## INSTITUTE OF CURRENT WORLD AFFAIRS

## JHM-12 BACK TO THE LAWA RIVER

Mr. Peter Bird Martin Executive Director Institute of Current World Affairs 4 West Wheelock Street Hanover, New Hampshire 03755 USA P.O. Box 206 Samarinda, East Kalimantan Indonesia April 1988

Dear Peter.

Two days and a night aboard the <u>Aspian Noor</u>, slowly chugging up the Mahakam and Pahu Rivers last December were enough to get me excited about the wind and speed of my first ride on the Kalhold Utama Company's logging road. Racing over smooth-packed earth in the night, the logging truck seemed like transport from another world. The driver, a wiry chain-smoker from South Sulawesi (the island east of Borneo) relished driving this road at night, headlights flashing yellow, red, or green in the eyes of nocturnal creatures stunned by the sudden brightness. He got poetic, talking about the road flowing through the jungle like a river, and pointing out how the treetops' deep black silhouettes stood out against the brilliant edge of the Milky Way. In the hour-long rush whoosh from the company's Pahu River landing place to the main logging camp, 69 kilometers over rolling hills to the south, the road began to seem almost miraculous to me, powerful technology in the starlight.

When I returned to the area almost three months later, any magic the company road held for me evaporated under the intensity of a mid-afternoon sun. The road was no river, but a heat-reflecting equatorial desert cutting through the ramains of logged-over forest interspersed with swidden fields of ripe padi. The straight line of treetops against white heat haze struck me as odd; the natural jungle's emergent trees and much of the old rainforest canopy were gone. Admiration for the road's engineering turned to curses as I trudged the spur from the corridor road to the Lawa River, ending up just across the stream from the village of Dilang Puti. The four kilometer spur had become impassable to vehicles due to heavy rains and flooding the previous week. (For a map and account of Dilang Puti, see JHM-10.)

I mounted the first hill of the spur road wondering what in my over-stuffed pack could have been left behind. Most of the weight was gifts, things not available in the Lawa River villages, which people had requested when I went back downriver in January. Dried fish, powdered milk, onions, chewing gum, and bug repellent; maps I'd collected or drawn for a couple of Village Heads and for Pak Awang, the assistant <u>Camat</u> (subdistrict officer) of the Bentian Besar region; and a pair of trendy trousers I knew would be a hit with Bu Seniati, my hostess of December.

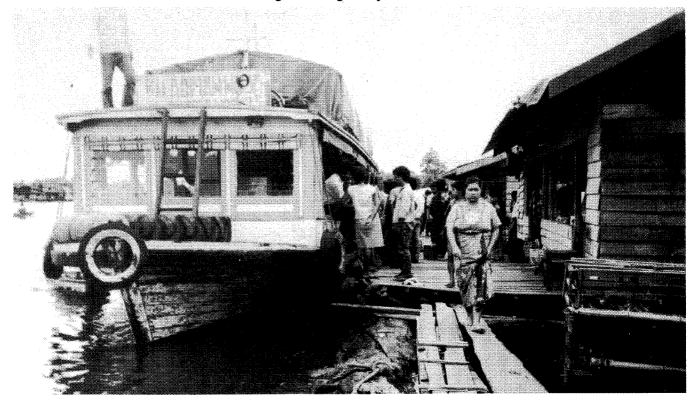
Reaching the river during Dilang Puti's late afternoon badminton games and baths, I watched young divers and splashers congregate around the raft lashed to a huge log on the opposite bank. The raft was much the worse for wear since my previous visit. Several boards were missing, and the enclosure built over the toilet hole at the downstream end leaned precariously. I had just decided to

Judith Mayer is an Institute Fellow studying environmental protection, conservation, and sustainable development issues in Southeast Asia.

abandon my pack to the tongue-flickings of two shiny-scaled lizards already investigating its dust-clogged zippers and just swim across the river (the quickest way to cool off) when three kids from the raft spotted me. We called back and forth as they pulled on fades skirts, shorts, and T-shirts. The boy took an involuntary dump back into the water; the two girls hooted with mischief as they pushed off from the raft in a small dugout to paddle me back across the river.

After the required greetings to everyone who passed the village center checking out badminton and volleyball courts, I finally jumped into the stream myself at sunset, a quiet lavender and indigo event, then wolfed down a plate of Bu Seniati's new rice, cassava leaves, and a fried chicken egg. We spent much of the evening in visits and rauc ous teasing, distributing prints of several dozen photos I'd taken in the village in December. Plenty of the teasing was directed at me, as I made arrangements to spend the next few days following people through the forest and to their rice fields, where the harvest was in full swing after the rains of the previous week. Everyone seemed relieved there was a harvest at all, as the heavy rain had threatened to rot the ripe grain.

The past week's Lawa River flood overflowed steep banks in many spots and turned normally placid segments into swirling torrents and treacherous eddies. In Lambing, the trading village over 40 kilometers downriver at the Lawa's confluence with the Pahu River, even structures built on traditional flooproof stilts were inundated. Families stationed members on rafts, boats, and roofs to keep vessels from accidentally docking inside the upland buildings. In Dilang Puti, the flood pulled tethered rafts to the ends of their lines; many of the logs serving as anchors for rafts and boats began rolling away under the force of the wild waters.



The Aspian Noor, one of four passenger/cargo boats making weekly scheduled trips between Damai, on the Pahu River and Samarinda.

No one seemed to remember a flood quite as dramatic as the past week's, which rose immediately as heavy rains saturated the watershed's thin soils, but dropped off only two days later, leaving a thick coating of sticky yellow-brown mud along the banks. The river quickly fell too low to allow motorized boats, the ketinting dugouts, to go up the Lawa as far as Dilang Puti.

The Lawa River was not always subject to such spectacular rises and falls. Until recently, it was considered a relatively steady stream, which contributed to its history as a major rattan trading area and overland route between the Mahakam River system in eastern Borneo and the Barito River system in southern Borneo. Villagers told me the change has come about since 1983. (No river level records exist to confirm this.) The long dry season of 1982-1983 had much of East Kalimantan's lowlands in flames. In many areas where the forest did not burn, including the Lawa River, the drought caused widespread famine, as crops withered in the fields the first year and seed stocks were eaten in desperation the next season. But the settlements along the Lawa River were lucky. The jungle's drought reflexes came to Bentian's rescue, as trees flowered and fruited in panic, feeding humans and wildlife. Thirst drew normally reclusive animals to exposed stream banks in search of water, where they were easy to hunt.

Once the rains began again, wildlife retreated to the deeper jungle, and the Lawa River people resumed their usual dependence on fish as their major source of animal protein. But no one has caught several favorite fish species since 1983, including the Lawa's fleshy toothless eel and a black and blue fish called keksili. Although the rains returned, the river's water level remained lower than it had been in the past, except during the Lawa's increasingly frequent floods. Few people in Dilang Puti or in Suakong (the next village upstream, six kilometers away) remember the river channel ever being shallower than a meter, before 1983. Since then, it has frequently dried to a depth of only 25 centimeters. The river floods within a day after a big rain, instead of the gradual three-day rise of former times, but falls rapidly, as it did in February, the week before I returned to the Lawa.

By mid-1984, villagers along the Lawa started to make connections between the intensive new logging operations to the south, in the river's upper catchment area, and the Lawa's strange new behavior. As explained by Patinggi Laku Sasan, Suakong's Village Head, "In 1983 and 1984, many of us here believed the river had changed because of a solar eclipse in June 1983. But that was not the cause. Since 1983, there is just less to hold the water at the river head. The forest is cut and rain leaks away too fast. The river floods, then dries up. And it is always muddy."

The formerly clear river's new load of silt annoys people in the Bentian region, and has become a particular nuisance to the women. Boiled river water makes an unappetizing though marginally sanitary drink, and food cooked in the silty water tastes dirty. Silt takes two or three days to settle out of river water. Few households have jars or drums large enough to store two or three days' cooking and drinking water. One alternative, collecting clean rainwater from house roofs, is used but not favored. Palm thatch and ironwood shingles are the standard roofing materials along the Lawa. Though they keep homes cool by providing good ventilation, they are not much good for collecting rainwater.

Despite the introduction of expensive but popular laundry soap in the 1970s, women find that clothing will not come clean in the river water. Dry laundry is permeated with fine brown powder that must be shaken or beaten out.

Clean water is now scarce. Since 1983, people -- particularly women -- have searched avidly for clear springs in the forest or near land being considered for new rice fields. There is talk of digging wells, but wells are not part of any local tradition, and the few shallow ones that have been tried in the past couple of years have had inconsistent, disappointing yields.



Bu Nilam Biduri and Bu Seniati complaining about floods and dirty water in Dilang Puti.

At first, almost no one on the banks of the Lawa took any notice of the logging companies' arrival. The logging concession areas, designated several years before operations on them actually began, exclude the most intensively used and frequently visited parts of the villages' customary lands, with concession borders four to five kilometers from the river.

In 1982 and 1983, the Kalhold Utama company began to exploit the concession nominally granted to the Timberdana company, in the western part of the Lawa's upper watershed. Timberdana is reputedly owned by Bob Hassan, Indonesia's most flamboyant and politically visible timber tycoon. (Timberdana is listed as an Indonesian-owned firm in Forestry Department records.) Kalhold Utama, which developed the Timberdana concession, is part of East Kalimantan's Georgia Pacific Group. The concession was developed with help from Georgia Pacific, and logs are turned into plywood at Georgia Pacific's Samarinda plant.

Since 1983, Kalhold has logged about 10,000 hectares of forest in the upper Lawa River area, taking about 500,000 cubic meters of logs out of the concession using Indonesia's selective logging system. The selective logging system has been used since the 1970s, and was designed to provide a sustained yield of commercial timber from suitable concession lands. Only large-diameter hardwood trees are deliberately cut in designated blocks within the concession

according to the selective logging system, which is supposed to leave a residual stand that will mature for a second round of cutting 35 years after the initial cut in the primary forest. (Recent research on logging in Borneo has shown that on land similar to that of the Kalhold concession, up to 40 percent of remaining vegetation in the immediate vicinity of the logging sites and skid trails is typically destroyed even using the selective logging regulations. This calls into question whether the expectiation of a 35 year rotation is realistic.)

In addition to the selective logging once the concession went "into production," Kalhold bulldozed the forest in a swathe 15 meters wide to build the company's 90 mile corridor road. The lower 69 kilometers, to the upper camp, were mostly built in 1982.

On the east side of the Lawa River, the Roda Mas company has held a 50,000 hectare concession since 1973. After intensive logging in this area in the early and mid-1980s, Roda Mas has wound down its cutting activities since 1986. Only five more years remain in the concession period. The company, which controls even other logging concessions in East Kalimantan and a saw mill in Samarinda, is considering renewing its concession to begin an industrial forest plantation. But according to Mr. Gunawan, a young California-educated director of the firm, even with the refund of money the firm has already paid into the national replanting fund (much of which would be returned to cover costs of developing a commercial timber plantation) silviculture is probably not the most profitable investment choice. The returns on investments in logging are almost immediate; tree growing would take a minimum of ten years, too long for many firms built up with an extractive industry boom philosophy.

Other than the changes in the river, the change most immediately noticed by the Lawa River people with the coming of the logging companies has been roads. Even zealous opponents of logging in Bentian (there are a few) point out how the company roads have benefitted local communities. Building the roads parallel to the river, at most a three-hour walk from the riverside villages, was a brilliant bit of planning as far as the mobility of Bentian's population is concerned, since villagers can hitch rides down to the Pahu River.

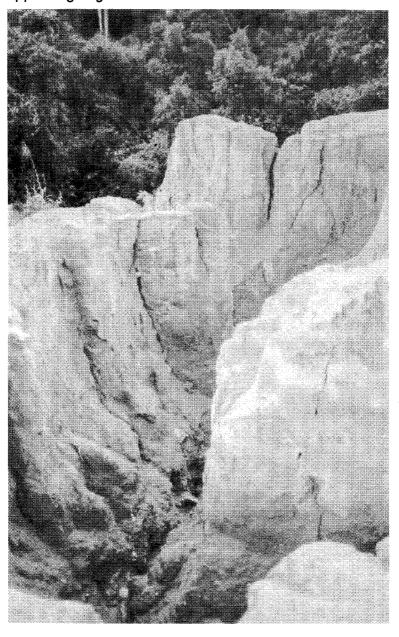
Government planners envision a web of company logging roads, built entire ly with private funds, eventually extending throughout Kalimantan's hinterlands and becoming the skeleton of a new rural transportation network. Such private investment in rural "infrastructure" has taken on even greater importance since 1986, when the drop in world petroleum prices left the Indonesian state unable to pay for planned roads in remote areas the state does not consider strategically important.

The roads are a major benefit of logging that allows state planners to claim that the timber industry is indeed bringing long-term economic development to the far interior of Kalimantan where forest exploitation is taking place and government resources are thinly spread. (Today, Kalimantan's few ongoing major rural road projects are funded almost entirely with foreign grants and loans. There is mounting grumbling about the development priorities they appear to embody.)

The companies did not build their roads directly to the villages along the river, since the borders of their concessions are four or five kilometers away. But within months after the corridor roads had been bulldozed through the forest, villagers cut footpaths from their homes to the new logging roads. Company jeep

and truck drivers willingly gave local people lifts along the corridor roads, down to the Pahu River landing places, and to parts of the forest previously accessible only with long hikes and extensive bushwhacking.

Once logging companies leave their concession areas, it is uncertain what will happen to their corridor roads, not to mention the less durable tracks leading more directly to the villages. The government has a schedule for taking over some, but equipment and money to maintain them properly may not be available. And without intensive maintenance, the roads will quickly become unusable to vehicles, disappearing in gullies and landslides.



Gully 3 meters deep beside the Kalhold Utama corridor road. Such erosion silts up streams and will eventually destroy the roads themselves.

Villagers are acutely aware that the logging companies have resources beyond anything their communities or regional government can muster. Development planners hope that state and company capabilities will complement each other. For example, four years ago, the regional government paid to upgrade the trail from Dilang Puti to the Kalhold corridor road so that it could be used by jeeps and trucks. Grant guidelines stipulated that the project could use only local residents' manual labor. This was meant to ensure that the grant money stayed within the local economy rather than being paid to outside contractors. Besides, the Department of Public Works had no road building equipment anywhere in the vicinity.

Dilang Puti men cut trees and cleared undergrowth with chainsaws and <u>parang</u> or <u>mandau</u> (ubiquitous machete-like knives). But the grant was not enough to cover the extremely strenuous and time consuming work of pushing huge tree trunks out of the designated roadway and removing large stumps. There were also quiet allegations that part of the grant had "disappeared" in the administrative pipeline. For two years, the road remained a glorified footpath, though it became a convenient way to reach new rice fields across the river from the village center, near the corridor road. Finally, in 1985 local officials convinced the regional government to pay the Kalhold company to bulldoze and grade the entire length of the spur road, and the work was finished in a couple of days using heavy equipment. Now, Kalhold maintains the road as a favor to the village, though the timing of repairs is subject to company priorities. Dilang Puti residents expected that it could take a couple of months for damage from the February floods to be fixed.

The Roda Mas company has also built tracks from its corridor road to villages so far upriver, above the rapids, that they have never been accessible with motorized boats. This January, the company graded a track from its road to the village of Sambung, near the Lawa's headwaters, previously accessible with at least a day's walk. By March, the road had plenty of traffic. Villagers use it to move their rattan to market along the Pahu River. But perhaps most important, from the point of view of the villagers, is the possibility of seeking outside medical care.

On Samarinda-bound boats, I met several groups of people from far upriver villages travelling to hospitals in Samarinda and Balikpapan. Many of them had to walk from villages above Sambung first, and then wait for over a week in Sambung until a company truck happened to come to the village and give them a lift. Bu Timah, who was taking her blind father to the hospital, explained that there are many medical problems that the traditional healers cannot deal with, but until the road came, there was no alternative to them. Government health teams come to the far upriver villages only once a year, and only stay for a day. She and her friends had led her father to Sambung (two days' slow walk Randa Empas, their village) and wait nine days for a truck to get to the village over the flood-damaged road. But they figured it was worth it. One young man in their group joked that the best thing that could happen for the village's health would be if a company driver fell in love with a Sambung woman. Then trucks would come to the village more often!

Right now, there are few non-company vehicles in the area, so the issue of who many use company roads rarely arises. However, on most Kalimantan logging roads, non-company traffic is restricted to late night hours to avoid collisions or disturbances of logging work.

Once the logging companies leave their concession areas, it is uncertain what will happen to their corridor roads, not to mention the less durable spur tracks. The government expects to take over some, but equipment and money to maintain them may not be available. And without intensive maintenance, the roads will quickly become unusable. Government upgrading of a logging road is generally considered a development project in Kalimantan, and as funds have become scarce, such projects have gone ahead mainly in areas being opened up for new settlement, especially under the Transmigration program, which moves people from other parts of Indonesia into sparsely populated regions. Although feasibility studies for Transmigration to Bentian have been done, no project is planned for the area now. In fact, the provincial development planning body, known as BAPPEDA, lists no development projects of any kind for Bentian in the near future.

Several times each year, Kalhold sponsors athletic competitions at its camp, and invites local teams to play. Company vehicles pick up young badminton, volleyball, and ping-pong players as close to their villages as possible, and the company treats the local kids to a two or three day holiday at the camp. The kids love these festivities, which generate an Olympic level of excitement, though the company teams usually win. Some of the athletes' parents see this hospitality as a cynical public relations ploy, when the camps rarely hire people from the Bentian villages as regular staff.

Although many of the Bentian men have gained logging experience elsewhere, neither of the companies with concessions in the immediate vicinity of their own homes hires local people except as casual or short-term labor. Since non-Dayaks (mainly ethnic Kutai Moslems from Muara Lawa) with no more experience than many of the Bentian men are numerous among the Roda Mas staff and not unheard of at Kalhold, there are complaints of anti-Dayak discrimination by the logging companies.

Managers of both companies give several reasons for not hiring staff from the immediate areas of their logging operations. Pak Hermandi, the General Manager of Roda Mas, initially claimed that local people never ask for jobs at the camp because they can make more money cultivating or gathering rattan. This did not jive with stories I heard in the Bentian villages. Hermandi and Kalhold managers admitted that they prefer to look for workers further afield. They fear that local workers would disappear too often to cultivate their own rice fields or take care of family obligations nearby. Workers from outside tend to stay put, according to the managers, and are available to work whenever the weather permits, only about half the days each month.

Based on conversations with workers at the camps as well as with people along the Pahu River, it's possible that many of the staff at the logging camps simply feel uncomfortable around the Bentian Dayaks. I was amused, or at least intrigued, by constantly repeated warnings to watch out for poisoning in the Bentian area. At first I thought people were talking about bad sanitation in Bentian kitchens. Then, I figured it was just another case of Moslems (Kutai ethnics, in this case) finding the Dayak penchant for serving pig meat to be unpalatable. But I learned there was more to it. The Bentian people have a reputation for great skill and ruthlessness in their use of black magic. Kutai Moslems are supposed to be their most vulnerable victims, according to the Kutai warners.

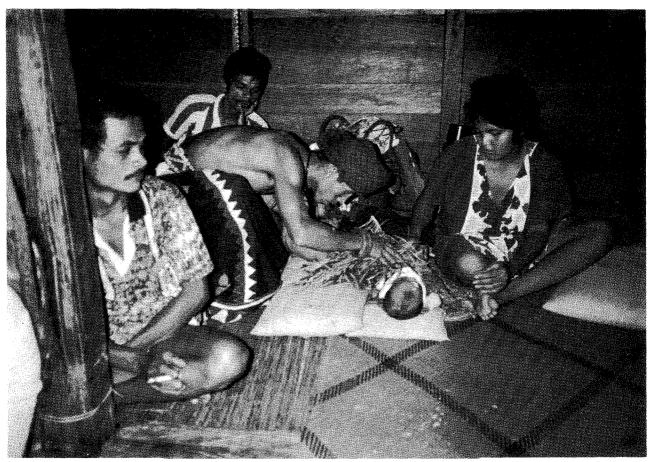
Remembering the aura of Christmas holiness pervading the villages of the middle Lawa River I had visited in December, I found these black magic warnings to be ludicrous. Returning in the middle of the March harvest season, the height of the traditional Bentian Dayak ceremonial calendar, I could begin to imagine the origins of a local reputation for black magic. I remembered that the area had been only weakly controlled by the Kutai sultanate in the 19th century, and stories of hapless Moslem traders failing to return downriver. Many of the long, loud, and colorful healing and harvest thanksgiving ceremonies I attended in the area in March had probably been modified very little since Borneo's headhunting days. While a large number of the staunchest Christians boycott these rites in areas like Dilang Puti and Suakong, traditional ritual experts (or belian) report that they are busier than ever. Christianity has not rid the land of spirits, or at least not completely. On the nights of healing and harvest ceremonies I saw, belian houses were always packed, many people there as much for the pure entertainment value as for anything profoundly spiritual.



Christmas concert in Dilang Puti.

The uneasiness of many outsiders about interacting with Bentian people may also help explain why, when the Kalhold company's base camp was built at kilometer 69 of the corridor road in the early 1980s, the company evicted the population of a small village that had been at the site. Most of the people from this village had ties with relatives at Dilang Puti, and moved there.

The old village Head, now given mainly to long naps and daydreaming, presided over the move. When I went to ask his son about the last days at the former village site and the establishment of the logging camp, I got a lot more history than I expected. Bentian people have preserved accounts, in songs and precisely recited oral histories, of land use in the areas they now occupy as well as in those they abandoned generations ago. Several members of the village Head's family can recite the history of each move the community has made going back 38 generations, including accounts of any compensation or other payments associated with these moves.



Young traditional healer (belian) treating a baby.

The forbears of Dilang Puti, for example, moved to the vicinity of their current village site 10 generations ago. (The group that moved from the Kalhold concession also descended from these migrants.) The area was known as Serongoh, with a swampy interior, and borders defined by low ridges and several medium-size streams. They bought the right to move into Serongoh from a ruler known as Sintaru Rajah. The purchase, near the tail end of the era of open headhunting, represented the exchange of an enormous amount of wealth: a hundred large antique Chinese ceramic jars of a design known as antang (a sort of amphora, to which backpack straps could be attached for carrying the jars through the jungle); one famous ceramic pot with a pedigree, named Keliwe Terdas; and a male slave named Nunuq Insan. Dilang Puti's history does not specify what happened to Nunuq after this transaction, but standard practice in that era was to sacrifice slaves as an alternative to the making war against a neighboring community in order to bring the spiritual power of a fresh head into the village.

Elders of the villages near the Lawa River have detailed mental pictures of conditions on the lands within a day's walk of their homes. Settling land right disputes over the years has provided continuous updates of the metal maps so essential to exercising traditional leadership. Only in recent years, since the arrival of the logging companies, have any of these traditionally preserved

лнм-12 --11-

accounts been written down. And almost none of the land right claims based on generations of family land use histories have been registered with or verified by the government.

The detail of traditional accounts is useful, however, in determining the extent of lands claimed not by individual families but by the community as a whole. Ironically, there have been no detailed land use studies within the expanses of land claimed by each village in this area; nothing in enough detail to address land right questions of individuals.

Several young men in the middle Lawa River villages complained to me that they were sick of hearing government tirades over the radio about the evils and wastefulness of shifting cultivation, as if they were stealing property from the state and contributing nothing of value to national development. They were mystified at how the official line could preach the virtues of fixed-field farming, but no one in the area, (which is almost entirely self sufficient in food) has been able to get a definitive land title. One of these guys pointed out that the government cannot even collect the land and development taxes that are supposed to be used for rural roads, bridges, and other "infrastructure" in areas without land titles. And the Agriculture Department is so set against shifting cultivation in general that no extension services are available in Bentian at all!

Most of the upland areas beyond the land currently being cultivated by people from the middle Lawa have been surveyed in a very general manner (with maps produced at a scale of 1:50,000) to determine boundaries for logging concessions, and as part of feasibility studies for potential Transmigration projects. Ironically, Agraria (the government body responsible for establishing and verifying land titles throughout Indonesia) has yet to send a survey team to Bentian, despite over 10 years of repeated requests by local people. Facing possible encroachment by logging concessions and new Transmigration settlements that would dwarf existing communities, many people want to definitively establish legal title to the lands they farm, and use-rights to long-fallow lands still producing fruit, vegetables, rattan, or anything else that could be used as evidence of continued produce, under overlapping requirements of local traditional law and Indonesian national law.

Reflecting on the place of Lawa River people in a new scheme of things, Bu Maryam, an old Suakong woman, told me "We used to be the only ones here, so we were big. Now, there are the others, the companies. They came. They'll leave, and we'll still be here. We tend to forget about them most of the time, and they forget about us. But they have changed the earth all around us, and suddenly we are small. We must think of what we want for our own future, or those others will make plans for us. We will not know what they are until it is too late..."

Judith Mayer

Sincerely yours,

Received in Hanover 5/24/88

JHM-12 -12-



Traditional longhouse construction in Dilang Puti. Here, smaller detached houses are also common.



Three generations of belian performing a harvest thanksgiving celebration in Dilang Puti. Ritual experts report greater interest than ever in their ceremonies.