

## **Narcotics Crops Control**

Evidence gathered through the annual opium cultivation survey conducted by the Office of the Narcotics Control Board indicates that the hilltribe farmers continue to depend on opium for personal consumption and as a cash crop. Hilltribe farmers are also employed by drug financiers to cultivate opium for use in the burgeoning heroin trade which exists in the region.

In recent years the amount of opium cultivated has fluctuated depending on the political situation along the northern border, the retail price offered for the drug, marketing conditions for legitimate crops and climatic conditions.

### **Narcotics Crops Survey**

The Narcotics Affairs Section (NAS) of the US Embassy in Bangkok, the Government of France and the Royal Thai Government jointly sponsor ONCB's ongoing opium survey. Three data systems are used in the survey; the ground and aerial survey, image processing systems and geographic information systems. These three systems form the basis of a database which is used to estimate opium cultivation and analyze emerging trends.

The annual opium cultivation survey is time sensitive. Data must be collected and analyzed and eradication target packages prepared to allow eradication troops sufficient time to destroy the crop before it can be harvested. In recent year, farmers have sought to avoid eradication and increase yields by planting outside of the traditional cultivation window and utilizing fertilizers and water sprinkling systems. In addition, multiple cropping in the same areas, and smaller more isolated fields have also been observed. Using these techniques, some farmers have sought to cultivate up to 4-5 crops in one year, including during the rainy and dry seasons.

A long-term solution, combining involuntary eradication with development

assistance must be used if Thailand is to make significant progress in further reducing the opium crop.

## **Opium Survey**

### **Methodology**

The 1997-1998 opium cultivation survey took place from August 1997 until April 1998. A total of 76 potential opium growing areas were targeted using both ground and aerial survey methods.

#### **Ground Survey**

Only 15 areas were surveyed through this method due to the difficult terrain. Ground survey teams also collected information on cultivation techniques, price and yield through interviews with farmers and other key informants. After reaching opium fields, the survey teams collected information on location by comparing GPS data with topographic maps. This information was later transferred to the survey database system for verification by aerial survey.

## **Aerial Survey**

The aerial survey was supported by helicopter units from the Royal Thai Police Aviation Division and the Royal Thai Army. The aerial survey covered all 76 highland target areas with an emphasis on areas with high-density opium cultivation. For each aerial survey flight, databases from the image processing system (a combination of SPOT and LANDSAT imagery) were compared with photo and video photo images taken from the helicopters. A laptop with a GEOLINK GPS program simultaneously recorded the flight lines for later analysis. This method was developed by ONCB. Upon return to the ONCB computer center in Chiang Mai Province, the image processing system processed the data which was used to plot the locations and size of the opium fields. Calculations were then loaded into the Geographic Information System.



### **Techniques Used by Farmers to Avoid the Impact of the Opium Eradication Campaign:**

- Postpone cultivation: Over the past 2-3 years, ONCB has observed less healthy fields in some areas due to poor timing by farmers. However, the poor crop may also be due to unfavorable weather conditions.

- Mixed-crop cultivation: Legitimate crops such as carrots and carnations, which resemble opium from the air, are often interspersed in opium fields to avoid detection by ONCB's aerial survey. During the past opium cultivation season,

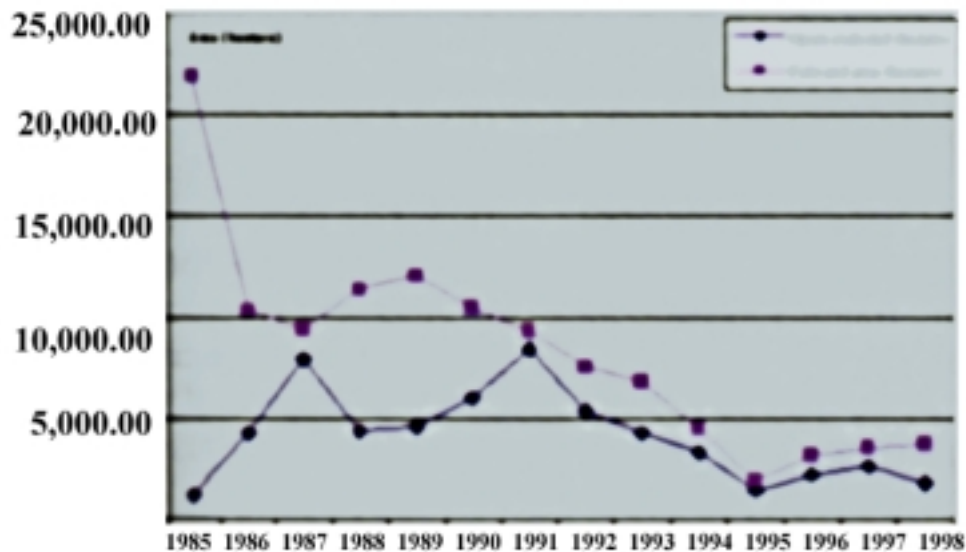
hilltribe farmers have also cultivated poppy in fruit tree orchards.

- Interval seeding: By planting poppy seeds at different intervals, farmers are guaranteed a crop at any time during the eradication season. Furthermore, studies have shown that if disturbed, small opium plants will produce an increased number of poppy capsules, sometime as many as 8-12. Normally a poppy plant will produce 3-5 capsules.

- Reducing opium field size: In recent 10 years, the average opium field size has decreased significantly. This is both an indication of the effectiveness of the eradication campaign and a simple method used by farmers to avoid eradication. Increasingly, smaller fields are located in remote valleys and other inaccessible areas.

- Catching the opium gum with leaves: Leaves are tied to the base of the opium bulb to catch the gum which may flow from the harvested bulb.

### Comparison of the Opium Cultivation Areas with Eradication Areas From 1985-1998



#### Observations on the 1997-1998 Opium Severy and Eradication Campaign

1. Opium cultivation increased 5.72% over the previous year. Cultivation in Tak Province increased

significantly by 316.40 hectares, or 193%

2. Average field size decreased from the previous year from 0.4-1 hectares to 0.2-0.8 hectares. At the same time, the number of opium plots increased from 1,855.20 to 2,713.20 hectares.

3. In Mae Hong Son, Chiang Mai, Chiang Rai and Nan Provinces, drug financiers have encouraged hilltribe farmers to expand cultivation across the Thai border to avoid eradication.

4. The quantity illicit drugs being smuggled through Tak Province increased along with poppy cultivation.

5. The wholesale price offered for raw opium is rising.

In the beginning of the cultivation season (Sept-Nov) was 15,000 Baht per 1.6 kg. "joi". Toward the end of the cultivation season the price declined to 8,000-10,000 Baht due to increased availability of opium. Prices can be expected to rise before the next cultivation season. Thus, it is important to keep pressure on farmers by maintaining the opium eradication campaign.

6. ONCB and eradication units must adapt the eradication campaign to meet the challenges brought on by farmers' use of interspersed crops, isolated cultivation and other trends are used to avoid eradication.

7. Technical means such as satellite imagery, GPS receivers and GIS have contributed greatly to the accuracy of the opium survey, However, each season, the databases provided by this technology need to be upgraded in order to increase the effectiveness of the campaign.



*The King's Initiative Project under the name "Royal Hilltribe Development Project" was created to develop the hilltribe's living standard.*

### Anticipated Trends in Opium Cultivation 1998-1999

1. Opium cultivation in 1998-1999 would be at least equal to if not greater than the 1997-1998 season due to the continued high prices offered for raw opium, improved efficiency in cultivating opium and lack of uniformity in the

government's eradication campaign.

2. Opium cultivation along the border provinces of Mae Hong Son, Chiang Mai, Chiang Rai and Nan will increase due to the demand for opium in Burma-based heroin labs.

3. Drug financiers will seek to recoup their reduced profits brought on by unseasonably dry weather in 1997-1998.

4. Thailand's economic downturn has resulted in depressed prices for legitimate crops in the North thereby increasing the chances that hilltribe farmers will choose to cultivate opium instead.

5. Multiple plantings, use of fertilizer and highland irrigation techniques will continue to be used by farmers to increase yield and avoid eradication by government troops.

6. Hilltribe farmers have studied the limitations of the eradication campaign to serve their own ends. Farmers who grow poppy have avoided arrest for their actions. They can, therefore be expected to see

opium cultivation as a relatively low-risk enterprise.

For Marihuana, there were 17 provinces of marihuana cultivation areas in 1998. Compared with 18 provinces in 1996 and 24 provinces in 1995. Marihuana cultivation still persists in many provinces throughout the country but it is grown mostly in the Northeastern part of Thailand. Regarding to the marihuana suppression measure which has been used for over 20 years, marihuana production has substantially decreased. An amount of 1,098 tons of fresh marihuana were eradicated in 1987 and it decreased to only 48 tons in 1998.

## Comparative Statistics of Fresh Marihuana Eradication during 1994-1998

| Year | Cultivation (hectares) | Areas | Eradication (kgs.) |
|------|------------------------|-------|--------------------|
| 1994 | 46.77                  |       | 456,788.00         |
| 1995 | 20.08                  |       | 156,765.45         |
| 1996 | 15.98                  |       | 59,871.80          |
| 1997 | 10.78                  |       | 30,500.00          |
| 1998 | 6.64                   |       | 48,205.80          |