. The construction of many vacation homes for wealthy Thais was also apparent. Government population data reveal that Mae Rim District had the greatest increase in population density among all districts in Province in 1970-2002, excluding the district in which the city of Chiang Mai is located. Moreover, the Mae Sa Valley accounted for 45% of Mae Rim District’s population growth, making it one of the fastest growing areas in Chiang Mai Province (Office of Population Census 2002).

Hmong people came to the Mae Sa Valley later than the Thais did, although the timing of their arrival is uncertain. Renard states that the area was a major Hmong opium-growing center before the Second World War (Renard 2001). Comments by Cooper (1984, 70-77) and data from the Tribal Research Centre (Table 1) suggest that the present villages were in place by the mid-1960s. The Hmong settled above 1,000 meters where the climate permitted them to grow opium. Opium was a traditional crop that they grew for sale or barter, as well as for medicinal purposes. Keen (1971, 1974) describes these villages as temporary clusters of houses built on sloping land; there were no roads, streets,


<table>
<thead>
<tr>
<th>Village</th>
<th>Year Established</th>
<th>1970</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mae Sa Mai</td>
<td>1961</td>
<td>557</td>
<td>1,797</td>
</tr>
<tr>
<td>Buak Chan</td>
<td>1964</td>
<td>73</td>
<td>859</td>
</tr>
<tr>
<td>Pha Nok Kok</td>
<td>1962</td>
<td>117</td>
<td>441</td>
</tr>
<tr>
<td>Nong Hoi (Kao)</td>
<td>1956</td>
<td>246</td>
<td>950</td>
</tr>
<tr>
<td>Nong Hoi Mai</td>
<td>NA</td>
<td>__</td>
<td>1,035</td>
</tr>
<tr>
<td>Bauk Taey</td>
<td>1960</td>
<td>__</td>
<td>396</td>
</tr>
<tr>
<td>Mae Sa</td>
<td>NA</td>
<td>282</td>
<td>__</td>
</tr>
<tr>
<td>Mae Ki</td>
<td>1956</td>
<td>__</td>
<td>239</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>993</td>
<td>5,717</td>
</tr>
</tbody>
</table>

*aOriginal village of Nong Hoi
*bOffshoot of Nong Hoi Kao after 1970
*cNot included in the 1970 survey
*dMoved voluntarily from the valley after 1970 survey
*eThis village is a combined Thai and Hmong village. Originally, it was a hill Thai village. The Tribal Research Centre did not record such villages in its 1970 survey. Only the Hmong portion of the village’s 2002 population is included in this table.
fences, sanitation, piped water, electricity, or schools. The houses had dirt floors, hand-hewed planks for walls, and grass-thatched or shingled roofs. Blacksmithing was the only specialized occupation, as villagers used horses to transport trade goods and crops. Keen’s four Hmong villages had ten blacksmiths. The larger villages probably had at least one general store; an enterprising Chinese “Haw” merchant (a Muslim from China’s Yunnan Province) was usually the proprietor of such a store. The Thailand government built the first road to a Hmong village in the valley in 1971—a narrow, dry-season road to Buak Chan—so that government officials could have access to the village (Sanit 1975).

Data from the Tribal Research Centre (1971 and 1974) and observations by Keen (1974) indicate that the higher elevations were experiencing a rapid influx of Hmong by the early 1970s. A civil war in Laos between government and communist forces spurred some of the immigration. Hmong people fought on both sides of the conflict, but mainly on the side of the government, which lost the war to the communists in 1975. Although it is undocumented, the inflow of hill people from Laos probably accelerated internal movements within Thailand that brought Hmong to the valley. Since 1970, the ratio of Thais to Hmong people decreased from about 4:1 to 2:1 (Table 2). The growth in the Hmong population was due to a high rate of natural increase as well as immigration (Crooker 1986). The villagers attempted to alleviate the population pressure by expanding their cultivated land area, even though the land belonged to a newly established national park where farming was illegal. From 1974 to 2000, the land farmed by Mae Sa Mai, Pha Nok Kok, and Buak Chan increased from 236 to about 774 hectares. Despite the spatial expansion, population density of Mae Sai Mai, Buak Chan and Pha Nok Kok increased 64% overall (Keen 1974, TRI 2000).

RESOURCE CAPTURE

The natural resources of the Mae Sa Valley have been affected by the same political, economic, and demographic exigencies that have affected the resources of northern Thailand as a whole since the mid-twentieth century (Tomforde et al. 2002). According to a government report, rising global market for timber and a growing hill Thai population led to rampant deforestation throughout the region (ICEM 2003, 78). The report notes that the reduction of Thailand’s forest cover accelerated in the 1960s and 1970s as the government, with World Bank support, encouraged the expansion of cash cropping, as well as timber harvesting. Moreover, according to the report, the roads penetrating the logged-over areas drew squatter settlers from the lowlands. Although the government imposed a strict ban on logging in 1989, illegal logging and squatter encroachment continue to reduce the forest cover today. The lowland squatters are an overflow from Thailand’s burgeoning populace since 1950. The country’s population was 23 million and its forest covered 60 percent of the country in the early 1950s. Today, the population is 63 million, and the country’s forest cover was down to 33 percent in 2001 (National Statistical Office 2006). Nearly all of the lost forest cover was in northern Thailand (ICEM 2003, 78). By the end of the 1990s, population growth in Thailand resulted in an estimated 12 million people living on land that the legislature had designated as National Forest Reserve decades earlier (Buergin 2000).

The Royal Forestry Department (RFD) was and continues to be the main instrument of commercial resource capture in the country (Yanuar 2005). The RFD was established

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>1970</th>
<th>2002</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thai</td>
<td>3,600</td>
<td>10,430</td>
<td>190%</td>
</tr>
<tr>
<td>Hmong</td>
<td>993</td>
<td>5,717</td>
<td>476%</td>
</tr>
<tr>
<td>Total</td>
<td>4,593</td>
<td>16,145</td>
<td>252%</td>
</tr>
</tbody>
</table>

in 1896. Until the 1960s, the department’s primary goal was to conserve the northern forest for logging interests, as logging concessions were an important source of revenue for the government. Commercial logging took place at elevations below 800 meters where magnificent stands of teak (Tectona grandis) grew. Teak was the most valuable forest product for both domestic and foreign markets. Local markets also demanded other species for construction material, railroad ties, fence posts and firewood. While Thais exploited the commercial timber of the foothills, hill tribe immigrants from China, Burma, and Laos quietly established villages above the teak zone in increasing numbers. Several authors describe how the government considered the hill tribes, who were not citizens, as invaders of the forest (Buergin 2001, Vandergeest 2003, Yanuar 2005). Even so, the hill tribes’ slash-and-burn, migratory agriculture was of little concern to the Thailand government at the time, as they were settling in unpopulated land that had few commercially valuable trees. Indeed, the hill tribes’ opium production was for a time an asset to the government, as they sold their opium legally to the government-run Opium Monopoly. That partnership ended abruptly, as Thailand responded to international pressure and declared the drug illegal in 1957 (Yanuar 2005).

Resource capture in hill tribe areas above the commercially valuable teak stands began in the 1960s, in part because of a growing global awareness of the ecological as well as commercial value of forests (Yanuar 2005), but also because landless Thais were moving into the remaining teak areas in large numbers (Uhlig 1980). Thailand responded to the ecological and commercial pressures by passing a series of legislative acts to preserve forests: the 1960 Wildlife Preservation Act, the 1961 National Park Act, the 1964 Reserved Forest Act, and the 1964 Forest Conservation Act. In effect, all inhabited or uninhabited forestland, to which the government gave no definite boundaries, became property of the state. Under provisions of the National Forest Policy Act (1985), the RFD began defining and demarcating more precisely a system of Protected Areas (watersheds, national parks, reserved forests, and wildlife sanctuaries). The acts of the 1960s and the Protected Areas system of the 1980s eliminated any possible usufructuary claims that the former opium-growing hill tribes had to forestland, as virtually all such villages were included within or next to protected areas of forest (Buergin 2001, Yanuar 2005). Moreover, in the mid-1980s, the government gave the Royal Forestry Department the power to force hill tribe villages to relocate out of forested areas, which the RFD has done, periodically, ever since (Anan 1996, Chupinit 1988, Chupinit and Prasert 2005). At the same time, the military became more active in opium eradication and therefore assumed a greater role in hill tribe affairs, including enforcement of RFD resettlement policies (Buergin 2001). The military is still the primary enforcer of resettlement for the RFD today.

The history of resource capture in the Mae Sa Valley parallels that of the northern region in almost every way. During the 1960s, due to environmental legislation, the valley became a protected watershed area under the Forest Conservation Act. The higher elevations, where the Hmong reside, became forest reserves. A boundary of a National Park created by the government adjoined the valley to southwest. According to Sanit (1975), a researcher for the government’s Tribal Research Center, teak logging and the agriculture of hill Thais and Hmong destroyed half of the valley’s forest cover by the mid-1970s. He concluded that the Hmong felt that occupancy of the valley was temporary due to the pressure of a growing Thai presence and a vanishing forest. The land shortage was already forcing some of them to catch buses or to walk two to four hours each way in order to clear swiddens in neighboring Samoeng District (Sanit 1975). The headmen of Mae Sa Mai and Pha Nok Kok were considering moving their households to that district. Conversely, other households were investing their labor in terraces on hill slopes for high yielding, wet (paddy) rice cultivation. Nearly 30% of the households had already devel-
Opened some irrigated terraces. Moreover, Mae Rim District officers were reportedly illegally registering land titles to Hmong householders who irrigated land, and at least one head of household used his title as collateral to purchase a van in Chiang Mai (Sanit 1975). Despite the growing pressures to leave the Mae Sa Valley in the early 1970s, the four Hmong villages that Keen studied remain today. A fifth village resulted from the growth and division of one of the villages—Nong Hoi—into two villages—Nong Hoi Kao (the original village) and Nong Hoi Mai.

By the mid-1980s, competition for land was so intense in the valley that influential Thai business interests were often purchasing large plots in the forest illegally with the help of corrupt officials (Quinn 1996, 113). Realizing that Thailand’s forests were vanishing due to market pressures, local RFD officials in the valley enforced policies of the Protected Area system. Since the mid-1980s, these officials have diligently enforced a ban against burning forestland in hill tribe areas, and they have been planting trees in abandoned swiddens as part of the national reforestation policy. More recently, following the 1992 Forest Farm Act, various other government departments have helped Thai businesses exploit the forest for commercial purposes by opening up roads into the highlands (Anan 1996, 202). Forestry officials have also intensified the pressure of population containment by forbidding the building of more hillside terraces for cultivation, as terraces would take up more forestland. Laws also prohibit the gathering of traditional forest products such as honey, resin, wasp eggs and rattan. Nevertheless, in recent years, the RFD recognized that the forest squatters were engaged in sustainable agriculture and sold crops in lowland markets. As a result, the RFD set in place programs that give usufruct rights to individual Thai occupants in highland areas, but not to members of hill tribes (Giné 2005).

The capture of forest resources and the ensuing economic growth has benefited the valley’s main Thai towns of Pong Yaeng Nai and Mae Raem. Due to opening of the land to Thai business interests, these centers now have banks, hotels, schools, medical clinics and a wide variety of retail businesses and services. The larger Thai towns also provide off-farm employment. Particularly important is the large tourist industry that employs mostly ethnic Thai residents in restaurants, at sightseeing waterfalls, an elephant “camp,” and “farms” for orchids, monkeys, and snakes. Additionally, wealthy Thais from outside the valley own expensive summer homes and employ valley residents, including some hill tribe people, as maintenance workers, gardeners, cooks, and house cleaners (Renard 2002). Similar jobs are also available at exclusive vacation hotel resorts catering to wealthy Thais and visiting international dignitaries. Valley dwellers also find employment on large Thai-owned commercial farms that produce flowers, strawberries, fruits and vegetables for lowland towns along the Mae Rim highway and for the city of Chiang Mai. Moreover, farmers own pickup trucks and deliver their produce to markets outside the valley.

The valley’s hill tribes might have defended themselves against resource capture had they been citizens when the land grab began in the 1960s. Without citizenship, however, the hill tribe residents of the valley had no legal right to own land, and at the slightest provocation, government officials could have arrested and deported them. By the late 1990s, all the hill tribe residents in the valley had become citizens (TRI 2000). However, by then, the RFD had officially drawn the boundaries of Protected Areas to include the hill tribe villages. In such areas, the government owns all forestland and has the power to resettle the villagers, even if they are citizens.8

ECOLOGICAL MARGINALIZATION

The Mae Sa Valley Hmong adjusted to population growth and resource capture by changing cultivation practices and abandoning livestock rearing. Originally, the Hmong were pioneer swiddeners, meaning they cultivated fields until they depleted soil fertility and then moved on to “pioneer” new areas with no plan to return to the original site. This practice was ecologically sound when...
there was ample forest. This was not the case in the Mae Sa Valley in the early 1970s. In the 1980s, the Hmong had adopted a second shifting cultivation system, rotational swiddening under the guidance of the Highland Area and Marketing Project (HAMP), a joint project between Thailand and the United Nations to substitute opium with alternative cash crops, and The Royal Project, administered by the government.

The new rotational swiddening system allows farmers to farm fields in rotation around a permanent village. A farmer clears a field in the forest, uses it for one or two years, and then clears another field nearby, and so on. After perhaps seven to ten fallow years, soil fertility in the first field returns and it can be cultivated again. The rotational system of shifting cultivation conserves land resources because it requires the burning of less forest. For instance, in the Mae Sa Valley, a comparison of Keen’s 1974 data and the TRI’s 2000 data reveal that the percentage of swidden land of Hmong villages has declined substantially (Table 3). Most of the land is in permanent usage for growing capital-intensive cash crops that require irrigation, roads, fertilizer, and pesticides. However, the new system is under stress. After a few years, soil deterioration sets in, and the farmers find themselves raising cash crops instead of rice (their main food crop) in order to pay for capital inputs to assure sufficient crop yields. The scarcity of land for growing rice causes them to seek land beyond their village territories. For instance, 60% of the Hmong farmers in the village of Mae Sa Mai must rent plots of land in the lowlands to grow rice due to a decline in soil fertility and rice yields and a shortage of land around the village. Some of the rented plots are twenty kilometers away, making the gross margins of such plots “modest” at best (Tomforde et al. 2002, 5). Recently, a Hmong leader in Mae Sa Mai complained to a visiting journalist that the new cropping system has deteriorated the fertility of the soil, diminished the supply of indigenous seeds, and raised concerns about food security and health risks in his village (Sakboon 2004).

In addition to these concerns, a comparison of data from Keen (1974) and the TRI (2000) reveals a significant decrease in the importance of animal husbandry in Hmong villages (Table 4). This decline is due mainly to the loss of accessible forestland. When the forest cover was abundant, the villagers could graze large livestock—cows, pigs and buffaloes—around the villages. Hmong typically raised cows and buffaloes to sell or barter, although they also rented buffaloes to paddy rice cultivators. The villagers usually ate the pigs and used horses for transporting crops from fields to the village. Nevertheless, in hard times, the Hmong sold the horses for cash or bartered them for supplies. The almost total disappearance of large livestock has diminished villagers’ cash income, food supply, and food security.

I have observed additional changes to the valley’s Hmong villages since my first visit there in 1982. More and better roads have reduced geographical isolation, although short segments require four-wheel drive capability in the wet season. Horses are outdated, so there is no blacksmith in any of the villages. Many homes and buildings are permanent, unlike their predecessors, which could be broken down and reassembled elsewhere. The floors are now concrete or wooden (not dirt), and roofs are tile or tin (not thatched). Women no longer carry water to homes; instead, plastic pipes convey spring water to common areas. Nearly all homes have gravity (stoop) toilets, electricity, a radio, and a motorcycle. About one-third of the households own televisions and about the same proportion have pickup trucks. Each village has at

### Table 3 – Percentage of Total Land Area in Swiddens 1974-2000 (Hectares). Sources: Keen (1974) and TRI (2000).

<table>
<thead>
<tr>
<th>Village</th>
<th>1974</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mae Sa Mai</td>
<td>83</td>
<td>23</td>
</tr>
<tr>
<td>Buak Chan</td>
<td>98</td>
<td>24</td>
</tr>
<tr>
<td>Pha Nok Kok</td>
<td>93</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>87</td>
<td>26</td>
</tr>
</tbody>
</table>
least one public telephone booth. All of the villages have government-operated daycare centers. Mae Sa Mai is the only village with a police station and regularly scheduled passenger minibus service (TRI 2000).

Despite these small steps toward modernization, the Hmong still have a “pre-modern” population structure. In both 1974 and 2002 population data, the youngest group (14 years old or less) constitutes the bulk of the population, whereas, the middle group is smaller in number, and the oldest is the smallest (Table 5). On the other hand, the structure of the valley Thai population exhibits a trend toward modernization from 1974 to 2002. The proportion in the youngest group became smaller, and the middle-aged and oldest groups grew larger. The lowland Thai population along the highway had proportions of young, middle, and old age groups similar to those of a modern society during the entire period. Population pyramids for Mae Sa Mai (a Hmong village) and Pong Yaeng Nai (a Thai town in the valley), which are just a few kilometers apart, illustrate the dramatic differences in the population structure of the Hmong and that of the valley Thais (Fig. 2). The hill-tribe population pyramid has a broad

---


<table>
<thead>
<tr>
<th>Village</th>
<th>Horses</th>
<th>Cows</th>
<th>Buffalos</th>
<th>Chickens</th>
<th>Ducks</th>
<th>Pigs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ban Mae Sa Mai</td>
<td>0 (143)</td>
<td>0</td>
<td>0</td>
<td>213 (759)</td>
<td>115</td>
<td>213</td>
</tr>
<tr>
<td>Ban Bauk Chan</td>
<td>0 (22)</td>
<td>0</td>
<td>0</td>
<td>1200 (196)</td>
<td>800</td>
<td>120</td>
</tr>
<tr>
<td>Ban Pha Nok Kok</td>
<td>0 (55)</td>
<td>0</td>
<td>0</td>
<td>624 (217)</td>
<td>109</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>0 (220)</td>
<td>0</td>
<td>0</td>
<td>2037 (1172)</td>
<td>1024</td>
<td>353</td>
</tr>
<tr>
<td>Per Household</td>
<td>0 (2.01)</td>
<td>0</td>
<td>0</td>
<td>6.19 (10.75)</td>
<td>3.11</td>
<td>1.07</td>
</tr>
</tbody>
</table>

---

Table 5 – Population Age Structure by Settlement Area, 1974 and 2002. Figures represent percentage of total population represented by each age group. Sources: Keen (1974) and Department of Public Health of Thailand (2002).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hmong Villages (Overall)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevation</td>
<td>1,100 m</td>
<td>47.5</td>
<td>40.1</td>
<td>45.4</td>
<td>51.8</td>
<td>7.1</td>
<td>8.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tambon Pong Yaeng (Thai)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevation</td>
<td>850 m</td>
<td>42.7</td>
<td>26.1</td>
<td>45.9</td>
<td>59.1</td>
<td>11.5</td>
<td>14.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tambon Mae Raem (Thai)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevation</td>
<td>600 m</td>
<td>33.1</td>
<td>21.4</td>
<td>52.3</td>
<td>59.4</td>
<td>14.6</td>
<td>19.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mae Sa Valley (Thais Overall)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevation</td>
<td>750 m</td>
<td>39.3</td>
<td>23.1</td>
<td>48.1</td>
<td>59.3</td>
<td>12.6</td>
<td>17.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highway Villages (Thai)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevation</td>
<td>450 m</td>
<td>18.1</td>
<td>15.5</td>
<td>51.9</td>
<td>59.1</td>
<td>14.3</td>
<td>29.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
base, but the poor health of infants (children to the age of five years) is still at serious risk in the Hmong villages. The TRI survey taken in 2000 revealed that seventy-one percent of newborn babies weighed less than three kilograms and 41% of them were malnourished. The survey also identifies dental, oral and ear infections as serious problems for hill tribe children beyond infancy, and common health problems among all age groups include diarrhea, colds and flu (TRI 2000). The same survey reveals that despite thirty years of development, there are still parasites in drinking water that cause serious and potentially lethal infections. Not surprisingly, the hill tribe infant mortality is approximately twice that of lowland Thai infants.

The youthful nature of the Hmong population assures a rise in local demands on natural resources, as the youngest group moves up the age pyramid. Efforts by the government to introduce birth control in hill tribe areas began in the late 1980s. As the Mae Sa Mai pyramid indicates, the effectiveness of the government’s birth control program in the valley is not evident so far. One can only speculate when or if the hill tribes will undergo a demographic transition to low birth and death rates, as the valley Thais have done.9

**ECONOMIC AND SOCIAL IMPACTS OF MARGINALIZATION**

The crops in the valley today include vegetables and root crops: cabbages, carrots, ginger, potatoes, sweet potatoes, strawberries and taro, among others. Hmong farmers also grow cut flowers and beans (soybeans, peanuts, and red kidney beans), as well as lychees and mangoes, for cash income (Tomforde et al. 2002). Lychees are the main cash crop. The government-run Royal Project generously subsidizes the farmers’ marketing costs and packages some of their produce. The project also transports hill tribe vegetables to Bangkok markets in refrigerated trucks. Hmong with pickup trucks and Thai intermediaries also transport produce to nearby

---

**Ban Pong Yaeng Nai**

Population 2002 in 1,288

**Mae Sa Mai**

Population in 2002: 1,839

Figure 2 – Age Structure of the Hmong versus the Thai Populations of the Mae Sa Valley. Pong Yaeng Nai is a Thai Valley Town and Mae Sa Mai is a Hmong Village. Sources: Department of Public Health (2002), TRI (2002).
The new crops need larger fields than opium did. They also require fertilizer, biocides, and since they are heavy and bulky, vehicular transport. Opium required none of these things. It was light in weight and low in bulk, and it was not perishable. Consequently, opium earned more income per unit of cultivated land and labor than the replacement crops did. Besides, opium and its derivatives had a guaranteed market of addicts that was virtually risk-free. Even so, the new crops have done well, despite higher ratios of investments to earnings and less dependable markets.

The average household income of the Hmong villages compared to the regional average has decreased since abandoning opium. The Hmong average household income was 2.5 times greater than that of the region as a whole in 1971. However, Hmong income was just one-fifth of the region-wide income in 2000 (Keen 1971, TRI 2000). The TRI 2000 survey does not provide detailed information about how the Hmong households spend their money. My own observations suggest that there are a few relatively large cash transactions. They occur outside the village and are for pickup trucks, motorcycles, farm inputs, rice (which is a minor crop now) and clothes. The villagers have little money left over to spend in their own villages. W. R. Geddes (1976) describes how, during the last days of large-scale opium cultivation, large village stores existed to sell a wide variety of goods, as there was more disposable cash in the villages than now. The few remaining shops today are small and have limited inventories—candy (for the large cohort that is less than 15 years old), dried and canned fish, cooking oil, salt, soap, and small household items. Part-time Hmong and Thai proprietors have replaced the full-time Chinese Muslims who ran the stores in the relatively cash-rich opium days (Hill 1983). Today, periodically, itinerant traders from lowland Thai towns bring goods to sell from the back of pickup trucks (Fig. 3). In my fieldwork, I found that the villagers sell almost no forest products—wild fruits, vegetables, mushrooms, bamboo shoots, and edible or medicinal roots, bark, leaves, and seeds. Such products are too sparse to gather anymore. Similarly, the loss of forested areas for grazing livestock means that the villagers are now unable to raise animals to sell to the outside world.

The decline in incomes and land productivity is forcing the Hmong to seek alternative employment, both off the farm and in the villages. According to the TRI survey in 2000, off-farm employment, handicrafts, and tourism are additional sources of income. One hundred twenty-nine laborers, or less than 10% of the Hmong active labor force, have jobs outside the villages. The majority of workers are 17–30 years old, and are employed in the adjoining lowland areas of Mae Rim District, where they earn two to four dollars per day as agricultural seasonal or day laborers. A few villagers work outside of the Mae Rim District; they are all women from Mae Sa Mai who work in the service sector. According to the survey, no women from the...
valley work as prostitutes in the lowlands. However, this seems unlikely, as a 1993 region-wide study of 225 hill tribe villages showed that at least 36% of 1,683 women and girls worked outside cash-poor villages as prostitutes (Montreevat and Pongsakunpaisan 1997, 290). The authors of the study found that the females see prostitution as a way to replace family income lost due to the loss access to land. Peak (2000) observed that the subsequent return of the women and girls has spurred drug addition and HIV-AIDS epidemics in hill tribe villages throughout the region.

The 2002 TRI survey also shows that women earn money working in Mae Sa Mai, Buak Chan and Pha Nok Kok by weaving handicrafts, such as finely embroidered handbags, for tourists in Chiang Mai and occasional tourists who visit their villages (Fig. 4). Three in ten households produce handicrafts for this market. Mae Sa Mai generates most of the income; each household averages $300 annually. Households in the other two villages average only $25–$30 annually. Additionally, tourism generates a small income in two Hmong villages—Mae Sa Mai and Pha Nok Kok. Trekking to the valley began in the early 1970s, when tourism became a growth industry in Chiang Mai (Cohen 2001, 76). Typically, youthful Thai “jungle guides” pooled their money to form trekking companies. These enterprising guides visited guesthouses to sign up foreign tourists. Typical tourists were relatively young “backpackers,” who were interested in experiencing the authenticity and primitiveness of hill tribe villages. Due to its proximity to Chiang Mai, Mae Sa Mai was on early “trekking” maps. After the government built the road to Mae Sa Mai, the village became a destination for the less-adventurous tourist. By the late 1970s, Mae Sa Mai was the first hill tribe village in Thailand to have a hostel built expressly for the more affluent tourist on a “safari tour” (Cohen 2001, 76). The hostel no longer operates. More sophisticated three and four-day treks to other villages outside the valley draw more-adventurous backpackers.

Nowadays, tourists who visit Mae Sa Mai and Pha Nok Kok usually stay in an expen-
sive hotel in Chiang Mai, where they rent an air-conditioned van, a driver, and a tour guide for a leisurely ride to the Valley. A meal at a valley restaurant and a stop at the Mae Sa Waterfall or the “Elephant” camp are usually included. These visitors more often than not stay in the villages just long enough to snap off some photographs and glance over a few tables and booths that the villagers have set up for selling handicrafts and assorted trinkets. Factories in Bangkok actually manufacture some of these items. No data are available to document how much cash actually enters Mae Sa Mai and Pha Nok Kok from tourism. Only a small amount of money and handicrafts appear to change hands, and there are few or no overnight stays.

Drug addiction has increased along with marginalization, creating both health and economic problems. The problem is most serious in Mae Sa Mai. Keen collected data on the number drug of addicts in these villages in 1971, when they were cultivating opium. A comparison of Keen’s data with the TRI 2000 survey shows that average addiction rates, based on the ratio of the total number addicts to the total number of households, increased from 0.33 to 0.51 between 1971 and 2000, a 55% increase. Drugs are more varied and drug addiction is more serious now than 30 years ago, despite the eradication of opium production (Table 6). Originally, addicts consumed the opium grown locally. Today, heroin and methamphetamines, in addition to opium, are smuggled from Myanmar. Charas and others have documented how drug addiction in hill tribe villages drags down household economies (Charas et al. 1978a, 1978b). New addicts are able to support their habit by working, but very quickly, the health of the addict begins to suffer and he or she becomes vulnerable to all types of diseases so that they are unable to contribute to their household’s income. Additionally, relatives of addicts usually end up working in the fields to earn money in order to feed their family members’ drug habit. Fortunately, according to the TRI 2000 survey, there were no drug-related AIDS cases in the study villages, although there were several cases in Mae Ki, a combination Thai and Hmong village.

Haglund reports that virtually all the drug addicts in the Mae Sa Valley’s hill tribe villages were opium smokers until the mid 1980s, when government authorities eradicated the last of the opium fields there (Haglund 1994). After that, low-cost Burmese heroin appeared suddenly and spectacularly. By the early 1990s, Mae Sa Mai was in the throes of a heroin epidemic. According Haglund, the headman of Mae Sa Mai, an addict himself, became the village’s main drug dealer. Even eight-year-old children were addicted to the drug. From January 1990 to December 1991, the number of opium or heroin addicts increased from 60 to 112 (Haglund 1994). Amphetamines started to appear in the hills in the mid-1990s, and Mae Sa Mai became a major center of usage. The police forced the headman to leave the village long ago, but the TRI survey recorded 82 opiate (opium and heroin) and 63 amphetamine addicts in the village in 2000. Other hill tribe and hill Thai villages nearby have experienced a decline in addiction, although their rates are much higher than regional and national levels. In January 2002, the Thai Provincial Police and the Northern Narcotics Suppres-

Table 6 – Addicts per Household, 1971 and 2000 Sources: Keen (1971) and TRI (2000).

<table>
<thead>
<tr>
<th>Village</th>
<th>1971</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Opium</td>
<td>Opium</td>
</tr>
<tr>
<td>Ban Mae Sa Mai</td>
<td>0.19</td>
<td>0.21</td>
</tr>
<tr>
<td>Ban Bauk Chan</td>
<td>1.00</td>
<td>0.11</td>
</tr>
<tr>
<td>Ban Pha Nok Kok</td>
<td>0.43</td>
<td>0.04</td>
</tr>
<tr>
<td>Average</td>
<td>0.33</td>
<td>0.16</td>
</tr>
</tbody>
</table>
sion Office searched 27 houses at Mae Sa Mai. They found no narcotics, but random urine tests of 16 villagers reveal that eight had methamphetamines and heroin in their system. Another police team search four houses at Buak Chan and arrested a drug trafficker (Subin 2002). In January 2003, a 200-strong police force conducted pre-dawn raids in several Hmong villages, and singled out 20 homes that police believed were involved in drug trafficking (The Nation 2003).

Education is a frontline defense against drug addiction and a prerequisite for hill tribe integration and advancement in Thai society (Mann 2000). In 1974, educational attainment increased markedly from the hill tribe villages to the lowland Thai towns. In theory, every Hmong child had access to education through the primary level, as there were government primary schools in every Hmong village back then (Fig. 5). However, Keen, who collected the 1974 data, noted the regular occurrence of Hmong school closures due to the absence of teachers. He observed that the hill tribe schools were the poorest served, because “ethnic and cultural isolation of the Meo [Hmong] prevents them from pressing effectively for reasonable schooling for their children” (Keen 1974, n.p.). Keen continues: “By the time the plain and the tar-sealed roads [of the highway villages] are reached, secondary schooling has become a possibility, and primary schooling has made a more effective impact.” Thus, in remote Hmong villages only 7.3% of the population completed primary school, whereas the figure for the highway villages was 19.2%. Education is better in the Hmong villages now. The percentage of hill tribe population with a primary education increased four-fold from 1974 to 2000 (Table 7). Compulsory education for all children who are Thai citizens consists of 9 years of schooling, or through lower secondary school. The Thai language is the basis of instruction. Hill Thai pupils graduate from elementary school at twice the rate the Hmong do (Table 9). The Hmong group’s percentage of graduates from high school is about three-fourths that of the hill Thais (Table 7). Dennis (1997) observes that ethnic minority children fall behind in elementary school because the curriculum requires learning solely in the Thai language. He also attributes high dropout rates from secondary schools to the prohibitive costs of having to travel to secondary schools outside the villages.

DISCUSSION

In some ways, the Mae Sa Valley Hmong are better off now than they were before they abandoned illicit opium. They live in permanent settlements that have water and electrical systems. Additionally, better mastery of the Thai language and access to roads enable them to negotiate, sell and deliver legal products to lowland markets. However, this limited participation in Thai society still does not offer the hill tribes a secure future. The government and Thai elites have deprived them of their traditional land tenure rights and access to resources on which they
depend. Indeed, the situation for the Hmong in the valley is probably at the crisis stage. Population pressures have forced dominant Thai and minority hill-tribe peoples to establish villages within a few kilometers of each other. Due to soil deterioration, even in hill tribe villages with the finest locational advantages, already-narrow profit margins are shrinking due to the rising costs of fertilizer inputs and land rentals outside their village territories. Their villages are overcrowded, they are inadequately educated, they are less healthy than their Thai neighbors are, and they constitute the poorest socio-economic strata in the valley. Because of the competition for finite resources, the minority hill tribes must either continue eking an existence on marginal lands or compete with Thais for jobs in cities. As job seekers, they are less educated, skilled, and mobile than their competitors are. In the end, most of them remain in the crowded villages and live a chronically poor existence. As if these problems were not enough, poverty-related social problems have moved stealthily into the valley: amphetamine and heroin trafficking, drug addiction, and the threat of HIV-AIDS. Even more disheartening is the fact that the Mae Sa Valley is a “best case” example of life in post-opium hill-tribe areas.

The evidence of resulting social conflict at the regional scale is present. Water supply and


<table>
<thead>
<tr>
<th>Villages and Groups</th>
<th>None</th>
<th>Primary</th>
<th>Secondary</th>
<th>Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hmong Group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mae Sa Mai</td>
<td>87.9</td>
<td>77.1</td>
<td>11.6</td>
<td>16.3</td>
</tr>
<tr>
<td>Buak Chan</td>
<td>99.2</td>
<td>42.8</td>
<td>0.9</td>
<td>45.8</td>
</tr>
<tr>
<td>Pha Nok Kok</td>
<td>97.8</td>
<td>61.4</td>
<td>2.3</td>
<td>31.6</td>
</tr>
<tr>
<td>All Hmong Villages</td>
<td>92.4</td>
<td>64.0</td>
<td>7.3</td>
<td>27.8</td>
</tr>
<tr>
<td><strong>Hill Thai Group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pang Pakha</td>
<td>NA</td>
<td>40.6</td>
<td>NA</td>
<td>42.5</td>
</tr>
<tr>
<td>Pang Hai</td>
<td>NA</td>
<td>21.6</td>
<td>NA</td>
<td>70.9</td>
</tr>
<tr>
<td>All Hill Thai Villages</td>
<td>NA</td>
<td>30.0</td>
<td>NA</td>
<td>58.3</td>
</tr>
<tr>
<td><strong>Thai Group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tambon Pong Yaeng</td>
<td>44.3</td>
<td>NA</td>
<td>54.9</td>
<td>NA</td>
</tr>
<tr>
<td>Tambon Mae Raem</td>
<td>42.6</td>
<td>NA</td>
<td>55.8</td>
<td>NA</td>
</tr>
<tr>
<td>Highway Villagesb</td>
<td>26.5</td>
<td>NA</td>
<td>66.3</td>
<td>NA</td>
</tr>
<tr>
<td>All Thai Areas</td>
<td>36.8</td>
<td>NA</td>
<td>59.7</td>
<td>NA</td>
</tr>
</tbody>
</table>

aMae K, a combined hill Thai and Hmong village, was omitted from the table, as information is unavailable about each group’s level of education.
bVillages in Tambon Mae Sa. The Chiang Mai–Fang highway passes through this tambon.
water quality are recurrent sources of conflict (Walker 2003). A repeated concern involves alleged erosion and downstream flooding induced by hill tribe farming. Watershed conflicts have led to the most recent major relocation of hill tribe villages by the RFD from a national park in 1994 (Anan 1996, 217). In 1995, the government’s eviction policy precipitated a mass demonstration by hill tribe people and their supporters in Chiang Mai. The next year, a 28-day demonstration in Bangkok by 11,000 upland Thai and hill tribe farmers temporarily halted the RFD’s resettlement policy (Yanuar 2005, 53). Again, in 1999, several thousand hill-tribe people gathered outside the offices of Chiang Mai Province to demand their right to Thai citizenship and recognition of their settlement and land use rights in Protected Areas (Buergin 2001). Lowland Thai farmers have reciprocated with their own protests against the hill tribes. On different occasions, they blocked roads to several Hmong communities in Chiang Mai and Nan provinces (Prasit 2004, 336-337). Since 2000, pressure on the hill tribes by the RFD has been growing, “resulting in arbitrary arrests, forced resettlement, terror and violence” (Buergin 2000, 13). According to Chupinit (2004), Thai authorities forced five Lahu villages in 2003 and 200 Karen people from five villages in 2004 to relocate.

The heart of the conflict is the fact that by law, all types of forests—conservation, production, and/or community forests—belong to the government. It is therefore the government’s view that it alone should manage the forests, even though millions of Thai and hill tribe farmers live in them. The RFD did not even take into account existing human settlements and their relationship with the forest as it mapped out Protected Areas. This unjust policy was changed belatedly when the new Constitution of Thailand, enacted in 1997, required that communities have input in boundary demarcation (ICEM 2003, 16). Both groups’ resentment toward the government must run deep, as the government still denies them access to land while Thai special interest groups continue to have access.

In recent years, the hill tribes and their upland Thai neighbors have argued for legal recognition of a community conservationist approach to land management. Under this approach, village councils would meet to make group decisions on how best to use land in perpetuity. Academic researchers and NGOs have promoted this community use or ‘people-oriented’ approach (Anan 2000). The lowland Thai farmers, on the other hand, support a preservationist management policy. They have had strong backing from the RFD and Thai commercial interests. This so-called ‘green’ approach would discontinue agriculture in Protected Areas altogether.

The alliance of scholars and NGO experts had some legal backing for their approach under the 1997 Constitution of Thailand. Human rights advocates called the document ‘the People’s Charter,’ for its affirmation of a strong, independent judicial system and peaceful public involvement in local issues (Asian Human Rights Commission 2006). The Constitution, under Article 46, called for community groups within and next to Protected Areas to have a greater say in how best to conserve, maintain and utilize natural resources (ICEM 2003, 21). A bill authorizing the establishment of community participation languished in the national legislature for years, but legislators were consulting with human rights activists to draft a community rights law (Physicians for Human Rights 2004), when a military coup toppled the government on September 19, 2006. According to the Asian Human Rights Commission (AHRC) (2006), the coup was the Thai military’s reaction to the 1997 Constitution, which placed the military subservient to the judicial branch of government for the first time. A military junta is now in control of the country and is overseeing the formation of a new government and a new constitution, both of which have no definite deadlines for completion at this time. According to the AHRC, the hoped for legal mechanisms that would protect individuals and tribes from ecological marginalization, probably ended with the coup. Historically, the military has perceived the hill tribes as invaders of the forest and potential threats to national security.
for their past transgressions as opium cultivators and their involvement in drug trafficking (Buergin 2001, Chupinit 1988). Indeed, as I mentioned before, the military is the main enforcement arm of the RFD village resettlement projects. Thus, a continuation of the governments’ marginalization and push for resettlement of the hill tribes seems likely.

The ‘spill-over’ effect of political instability in Myanmar, Thailand’s northern neighbor, darkens the clouds gathering on the hill tribes’ horizon. Myanmar’s ruthless military regime, which has a notorious human rights record, is fighting a protracted rebel insurgency. Two esteemed Nobel Peace Prize laureates concluded in a recent study that Myanmar is a direct threat to the peace of all of South Asia, as well as to the security of its own people (Havel and Tutu 2005). Fighting between rebels and government- backed militias strays into Thailand from time to time. Drugs have become a source of cash for rebel and militia groups. Hill tribe people in Thailand become participants in or victims of cross-border fighting, criminal activities (including trafficking of drugs, women and children), and smuggling of trade goods (Bell 2003). Such activities result in raids on hill tribe villages by Thai law enforcement and military units that no doubt exacerbate hill tribe feelings of resentment and insecurity.¹⁰

CONCLUSIONS

Will the social and economic progress of the hill tribes counter future ecological pressures? No, this outcome seems very unlikely. Like cogged wheels in motion, it appears that population growth, resource capture, and ecological marginalization are increasing environmental degradation and resource scarcity in northern Thailand (Fig. 6). Are the hill tribes’ present insecurities going to heighten and accelerate future social conflict in the region? Yes, this is a probable scenario. The situation seems to be at a critical stage for the former opium-growers of the region, as migration is not a viable strategy for preventing their economic demise. For decades, Thailand’s borderland has been their migratory cul-de-sac as they migrated from China and Burma. The hill tribes can go no farther south—virtually all the cultivable land farther south is occupied (Crooker 1987, Chupinit 1988). This geographical limitation no doubt heightens hill-tribe desperation.

Population pressure and ecological marginalization are creating a potentially explosive situation that promises to have region-wide implications. However, determining exactly when, where, or how intense the conflict will be is difficult. The vagaries of the geographical environment could delay or accelerate

---

Figure 6 – Resource Capture and Ecological Marginalization of the Hill Tribes in Northern Thailand’s Borderland. Adapted from Homer-Dixon (1999, 74).
resource scarcity and social conflict from one valley to the next. Uncertainties about hill-tribe fertility rates also complicate predicting future ecological damage. The government’s policy of resettling hill tribe villages on non-cultivable land threatens to further inflame tensions in the region already being destabilized by Myanmar’s exportation of drugs, crime and violence.

Forestalling the crisis that will result from population growth and resource scarcity lies with the new political regime. To do this, it must institute a community forest policy that expands hill tribe citizenship and recognizes the usufructure rights of forest dwellers. Such a policy would give hill tribe people some hope that they can regain control of their lives. They would no longer “remain part of a shadowy underclass, eking out a parallel existence,” in a country, they cannot call their own (Academy for Educational Development 2006). An informed Thailand official told me several years ago that the former opium-growers have “lost their spirit to improve themselves because they can see no way out of their poverty” (Chavalit 1995). However, they might not remain as tolerant of outside meddling as they have been, if the junta or its new government continues its anti-people forestry policy. A universal corollary axiom of deep-seated misery is that “desperate people do desperate things,” and Thailand’s former opium-growers certainly face a desperate future due to their ecological marginalization.

A progressive government policy would not be the cure-all for the complex social and political tensions in the region, but it could help assuage justifiable grievances that the hill tribes have regarding the government’s role in their ecological marginalization.

NOTES

1. About half of Thailand’s hill tribe people are citizens and therefore Thai nationals. In this paper, I use the terms “hill tribes” and “Thais” to differentiate between ethnic groups, irrespective of citizenship status.

2. Thailand collaborated with the United Nations in two projects involving the valley between the early 1970s and the mid-1980s (Renard 2001, 70). The basic goal of these projects was to find suitable crop replacement for opium and to integrate the evolving hill tribe economy with the lowland Thai economy (Keen 1971, 1974). Between 1973 and 1981, the United Nations Development Programme, the U.S. Food and Agriculture Organization, and the Thai government combined forces to attempt to reduce forest destruction and soil degradation in the valley brought about by the growing Thai and hill tribe population there. More recently, The Royal Project, an initiative of the King of Thailand, has been assisting the hill tribes in projects involving moderate-interest loans, irrigation, and crop marketing since 1984 (Renard 2001, 70).

3. A lone Karen village is situated on the northern edge of the Mae Sa watershed. Keen did not include this village in his original surveys, but it existed in 1971, according to the first population census of the hill tribes conducted by the Tribal Research Centre (TRC), when it had six households (32 people). I could not confirm the existence of the village in 2002. The census of population that the Tribal Research Institute conducted in that year does also not include the village, although it does appear on a map in the Mae Rim District Office.

4. Two citations with similar names appear in this paper, but they refer to the same institution: Tribal Research Centre and Tribal Research Institute. The government of Thailand established the Tribal Research Centre (TRC) in 1964 under the aegis of the Department of Public Welfare to promote research that would document and preserve hill tribe culture and assist their integration into Thai society. The name changed to Tribal Research Institute (TRI) in the early 1990s. The Institute closed permanently in October 2002.

5. Rural northern Thais still consider miang a delicacy today; they chew it after meals
and at social gatherings.

6. Thirty-three percent is the official government estimate of Thailand’s forest area. Critics argue that this figure includes land that is not really forest, because it includes large areas of land stripped of natural forest species by logging and short-cycle swiddening. Tall grass savanna and bush-scrub make up the climax vegetation of vast areas as a result. Buergin has estimated forest cover at between 10% and 20% (Buergin 2000, 9).

7. Thailand established its opium monopoly in 1852. Initially, the country viewed the newly arriving opium-growing immigrants as annoying criminal interlopers, as their opium production competed with opium sold by a government-run monopoly. The monopoly sold only imported opium in government-run opium smoking dens and was a relatively important source of government revenue. In order to meet the growing demands of addicts living in the country, Thailand legalized opium cultivation in 1938. Until its criminalization in the late 1950s, caravans led by Thai and Chinese traders made regular trips to hill tribe areas in order to collect the opium (Geddes 1976, 208; Crooker 1986, 303).

8. The process of obtaining citizenship in Thailand is notoriously so slow, corrupt, and inefficient that the Thailand government has not extended citizenship to at least half of the hill tribe population (Physicians for Human Rights 2004, 27). In fact, the Mae Sa Valley is exceptional for its universal hill-tribe citizenship. Nevertheless, all hill tribe people who are Thai citizens must still carry special identity cards that restrict how far they may travel from their villages. Ethnic Thai citizens do not have such cards (Asia Centre for Human Rights 2003).

9. Hill tribe fertility rates appear to be declining regionwide. The study by Gray et al. (2005) suggests that the decline varies among the tribes for social reasons. They compared fertility rates of the Hmong and Karen and found that both groups’ rates were declining, but the Hmong were declining at a much slower rate because “they feel more politically disadvantaged and want to preserve their group strength.” The variation in fertility rate decline complicates forecasting ecological conditions in hill tribe areas.

10. Thailand’s border with its other northern neighbor, Laos, is relatively “quiet,” but for an unfortunate and dubious reason: The communist regime of Laos (reportedly with the military advisors from communist Vietnam) appears to be consummating the ethnic cleansing of recalcitrant Hmong insurgents living within Laos near Thailand (Sommer 2006).

ACKNOWLEDGEMENTS

The National Geographic Society’s Committee for Research and Exploration funded nearly all my fieldwork, most recently in 2002, so that I could conduct research in the Mae Sa Valley.

REFERENCES


Asia Centre for Human Rights. 2005. Thailand: Not So Smiling to its Indigenous Hill Tribes (July 13) [http://www.achrweb,
Chavalit Yodmani. 1995. Secretary-General of the Narcotics Control Board, Office of the Prime Minister of Thailand, personal communication, January 3.
329–357.
Ecological Marginalization And Hill Tribe Security In Northern Thailand


