Ever since the Shanghai Commission met in 1909 to find ways to curb the opium trade, the narcotics problem has been seen as originating in the impoverished nations of the world. As a consequence, it has been fashionable in the North to see narcotics trafficking as a law enforcement problem calling for ever-more-punitive measures against the producers. What has been forgotten — conveniently so for the North, which is incapable of dealing with the demand-side of the drug equation — is that the present pattern of the drug trade is the result of a colonial imprint, and the North's own "progressive" pharmaceutical industry.

Arab traders had probably introduced opium into China around the 8th century when they established commercial ties with merchants in the port of Canton. The Chinese were quick to recognize the seriousness of opium addiction, but their chief supplier was the British colony of India. Chinese control measures then, were doomed by the interests of the Empire.

The first Opium War of 1839, declared by the British, who...
were exceedingly annoyed with persistent Chinese efforts to prohibit opium, resulted in the island of Hong Kong being ceded to the "barbarians" — as China so quaintly referred to its European tormentors. The British colony of Hong Kong encouraged opium smugglers to operate out of its harbour and established itself as the world's key opium distribution centre. Incredibly, opium importation, distribution, and use were not banned in Hong Kong until 1945.

A second Opium War broke out in 1856 after the Chinese had refused to yield to British pressure to legalize opium and permit access to more inland ports. The Treaty of Tientsing, signed in 1858, opened up 11 more ports to Western powers and legalized the importation of opium. By 1880, Chinese imports of opium were more than 6500 tonnes a year; almost all of it from India. Its addict population was estimated in excess of 15 million.

OTHER COLONIAL CULPRITS

The three countries of Southeast Asia that make up the so-called Golden Triangle are Thailand, Burma, and Laos. Burma, a former British colony, produced large quantities of opium for export to China — despite the vehement protestations of successive Burmese kings. In more recent times, insurgency and activities of the remnants of the Chinese Nationalist Army, the Kuomintang, maintain the high levels of production to gain revenues to buy arms.

In Thailand, following the recommendation of British advisor Sir Malcolm Delevingne, in 1934, licit opium cultivation was promoted in the highlands. After World War II, Thailand experienced difficulty in obtaining opium for its registered addicts, and had to authorize more poppy cultivation. Eventually, with the elimination of smuggling from Yunnan Province in southern China and from Iran, Thailand emerged as a significant opium producer.

THE PRODUCERS

Opium can only be produced when and where labour is cheap and abundant. Anywhere from 175 to 250 hours of labour are required for every kilogram of the drug, and the size of the poppy plot is restricted to the number of plants that can be incised and then scraped of raw opium resin within a 24-hour period. In most of the producing countries — such as Turkey, Iran, Afghanistan, Pakistan, India, and Mexico — plots rarely exceed 0.5 hectares. Opium cultivation represents only a small amount of the farmer's total cropped land; the rest serves to grow food crops. In Southeast Asia, however, because of political and historical factors that have made opium cultivation an integral part of the life of the hill tribes, opium fields tend to be larger and may represent as much as half of the cultivator's cropped land.

Opium use is widespread among the hill tribes of the Golden Triangle: to treat the symptoms of gastrointestinal diseases, as a painkiller, and for recreation. As a form of currency, it is exchanged for salt, rice, and other commodities provided by local Chinese traders.

Opium growers employ the "slash and burn" agriculture technique. In Thailand, they are often accused of destroying the watersheds of the major rivers on which the country depends for a good part of its lowland agriculture. The extent of the environmental damage is a matter of conjecture and of considerable dispute. The forest areas cleared for opium growing are usually between 900 and 1500 square metres. They are sparsely and their water retention capacity may be limited. It is also noteworthy that hill tribes who follow similar practices, but for other crops, have escaped criticism.

In Thailand, there are approximately 6000 hectares under poppy cultivation. It is difficult to estimate the resulting average annual income because of the surreptitious nature of the activity and wide and frequent fluctuations in prices. On a regional and national basis for 1981, if a maximum production of 1100 tonnes for Thailand and 600 tonnes for the Golden Triangle, and a price of CA$54 per kilogram is assumed, this would mean total "farmgate" revenue of CA$5.5 million for Thailand, and CA$33 million for the three countries. However, since 50 percent of production is consumed regionally, only half of these figures would represent for foreign earnings. International agencies usually depict the foreign earnings. International agencies usually depict the

THE COCAINE TRADE

Estimated world licit needs for processed coca for pharmaceutical use in 1981 were 1441 kilograms, and for coca leaf 8 493 349 kilograms. But there is now staggering overproduction of coca leaf, principally in Bolivia, Peru, and Colombia. Total production for the three countries could be as high as 100 million kilograms.

The mature coca bush is marvelously adapted to the Andean region and the socioeconomic characteristics of the native peoples. The bush will produce harvestable leaves over a period of 15–30 years, and it has an elaborate and deep root system that greatly reduces soil erosion. It is labour-intensive — but only for a short period of time — and is suited to the family as a unit of production. Yields are almost always reliable; it is not particularly sensitive to variations in rainfall and soil conditions. While no comparative figures are available, coca is always reported as the best cash crop for growers - more lucrative than coffee, bananas, pineapples, cassava, or any citrus crop. The price paid to farmers as the "poorest of the poor," members of oppressed ethnic minorities eking out a marginal existence. This table may show in excess of 15 million.

(Opposite) Harvesting opium in the Golden Triangle: the international trade in narcotics was just as much the creation of a dependency among nations as among drug users.
THE CANNABIS TRADE

In terms of volume, monetary value, and complexity of operations, cannabis has become one of the most important trade commodities in the world. The principal countries from which marijuana is supplied to the U.S.A. are Colombia, Mexico, and Jamaica. The retail value of these marijuana imports for 1979 would have been roughly CA$17-$25 billion. In addition, some 200 tonnes of hashish worth CA$835-$885 million retail were imported, principally from Morocco, Lebanon, Afghanistan, and Pakistan.

It is difficult to gauge current cannabis production in Colombia and consequently, its monetary value. Drug officials in the U.S.A. have given a high priority to verifying the results of a 1978 aerial survey of marijuana cultivation in the northeastern Guajira Peninsula, which estimated that 70,000 hectares of cannabis were under cultivation with a possible annual yield of 100,000 to 200,000 tonnes. Colombian analysts maintain that less than 3 percent of the total monetary value of the crop remains within Colombian hands. But this percentage still means from CA$530 to $930 million was pumped into the country's illicit agricultural sector.

JAMAICA

Cannabis has been described as Jamaica's main cash crop and most important single source of foreign currency. With the possible exception of Colombia, there is probably no other country in the world whose economy is so enmeshed in the narcotics trade. In 1980, the island exported (excluding tobacco) CA$205 million of agricultural produce, considerably less than the retail value of its cannabis trade.

Cannabis production for export is now approximately 4,800 tonnes, worth about CA$1.25 billion in retail value. About CA$245 million of this remains within Jamaica, making cannabis still more important economically than bauxite mining, tourism, and agricultural exports.

In Jamaica, the cultivation of cannabis is a poor man's enterprise and it fits well into the island's pattern of mixed cropping. For the great majority of growers it is an agricultural sideline bringing in critically needed income.

The use of marijuana in Jamaica is extraordinarily widespread, and has been labelled as "one of the highest rates for any nondeviant population in the Western world."

Increased cannabis cultivation is likely to occur in other developing countries in the future, particularly where previously there has been little or no cultivation.

This is precisely what is happening, for instance, in the coastal regions of the Niayes and the swampy areas of the Casamance in the south of Senegal. With two harvests a year and a kilogram of cannabis ("yamba") selling at CA$22-$29, profits are considerably more attractive than a kilogram of groundnuts selling for CA$0.30.

Both cocaine and cannabis penetrated the North through popular patent medicines. Cocaine was guaranteed to cure shyness, headaches, and neurasthenia. Cannabis (which includes marijuana, hashish, and hashish "oil") was hailed as a remedy for physical pain, muscular spasms, convulsions, tetaus, rheumatism, and epilepsy.

Each great pharmaceutical leap in modern times has resulted in a serious drug abuse problem, first in the North, and later in the South. The isolation of morphine in 1805, the marketing of heroin in 1898, the discovery of the benzodiazepines, a multitude of tranquilizers and hypnotics marketed at a furious pace during the 1950's and 1960's, has led to one of our most recent, and perhaps our most pernicious drug abuse problems. Modern pharmacology is transforming drug abuse patterns around the world. Everywhere, but principally in the cities of Asia and the Near and Middle East, opium smoking is giving way to intravenous heroin use, the barbiturates, the tranquillizers and the sedatives. The flow of illicit drugs is increasingly from North to South.

A TWO-WAY TRAFFIC

According to the UN's International Narcotics Control Board (INCB), the major international control problem in the world now is diversion from huge overproduction of amphetamines and methaqualone. This occurs because exporting countries do not insist on a valid import certificate having been received, and allow shipments to free trade zones - particularly those in Europe - where drugs are repackaged and relabelled as "Vitamin C," or other such innocuous products. Almost everywhere across Africa, Asia, and the Middle East, there are important seizures of illicit supplies of psychotropics, particularly methaqualone. These reflect widespread abuse of mood-modifying drugs in the Third World, often in combination with the more traditional substances such as the opiates and cannabis. International regulatory agencies are agreed that this emerging pattern of intoxication in the developing world presents new and serious health hazards.

Chemical and pharmaceutical companies have turned to the developing world for a new market where the scope for the sale of psychotropics is enormous. Rising standards of living, the relative shortage of doctors and inadequate national regulations are seen as ideal factors for the self-prescribing of psychotropics. In 1970, excluding China and the Eastern Bloc countries, the total international wholesale value of all pharmaceuticals was estimated at just under CA$22 billion.
It was expected that in 1980, the world market would be about US$55 billion.

**THE DEVELOPMENT PERSPECTIVE**

The 92nd U.S. Congress, of 1971-1972, in a frenetic pre-election period, saw the introduction of no fewer than 102 bills related to international narcotics control, many calling for the suppression of drug crops in developing countries that failed to curb production. Fortunately, the selling up of the United Nations Fund for Drug Abuse Control (UNFDAC) in 1971, has given great impetus to the notion that crop substitution is the most feasible long-term strategy to follow in international drug control.

In 1976, Pakistan, with substantial financial support from the Federal Republic of Germany, signed an agreement with UNFDAC for a 1400-hectare pilot crop-substitution program in the Buner area of the Northwest Frontier Province. Two years later it was found that revenue from farming systems where high-yielding wheat and maize varieties had been introduced was as high as or higher than the income obtained from cultivating opium. The research work also indicated a good potential for sugarcane, peanuts, and potatoes. There was also some potential for the cultivation of high-value medicinal and herbal plants, as well as fruit trees planted on terraces where they would add income without displacing other food crops.

In Burma, a large-scale program involves a host of UN agencies and includes crop eradication as well as substitution. That is, once a farmer's poppy crop has been destroyed, he is then offered assistance to switch to other food and cash crops or to embark on other agricultural ventures. The program calls for agricultural base stations to produce seedlings, silk worm eggs, and livestock for distribution to the cultivators. Extension centres will ensure proper utilization of the material distributed from the base stations, backed up by training programs for young farmers and demonstration centres in villages. An evaluation of the Burmese program claims a "fascinating success story," with a dramatic reduction in the opium crop, and over 16,000 hectares eradicated. The evaluation appears to be a little enthusiastic. It does not take into account a severe drought that is known to have drastically reduced the opium crop in the entire Golden Triangle at the time of the program. The fact that Burmese opium production was reported at 500 tonnes — as high as it has ever been — in 1981, is a strong indication that the success of the Burmese program is less fascinating than is being claimed.

The most important venture of UNFDAC in crop substitution has been in Thailand. The project has involved setting up 11 experimental stations and a research training centre. Successful crop development at experimental stations has included coffee, new varieties of upland rice, kidney beans, navy beans, off-season vegetables (such as lettuce and carrots), peaches, passion fruit, field corn, and potatoes. The returns from some of the substitute crops compare favourably with revenue from the sale of opium, especially in the case of coffee.

The Thai program was planned and implemented with great care. It included the provision of primary health care; the development of handicrafts; the provision of marketing, trading and storage facilities; the researching into opium abuse among the hill tribes; and the training of workers in the treatment of abusers. It is estimated that, in the participating villages, opium production has been cut by half. Program officials are confident that they have identified suitable replacement crops and, more importantly, have enlisted the cooperation and trust of the growers and their families.

CROP SUBSTITUTION IN COCA-GROWING REGIONS PRESENTS SERIOUS, THOUGH NOT INSURMOUNTABLE, DIFFICULTIES. A PERENNIAL WITH A WELL-DEVELOPED ROOT STRUCTURE, THE COCA BUSH CALLS FOR A FAR MORE VIGOROUS EFFORT TO BE ERADICATED THAN THE RATHER THIN-STEMMED A SUITABLE ALTERNATIVE CROP HAS NOT YET BEEN IDENTIFIED, ALTHOUGH THE U.S. STATE DEPARTMENT'S BUREAU OF INTERNATIONAL DRUG CONTROL, MANY CALLING FOR THE SUBSTATION OF THE GROWER AND THE CROP IS LESS CONSISTENT. THE PROFIT-MOTIVE IS ALSO LIKELY TO REMAIN IRRESISTIBLE, BECAUSE DEMAND IS RISING AS USE CONTINUES TO PENETRATE WESTERN CULTURE AND FINDS FAVOUR WITH MIDDLE-CLASS YOUTH S AROUND THE WORLD.

As to the pharmaceutical industry and North-South drug flow, the future looks bleak. Unbodies have at best a tenuous restraint on the industry, and even that is now seriously threatened. Several major producing countries, such as Hungary and the Federal Republic of Germany, are preparing to defect from international agreements regulating preparations containing phenobarbital. And the prospect of the benzodiazepines being added to the 1971 Convention on Psychotropic substances, as urged by a number of developing countries, is doomed now that manufacturers have successfully lobbied against it.

The development option, largely unproven and exploratory, nonetheless reflects the reality that narcotics production is rooted in chronic rural poverty and ill health. It is therefore a more optimistic approach than strict law enforcement that has repeatedly resulted in consumers switching to more easily smuggled and potent forms of drugs; and in cultivation being pushed back into more remote, distant and often new regions and countries altogether.

André McNicol is senior writer in IDRC's Communications Division. This article is based on a study by the same author and was published by the Ottawa-based North-South Institute.