

enforcement agencies (NCB 2002). Judged on the basis of seizures, most of the cannabis cultivation in India occurs in the north east (NCB 2004).

### Licit Cultivation

India is the only country currently producing licit opium gum for medical and scientific purposes for domestic needs and for export under the terms of the 1961 Single Convention.<sup>5</sup>

Opium poppy is cultivated in three states of India – Madhya Pradesh, Rajasthan and Uttar Pradesh – in the following 22 districts:

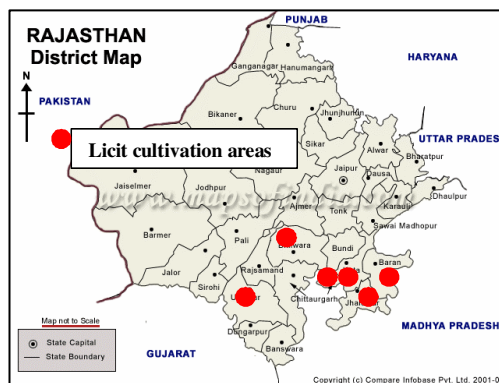
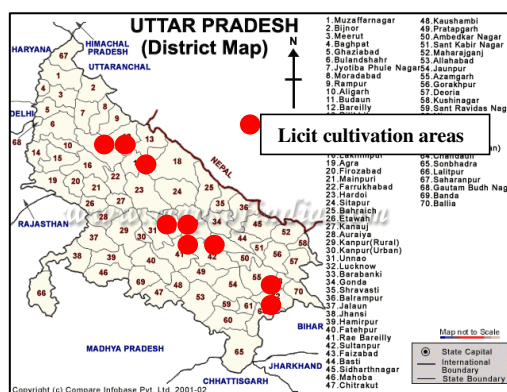
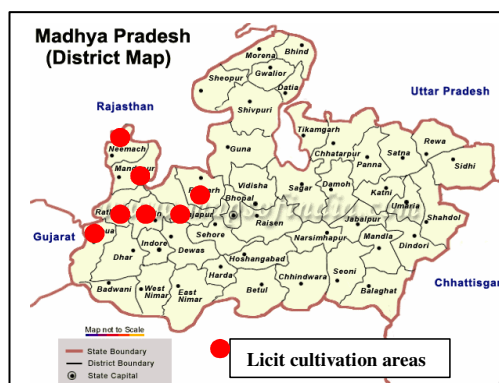
**Madhya Pradesh:** Mandsaur, Neemuch, Ratlam, Ujjain, Jhabua, Shajapur, and Rajgarh.

**Rajasthan:** Kota, Baran, Jhalawar, Chittorgarh, Udaipur and Bhilwara.

**Uttar Pradesh:** Barabanki, Faizabad, Ghazipur, Mau, Lucknow, Raibareilly, Bareilly, Shahjahanpur and Budaun.

The Central Bureau of Narcotics, based in Gwalior, implements a stringent licensing system in India. The crop is generally sown in November and harvested in March-April. Opium is used to extract alkaloids such as morphine, thebaine and codeine. After the extraction of the opium, the pods are crushed and the poppy seeds are extracted and can be used as condiments in Indian cooking.

The sale of poppy seeds forms a significant proportion of the income from the licit opium crop. The crushed pods left after extraction of the seeds are referred to as poppy straw. This poppy straw contains a small concentration of morphine residue. The state governments in India regulate the sale of poppy straw for medical and scientific purposes. Trafficking and abuse of poppy straw is a common problem in some north-western states of India.



<sup>5</sup> The other countries which authorize licit opium gum production are the Democratic Republic of Korea (only for domestic purposes), and Japan (only in small quantities to maintain the technology). China produced licit opium for medical purposes until the end of 2001. While the country appears to have stopped such production it maintains estimates for opium production. There are 11 other countries that cultivate opium poppy for the extraction of alkaloids. These are: Australia, China, Czech Republic (where poppy-straw as an opiate raw material is only obtained as a by-product), France, Hungary, Slovakia, Spain, the former Yugoslav Republic of Macedonia, Turkey, the United Kingdom and Serbia and Montenegro (where poppy-straw as an opiate raw material is only obtained as a by-product). There are 6 more which cultivate only for horticultural or culinary purposes: Austria, Estonia, Germany, Netherlands, Poland, Ukraine, but they harvest the produce using means which do not involve the process of lancing and obtaining gum, thereby minimizing the risk of having opium diverted into illicit channels.

Raw opium is a viscous product with considerable moisture content. Opium tendered by the farmers at the time of procurement normally comprises of 55-60% solids; the remainder is moisture. For the sake of uniformity, all production figures of opium in India are calculated using a consistency ratio of 70 degrees i.e., comprising 70% solids and 30% moisture).<sup>6</sup> The extent of licit cultivation of opium poppy in recent years is given below.

#### Licit cultivation (licensed area in hectares)

Year of harvest	1997	1998	1999	2000	2001	2002	2003	2004
Opium poppy	29,799	30,714	33,459	35,270	26,683	22,847	20,410	21,141

Source: CBN 2004, and correspondence with CBN in September 2005.

#### Licit production (metric tons at 70 degrees consistency)

Year of harvest	1997	1998	1999	2000	2001	2002	2003	2004
Opium produced at 70 degrees consistency	1,271	335	1,382	1,705	995	1,055	684	1,061

Source: CBN 2003, and correspondence with CBN in September 2005.

#### Number of licensed cultivators for the 2003-2004 growing season

Name of unit	No. of cultivators licensed	No. of cultivators			
		Did not sow	Who actually cultivated	Uprooted	Tendered opium
Madhya Pradesh	48,207	783	47,424	871	46,553
Rajasthan	44,695	2,273	44,422	491	43,931
Uttar Pradesh	10,795	77	10,718	2,647	8,071
Total	105,697	3,133	102,564	4,009	98,555

Source: CBN 2004.

#### Licensed cultivation/harvested area (in units) for the 2003-2004 growing season

Name of unit	Area licensed in hectares	Area utilized (in hectares)				Quant-ity of opium at 70° consistency	Average at 70° consistency
		Not sown+ unutilized	Measured	Uprooted	Harvested		
Madhya Pradesh	9,642	877	8,765	200	8,565	500	58.39
Rajasthan	9,339	768	8,571	110	8,461	506	59.83
Uttar Pradesh	2,160	22	2,138	573	1,565	55	42.27
Total	21,141	1,667	19,474	883	18,591	1,061	57.07

Source: CBN 2004.

The opium is thereafter dried and, for export, the consistency is increased to 90 degrees, i.e., 90% solids and 10% moisture. Most of the opium produced in India is destined for export. The quantities of opium exported in the recent past are contained in the table below.

<sup>6</sup> Since all opium is first tested at the collection centres, in the case of farmers who produce low-consistency opium (e.g., 50 degrees consistency), a smaller amount would be recorded as their total. As an example, if a farmer produces 14 kg of opium of 50 degrees consistency, it will be reckoned as 10 kg (14 x 50 / 70).

### Recent Opium Exports (in metric tons at 90 degrees consistency)

Year	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03
Opium exported	735	528	650	574	495	495

Source: CBN 2003.

**The 2005 crop:** According to provisional data from the Central Bureau of Narcotics, the total quantity of opium harvested in 2005 (March – April) declined by more than half to 439 metric tons. This was the result of a conscious decision by the union government to reduce the number of hectares under cultivation. The number of hectares harvested in 2005 was 7,833, down from 21,141 in 2004. The number of cultivators who actually tendered opium was 79,016, down from the 2004 total of 98,555. The average yield declined minimally from 57.07 to 56.04 kgs per hectare at 70 degrees consistency.<sup>7</sup>

**Diversion:** Although an elaborate system of regulatory and preventive controls has been established to prevent the diversion of opium, certain quantities do flow into illicit channels. This is evidenced by seizures in and near the poppy-cultivating areas<sup>8</sup>, although the extent of diversion is almost impossible to determine. One obvious incentive for unscrupulous farmers is the higher price offered by the illicit market (ranging from Rs.5,000 per kg during the crop season in April, to between Rs.15,000 - 20,000 in December/January). This can be compared with the government's official procurement prices, which generally vary from Rs.720 – Rs.2,100 per kg depending on the quantity of opium tendered per hectare.

Market studies also lend indirect support to the notion that the illicit manufacturing of some quantum of heroin within India results from diverted product. For example, a UNODC study of the illicit drug markets of Delhi (UNODC ROSA 2001) estimated, on the basis of respondents, that a significant portion of the heroin available on the city's streets originated from opium poppy cultivated in India. To reduce the risk of diversion, attempts have been made to ensure that the product is not left with the cultivators for a significant amount of time following the conclusion of the lancing and extraction of the opium. In an effort to further reduce the risk, the CBN has also initiated a project to estimate the licit opium poppy cultivation area through satellite imagery.

### 3(b) Manufacture

**Opium / heroin:** The number of heroin manufacturing facilities ('labs') detected during the past few years are as follows:

Year	1999	2000	2001	2002	2003
'Labs'	3	5	6	7	3

(Source: National Drug Enforcement Statistics as on 30 Nov 2004 compiled by the Narcotics Control Bureau, India)

**Methaqualone:** Methaqualone is a depressant used in combination with diphenhydramine (or, alternatively, diazepam) in the manufacture of Mandrax®. Methaqualone is not typically abused in India. It is illicitly produced in India and exported for consumption (both oral and smoked in combination with cannabis as 'white pipe') in South Africa, a country with which India has strong, historical, cultural and trading links. The NCB notes that the illicit

<sup>7</sup> Source: correspondence between CBN and UNODC in September 2005.

<sup>8</sup> For example the Annual Report of the Narcotics Control Bureau indicates that during the year 2003 39% of national seizures of opium occurred in the three states licitly cultivating opium (NCB 2004).

manufacturing of this drug, which was limited mainly to Maharashtra and Gujarat, could take place in pharmaceutical establishments in other parts of the country. Illicit manufacturing facilities have, in recent years, been discovered in Hyderabad, South Gujarat, Rajasthan and Eastern Uttar Pradesh. In some cases it was observed that these illicit operations had been financed and controlled by non-residents based outside India. The principal destination for the end product remains South Africa.

**Substitute chemicals:** One recent trend detected during certain investigations has been the use of acetyl chloride as a substitute chemical for Acetic Anhydride, which is controlled under the NDPS Act. The use of such chemicals will render the location and identification of illicit manufacturers increasingly difficult.

**Amphetamine type stimulants:** Although India produces many precursors used for illicit manufacture of amphetamines, until recently, illicit ATS factories had not been discovered. The precursors for ATS, especially ephedrine and pseudo-ephedrine, tended to be smuggled out to Myanmar for ATS manufacture there. A change in trend was however observed as a result of the successful dismantlement on 17 May 2003 of an illicit ATS laboratory in Kolkata and the seizure of 24 kg of ephedrine. The facility, involving Myanmar, Chinese and Indian nationals, had yet to start production. The raid was the result of a successful joint global operation by the Indian Narcotics Control Bureau, and authorities from China and the United States. On 5 June 2004, officers of the Directorate of Revenue Intelligence dismantled another factory in South India, which was manufacturing ecstasy (MDMA – Methylene DioxyMethyl Amphetamine) as well as methaqualone. Methamphetamine was also seized in the operation. Considering the relative ease of availability of ATS precursors in India and the growing demand for ATS in the world, especially SE Asia, the pattern is of concern.

### **Other Licit Drugs**

India is a large manufacturer of pharmaceuticals. Its approximately 25,000 manufacturers account for about 10% of the total quantity of pharmaceuticals produced in the world. While the law requires all drugs with abuse potential to be sold only on prescription, there are reports of significant diversion (INCB 2003). Proxymon® (a preparation of dextropropoxyphene), buprenorphine, Phensidyl® (a codeine based cough syrup), diazepam, nitrazepam and lorazepam are the most commonly abused pharmaceuticals (NCB 2002). In India, currently, injecting drug use is more closely linked to the abuse of licit opiate pharmaceuticals than to illicit drugs. A related problem is the issue entrance of spurious drugs into the marketplace.