December 6, 1971, I visited a Meo village near Chiangmai, Thailand, and December 16, 1971, a Yao village north of Van Vieng, Laos. The following observations are based on these visits and conversations with area officials.

The White Meo village of 24 families was founded in 1969. The houses, with timber sidings, dirt floors, and one of 4 types of rat-infested thatch roofs, were permeated with smoke from trixylic fires. Rice had been harvested and some was being sun-dried. Popped rice was strewn on altars, characteristic of the houses.

Within three miles of the village were at least five poppy (Papaver somniferum L.) fields (Fig. 1), three with a few plants already in flower. Most flowers were white, but some were purplish. The Meo did not like early sporadic flowering, attributing this to poor soil conditions. Some poppies grew in the stubble of corn, harvested a few weeks earlier. Intercropped with the poppy was an occasional taro or fruit tree. Some fields were separated from the road by fences lined with pleasantly aromatic plants of marihuana, Cannabis sativa L., 2.5 m tall, with short internodes and swollen nodes. Dried Cannabis was offered for sale.

Meo, Yao, Thai and Lao called marihuana canja or cansha, and opium fin. Marihuana leaves were used in soups in southeast Asia. Opium was used medicinally and there was some addiction, estimated at about 10 percent among the Meo, 15 percent among the Yao. In the hills, crude opium commanded about $25.00 to $30.00 per kilogram. Many Meo and Yao planted poppies as a money crop, paying other ethnic groups for rice and staples.

In Laos, thanks to AID officials, I visited a Yao village at an elevation of about 1,000 m. Mr. Fletcher H. Poling and Mr. Seng Dao of the USAID/Lao Economic Affairs Division, having completed a short study, stated that the 28-year-old village had 28 families. The houses resembled Meo houses, but had tin roofs. According to Poling and Dao's data, the head of the average family of 9 members was about 50 years old. A family averaged about 15 chickens, 8 pigs, 2 cows, and 1 duck. There was about one horse for every two families, one buffalo for every four families. An average family produced annually about 1,300 kg

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rice, $45.00 worth of vegetables, and 10 kg opium, reportedly worth more than $750.00.

Castor bean, citrus (especially pummelo), coffee, guava, orange, purging nut, and tobacco were cultivated in or near the village. Most rice was grown below the village while other vegetables, fruits, and poppies were grown in the karst hills above the village. Rather dense stands of *Ageratum*, *Cassia*, and *Sambucus* occurred just outside the village. Steep trails ascended through cloud forest and bamboo brake in the limestone karst to the poppy fields.

The interconnected poppy fields had been used for about three years and would probably be used for about seven more. A youth was clearing a forested area nearby, which, after burning toward the end of the dry season, was to be sown to poppy in 1972. As in the Neo field, charred stumps remained in the poppy fields. Frequent large, bare spots, resulting partly from poor seeding, partly from intensive cultivation, were said to make poppy fields recognizable in aerial photographs. The mixture of crops in these Yao poppy fields should give them different photogrammetric signatures from the nearly monospecific Neo poppy fields. The Yao poppy fields (Fig. 2) had more than 25 interspersed crops, among them, amaranth, balsam pear, banana and related spp., bean, betel, cabbage, Chinese radish, corn, cucumber, dill, eggplant, fennel, ginger, guava, kale, lemongrass, mint, mustard, onion, papaya, pea, pineapple, radish, string bean and possibly yard-long string bean, sugarcane, sweet potato, taro and yam bean.

Poppy seeds were broadcast periodically for several weeks starting in November and early December. Seedlings, young plants, flowering and fruiting specimens and harvested specimens all occurred in one field. Unlike the Neo, these Yao preferred to stagger the planting to stagger the harvest. Like Neo, the Yao weeded carefully, and thinned out the seedlings. Unlike some ethnic groups, the Neo and Yao did not eat the seedlings. In these fields, white flowers were more frequent than purplish flowers, which outnumbered carmine flowers. Fringed petals were occasional, in all colors, as was spotting near the base of the petals. The Yao believed that purplish-flowered poppies bloomed sooner and had a darker, but equally potent, latex. At harvest, pods were slit vertically on one side with a three-bladed knife, preferably shortly after noon. Early the next day, the exuded latex was scraped off into a small container with a spatula. On the third day, the other side of the capsule was lanced. At the village, the latex was mixed with water and boiled in a bronze pail, then strained, and boiled until thick. Cooled opium, kneaded into a dough-like consistency, was said to keep for several years, enabling the farmer to hold some back for favorable prices.
The Meo and Yao, unlike Turkish peasants, did not use the seeds for oil or condiment. For the next year, the Yao selected seeds from the biggest pods, dried them in the sun for a day or so, and stored them in the "attic" in split bamboo containers, not directly over the fire. Poisoned rice was spread to prevent rats from eating the poppy seed.

Broad conclusions should not be drawn from a study of too few poppy fields. A look at one group of Meo fields in Thailand and Yao fields in Laos indicated that cultural conditions, intercropping patterns, photogrammetric signatures and poppies themselves may vary widely in the poppy fields of southeast Asia.

Fig. 1. Meo Poppy Field Near Chiangmai, Thailand (December, 1971)
(Cannabis sativa was frequent along fence lines)
Fig. 2. Yao Poppy Field North of Van Vienz, Laos