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Poppy fields in Afghanistan

And its implications for the development of a healthy agriculture

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Preface

This chapter is to describe the problem of growing, processing and traffic of illicit drugs in Afghanistan with a realistic look at its social causes and effects along with a brief history of opium and cannabis production in Afghanistan. With such a background, the implications of opium problem on any plan to help rebuild and restructure Afghanistan's economy can be better understood as the general view of the authors is to redirect the agricultural potentials in north Afghanistan towards a healthy stage that can lead to near self-sufficiency in provision of food for the area's residents.

We believe that the problem of growing, processing and traffic of illicit drugs in Afghanistan should be discussed with reference to its role in the household economy of farmers, the resultant social and political anarchy, and hindrance to the development of a healthy agriculture and economy. The causes of this phenomenon can be delved into, with a view to the history of the events and the current situation especially in north of Afghanistan. The prospective picture for Afghanistan could be portrayed by looking at the real data and statistics available through the work of international organizations (most notably UNDCP) and the solutions to opium problems should be sought considering the deep changes that are needed to empower the farmers with the necessary tools to grow other crops, while remembering the immediate needs of a society that has few alternatives to earn a minimum living.

With a short discussion on all the social, economical, political, and humane perspectives of the opium issue, the importance of providing a competent system of irrigation for the farmers living in north Afghanistan could not be overemphasized, considering the potentials of Amu-Darya river to support a healthy and strong agriculture on its left bank.

Introduction

Illicit drugs are a global problem with more than 200 million people abusing drugs worldwide. Drug use is responsible for lost wages, soaring health-care costs, broken families and deteriorating communities. Intravenous drug use is also helping spread HIV/AIDS and hepatitis. There is an obvious and direct link between drugs and an increase in crime and violence. Drug cartels undermine governments and corrupt legitimate businesses. Revenues from illicit drugs fund some of the deadliest armed conflicts in many countries. The social costs are also high and inflict all communities to a more or less degree with a variety of problems: street violence, gang warfare, social decay, shattering of lives, expenses and financing of police forces and army watch guards in the borders, judicial systems and jails, treatment and rehabilitation programs. Drugs also lead to an expenditure of our financial resources away from a healthy development and in this regard are especially harmful to the developing countries. More than four hundred billion dollars is spent globally on drugs every year.

Afghanistan has been a major player and also itself a culprit of this phenomenon; as for example it accounted for 75 per cent of the global opium production in 1999 (figure 1). In July 2000 the Taliban authorities ruling over 90% of Afghanistan prohibited the cultivation, production, manufacture, use and trade of narcotic drugs and the total ban on opium poppy cultivation resulted in a sharp decline in the cultivation of opium poppy for the growing season 2000/2001 in the areas controlled by Taliban. Opium poppy cultivation in the remaining areas continued unabated with recent significant increases. Still the continued seizure of opiates in countries surrounding Afghanistan indicated the existence of significant stocks held by a large number of drug trafficking groups. The international community should be made aware of the continued potential of extensive illicit opium poppy cultivation in Afghanistan, and to assist Afghanistan in preventing the resumption of opium poppy cultivation and the related production and trafficking of opiates particularly Heroin.

The role of Afghanistan's opium in the world trade of illicit drugs

In the late 90's, about 180 million people worldwide were using drugs. Meanwhile 90% of illegal opium as well as 80% of heroin was produced in two countries of which one was Afghanistan. Afghanistan alone produced more than 70% of the world's opium, and about 80% of opiate products (mostly heroin) destined to the European market. Fifty percent of all narcotic drugs in the world were produced in Afghanistan. This represented approximately one third of the worldwide annual turnover of narcotics, estimated by the United Nations to be of the order of \$500 billion.

Afghanistan, the poorest country on earth, was the source of tremendous financial wealth derived from the drug trade to financial institutions, business syndicates and organized crime who needed a poor and politically and economically unstable Afghanistan to continue benefiting from this business. This is one reason we believe any project to help rebuild Afghanistan's economy and in particular its agriculture should address the opium issue seriously.

Our discussion will continue first with a definition of opium's physicochemical characteristics and its medical effects on the body to grip a better understanding of what it is, how it is produced, and why it is abused. After a discussion on the drug's adverse (meaning unwanted by the consumer) effects on the body, the detrimental effects on the economy of societies producing or consuming this product are delineated and references made to the situation in Afghanistan. Heroin and Cannabis will also be introduced as other major illicit products of Afghanistan.

The physicochemical & pharmaceutical features of drugs produced in Afghanistan

"Opium" is the coagulated juice of the "Opium poppy" which is a plant from the species Papaver somniferum, an annual plant that can grow in a moderate climate. It has white to red flowers and round to elongated capsules with dark violet seeds (*figure 2*).

Raw opium is a non-homogeneous material containing poppy capsule fragments. In fresh state, it is sticky, tar-like and dark brown, and becomes brittle and hard as it ages. Raw opium is made by just air-drying of opium. It may be abused through smoking, chewing, or eating, with an average daily dose of 5-10 grams. Prepared opium is a sticky dark product obtained through various treatments of raw opium (e.g. water extraction) to make it suitable for smoking.

Morphine is one of the alkaloids extracted from opium. Its color ranges from gray or yellowish white to dark brown. Crude morphine can be in the form of finely ground powder, compressed blocks and tablets. It is abused by injection with an average daily dose of 10-20 mg.

Heroin is a semi-synthetic opiate synthesized from morphine. The smokable form of heroin is a hard granular material from light brown to dark gray, sometimes red or pink, containing 25-45% heroin hydrochloride and other substances such as caffeine. The injectable form of heroin is a white and almost odorless powder and if free of added impurities, may be composed of up to 98% heroin hydrochloride. It may be injected, inhaled, sniffed, or smoked with an average daily dose of 5-15 mg, and up to 250 mg. Heroin is almost 10 times more potent than morphine.

Opium and opiates are still widely used in medicine for analgesia (pain relief), treating cough (codeine), and diarrhea. The pharmacologic effects that lead to abuse are a sense of well being (by reducing tension, anxiety and depression); euphoria, feeling of warmth, contentment,

detachment from emotional as well as physical distress, and relief from pain. They may also cause some short-term effects like nausea and vomiting, constriction of pupils, drowsiness, inability to concentrate, apathy, and decreased physical activity. An acute overdose can result in death due to respiratory depression. The long-term effects include rapid development of tolerance and physical and psychological dependence, constipation, menstrual irregularity, infectious diseases and abscesses (if injected), damage of structures in nose (when sniffed), respiratory problems (if smoked), decreased appetite leading to malnutrition and weight loss, chronic sedation and apathy leading to self-neglect.

Abrupt withdrawal results in a moderate to severe withdrawal syndrome that is generally comparable to a bout of influenza with cramps, diarrhea, running nose, tremors, panic, chills and sweating.

The cannabis (hemp) plant, Cannabis sativa L. (Cannabinaceae) is a single plant species, but exists in many different biological, chemical and morphological varieties. It is a cosmopolitan annual bush-like plant growing widely throughout the temperate and tropical zones of the world. The term "cannabis" is also used generally to describe different products obtained from the cannabis plant: a tobacco-like greenish or brownish material consisting of the dried flowering, or leaves of the cannabis plant (figure 3). It is produced by air-drying of herbal material and may be found in the form of loose herbal material, blocks of compressed herbal material, fiber, or small rolls wrapped in paper. It is widely known as marijuana and usually smoked in a dose of 0.5 to 1 gram of plant material. Cannabis resin is a crude or purified extract, separated from the cannabis plant. The dried fine powder is widely known as hashish or pot. It may be smoked (alone, or mixed with tobacco; approximately 0.1 gram) or orally ingested (in food, tea). Its pharmacologic effects include a sense of well-being or euphoria described as a "high" feeling, a pleasurable state of relaxation, and enhancement of sensory experiences with more vivid sense of sight, smell, taste and hearing. There are some short-term effects like increased appetite, increased pulse rate, red eyes, impairment of intellectual (e.g., short-term memory, logical thinking) and physical performance (e.g., driving a car or performing other complex tasks), and at a later stage becoming quiet and sleepy. With larger doses, perceptions of sound, color and other sensations may be sharpened or distorted, and thinking becomes slow and confused. In very large doses, the effects of cannabis are similar to those of a hallucinogen (confusion, restlessness, excitement, and hallucinations) causing anxiety and panic; or may even precipitate a psychotic episode. The long-term effects include development of moderate tolerance, possible psychological dependence, and losing interest in sustained activities. Also cannabis smoke contains 50% more tar than smoke from a high-tar cigarette; with regular use, risk of lung cancer, chronic bronchitis, and other lung diseases increases.

Cannabis has been used in medicine to treat nausea and vomiting in cancer chemotherapy, to stimulate appetite especially in AIDS patients (to counter HIV related "wasting"), to lower intra-ocular pressure in glaucoma, and to decrease muscle spasms, for instance in generalized epilepsy.

In any discussion of the medical aspects of drug use, spread of HIV infection and contraction of AIDS through injecting drug use should also be mentioned. More than 60% of all new HIV cases in neighboring countries (including Iran and many of the former Soviet republics) are related to injecting drug use. This results from sharing of the syringes for drug use that may be because of a lack of access to syringes (especially in prisons), the addicts' attempt to economize on a small amount of the injecting drug they prepare, or just lack of knowledge or attention to the possible risks. Injecting drug use is changing the epidemiology of many life-threatening infections like hepatitis and especially HIV infection.

The role of agriculture in the economy of Afghanistan

Afghanistan has an area of 700,000 square kilometers with mountains accounting for 75 percent of the land. People live in cavernous valleys surrounded by towering mountains. These elevations make tough passageways that impede normal trade and business. The shortage of roads not only creates obstacles for armies who seek to occupy Afghanistan, but also stops businessmen whose prosperity may become a means of economic growth. In the past Afghanistan was a passageway for caravans on the Silk Road crossing China through Balkh and India through Kandahar. The usage of waterways and then airways in the last century changed Afghanistan from being an ancient commercial route into a dead-end. Maybe if Afghanistan were not so rugged it would have had a different economical, military and political fate. There are no standard routes in the mountains and road construction is expensive. The roads if any, are either military or narrow paths for smugglers. The only trunk road passes around the borders but a border road cannot function like a primary artery in the body of Afghanistan to facilitate economic communications. The few interstate roads that existed were destroyed in the war. On the other hand, Afghanistan is a land full of hidden paths that are quite efficient for smuggling drugs. There are many winding roads for smuggling but for crushing the smugglers, straight ones are needed that don't exist.

This rough and dry country (with only 7 percent of its land being used for agriculture of which half is threatened by drought) has had the natural tendency to turn to cultivation of poppy seeds to support its people; except for drug dealers, few businessmen have risked investing there. It is partly the result of this geography that emigration, smuggling and war remain as occupations. Whenever farming has been threatened by shortage of water, emigration has increased and wars

have worsened. The country is solely dependent on farming, as grasslands (in non-drought years) are the only resources for economic continuity.

The Afghans had about 22 million sheep between 1986 to 1989; one sheep per person. This has traditionally been the main wealth of a farming nation such as Afghanistan. This wealth was lost in the recent famine. Upon waking up each day, an Afghan has four burdens to consider. First is their livestock and this depends on drought not being an obstacle. Fighting for a group or sect is the second option and generally they enter the army as sort of employment. Moving to another place to earn a living and support the family is another option and if all else fails, they enter the drug business. The extent of this last option is limited and thus, characterizing the people of Afghanistan as opium smugglers is unreal and applies only to a very limited number. The original tragedy of Afghanistan today is poverty and the only way to resolve the problems is through economic rehabilitation. It must be understood that there is no immediate solution for the economic crisis in Afghanistan.

Historically agriculture has long been the main occupation of people living in Afghanistan but less than 10% of the land is cultivated; war of the 1980's and 90's damaged a large percentage of the arable land. Subsistence crops include wheat and other grains, cotton, sugar beets, fruits, and nuts. Grazing is also of great importance in the economy. The fat-tailed sheep are a staple of Afghan life, supplying skins and wool for clothing and meat and fat for food; goats and cattle are also of economic significance.

Mineral wealth is virtually undeveloped, except for natural gas, which is produced in exportable quantities. There are deposits of iron ore, coal, copper, talc, sulfur, emeralds, and lapis lazuli; oil fields are found in the north. Industry was still only in the beginning stages at the end of the 1970s and has suffered substantial damage since then. Small-scale manufacturers produce cotton and other fabrics, fertilizer, cement, and processed agricultural goods. Natural gas, fruits and nuts, lambskins, and hand-woven carpets have been the main exports. As a result of civil war, exports have dwindled to a bare minimum and illegal trade of opium and hashish has soared and continued.

Kabul, once a major trade city, has been ravaged by war, and its industry infrastructures have largely disappeared. Road communications throughout the country are poor, with pack animals being the primary means of transport. The few railway lines in the country are those that were constructed by the Soviets during their occupation of Afghanistan.

Even before the events of 11 September, Afghanistan was gripped by a grave food crisis following three consecutive years of drought and intensifying economic problems due to continuing civil conflict. The shortage of water in rivers and the rapidly falling water tables resulted in an acute scarcity of drinking water in both rural and urban areas. Large sections of the rural population and their livestock in the affected provinces started migrating to other areas

in search of water. Water flows in the two main sources of irrigation, the Amu Darya and Syr Darya rivers dropped to about 40 percent of the average flows, while record hot and dry weather conditions increased demand for irrigation water. In addition, high levels of salinity were reported to contaminate the scarce water supply.

The geographic, social, and economic aspects of opium production in Afghanistan

The UNDCP provides estimates of the level of opium poppy cultivation per region by conducting a census of farmers on the ground. Opium cultivation and processing has been most extensive in the south of the country, in particular Helmand province. Helmand was once Afghanistan's breadbasket, by virtue of a massive irrigation system built by the United States in the 1960's. What had been desert suddenly sprouted with wheat, cotton, vegetables and fruit. Agriculture benefited a lot from this irrigation system.

Opium poppies have always been grown in Afghanistan, but it did not become the world's main exporter of heroin until the Soviet invasion of Afghanistan brought near-anarchy to the region. Production and refining exploded as the Afghan Mujahedin traded in drugs to finance their war against the Russians. While opium poppy was always grown in Helmand and elsewhere in Afghanistan, it was a minor crop until war and drought disrupted supplies from the Golden Triangle in South-East Asia in the 1970's. So when the Soviet Union invaded Afghanistan in 1979, anti-communist Mujahedin fighters turned to opium cultivation and heroin production to help finance their holy Islamic war.

In Helmand, neglect and nearly two decades of war, first against the Russians and then among Afghan factions, left the once magnificent irrigation system in a shambles. The main Bughra Canal got clogged with silt and many of its sluice gates are damaged and inoperative, as are subsidiary canals and ditches distributing water to individual plots; and the corps no longer exist. This is one of the reasons opium was being grown so freely and widely.

There is a community that apparently sees opium as just another crop. The people lancing the poppy heads to release the brown extract that is eventually refined into heroin, are ordinary farmers who look as far removed from dangerous drug traffickers as one could imagine. The opium harvesting has become part of the normal pattern of life for the village people.

There's a shadowy chain of people, beginning with traders in local bazaars who buy the opium. It is turned into heroin along the way in so-called factories that may be nothing more than a shack, going up in value of course at every stage (*figure 4*).

Although the traffickers make the biggest profits, the growers also do "comparatively" well out of opium, which is precisely why the efforts so far to wean them off opium cultivation and to persuade them to grow other crops have been of such limited success.

So what are the gains when we say farmers get more from growing poppy? Compared to what, gold or some precious crop?! Farmers claim they could get twice as much for opium as for wheat! There should be no surprise why they grow opium when they only earn seven dollars a month to feed themselves.

They hardly know or think about the damage it could do to anyone who becomes addicted to it. They throw such questions back and say they will stop growing opium once there's some development in there, or they say if the west wants to stop the opium trade it should remember it had helped make Afghanistan unstable by pouring in arms some years back.

Drug control officials suggest it is as much for the west to stop people buying heroin as it is for the Afghanistan government to stop the supply at its source. They are doing their best but the reality is that the villagers need the money to live.

The only hope to make a prohibition on poppy cultivation practical is by providing farmers with an economic incentive. Repairing the irrigation system is the main thing especially because the summers have been dry and they can only grow one crop, poppies, in such dry condition. With water and better seed and some machines and fertilizer, they could plant two crops every year. They could grow wheat or cotton or maize, not opium. They could plant more land and make more money with less work.

Opium poppy is a labor-intensive crop. Estimates suggest that approximately 350 person days are required to cultivate one hectare of opium poppy in Afghanistan, compared to approximately 41 person days per hectare for wheat. Harvesting alone is reported to require as much as 200 person days per hectare. Consequently, to spread the demand on both hired and family labor during the harvest period, households both cultivate different varieties of opium poppy with differing maturation periods, and stagger the planting of opium poppy. Poppies are harvested in March and April. However, despite using this method and all these efforts the majority of opium producing households still need hired labor during the opium poppy harvest.

On the other hand, the varying climatic zones within each of the opium poppy cultivating regions of Afghanistan means that the opium poppy harvest is often staggered, reaching different areas at slightly different times. Consequently, for those who are willing and able to travel during the harvest season, opium poppy provides a valuable source of off-farm income. Therefore opium poppy provides an important source of livelihood not only for those who own the land but also for those that are employed to work the land on a short-term basis.

Most of workers on opium field would sell the opium they were paid (as wage) in the local bazaar once they had completed each harvest. Also few farmers store their opium for any period of time despite the increase in opium prices that are experienced in the post harvest period. These all suggest that the income generated from their work is used to satisfy more immediate needs. Moreover, the majority of harvesters use the income they earn from the opium harvest for

purchasing basic necessities including wheat, clothes, sugar and tea and few invest the income generated for productive purposes. This would also suggest that the income derived from working as a harvester is an important contribution to household livelihood strategies.

The Taliban's ban on opium badly hurt farmers in one of the world's poorest countries, shattered by two decades of war and devastated by drought. Opium provided credit and acted as savings for farmers, while wheat fetches only two thirds of the price, and there is no guarantee that they can sell the crop when it is ready. Having a choice, many of the farmers would grow opium. For example, a farmer who shared less than three acres in Nangarhar with his three brothers said the opium he produced before on part of the land brought him \$1,100. But, he said, he would be lucky to get \$300 for the onions and cattle feed he planted on the entire piece of land.

Role of opium in Afghanistan's war beaten economy

Yearly sale of opium in Afghanistan has been about \$500 million and opium is the main product that Afghanistan offers to the world. If we add the \$300 million from the sale of northern Afghanistan's gas to the \$500 million income from the sale of opium, and divide the total by the 20 million population, the result is \$40 per capita annual income.

Although Afghanistan would earn only half a billion from drug production, the actual turnover is about a third of the total 500 billion dollars in the world drug business. In transit to the rest of the world, the mark-up stretches 400 times. For example, heroin enters Tajikistan at one price and exits at twice that much. The same goes for Uzbekistan. By the time drugs reach consumers in the Netherlands, they cost 160 to 200 times the original price. Smugglers walking all the way from inside Afghanistan to hundreds of kilometers into nearby countries with the drugs on their back cannot be the prime beneficiaries of this trade. We can hardly consider them the true smugglers of drugs.

In southern Afghanistan, around a million farmers were dependent on opium production until Taliban decreed a ban on poppy cultivation in 2000. The ban eased the flow of drugs to the West but its impact on the rural population was disastrous. More than half a million agricultural laborers in southern Afghanistan lost their jobs. Farmers, who had borrowed money to cope with the drought that had gripped the region, found themselves unable to repay their debts. It is little wonder they are now growing poppy again.

The international community accepts that farmers are only likely to stop cultivating opium if they can see the benefits to them of doing so. But the United Nations officials are frustrated as they say many Afghans turn every simple short-term solution only to a temporary way of earning a living and this may easily lead to a situation like blackmail with the demands rising.

Ironically, the Afghan drug producer is not himself a consumer. Drug use would face a much stronger ban than its production. The total drug turnover in the world is 500 billion dollars and Afghans are the victims of this market and considering all the misery resulting from this situation, in no way profit from it.

Opium and heroin production and traffic routes

While much of the South East Asian crop finds its way to the United States, Europe is the main destination for heroin coming from Afghanistan and Pakistan. According to the US Drug Enforcement Agency (DEA) Afghanistan in 2000 produced more than 70% of the world's opium, and about 80% of the opiate products in Europe. Following the Taliban ban on opium in 2001, poppy cultivation went down more than 90% but a recent assessment by UNDCP shows that it has resumed and will possibly lead to a production of about 2500 tons of raw opium or more (*figure 1, again*).

Laboratories convert the raw opium into a morphine base, white heroin or brown heroin. These are then transported through a number of intermediate countries, where it is sometimes further refined and processed, and finally shipped to Europe and North America. In the past, a large number of laboratories were located across the border in Pakistan's tribal region, but a Pakistani Government crackdown forced many of these to relocate across the border.

Afghanistan also produces a large amount of hashish, a processed form of cannabis, that is mainly transported through Pakistan and the Central Asian republics.

The raw opium is sold to local traders and smuggled into neighboring Pakistan, Iran and Turkmenistan by camel, donkey, trucks, and on foot (*figure 5*). Some is dried and refined into heroin in laboratories along the way. Most of the product will end up in Europe, the United States or Pakistan, where there is a large addict population.

In the darkness of the night, the roads are the passages of smuggling caravans that according to witnesses are comprised of groups of five to 100 people. Their ages range from 12 to 30 years. Each carries a sack of drugs on their backs and some carry hand-held rocket launchers and Kalashnikovs to protect the caravan. If drugs are not flown by airplane, they go in containers and otherwise, they are carried by human mules.

Also huge quantities of cannabis, which is the most widely abused substance in West Asia, continue to be illicitly cultivated or grow wild in Afghanistan and, to a lesser degree, in Pakistan. Cannabis resin continues to be smuggled into other countries and finally to West Asia and Europe.

The 1999 output of Afghanistan was a world record for opium production, more than all other countries combined, including the "Golden Triangle" where the borders of Thailand, Laos and

Myanmar meet. But in July 2000 the leader of Afghanistan's former Taliban government, Mullah Omar, declared a nationwide ban on opium cultivation for one year. The ban was a success, and production plunged to negligible levels during 2001.

A 12-member team from the U.N. Drug Control Program spent two weeks searching most of the nation's largest opium-producing areas and found very few poppies. The U.N. team visited Helmand, Kandahar, Urzgan and Nangarhar provinces, areas responsible for 86 percent of the opium produced in Afghanistan last year. They found poppies growing on barely an acre here and there. The rest, about 175,000 acres, was clean. Farmers were growing wheat or onions in fields where they once grew poppies. Other areas held by the Taliban were mountainous or desert, where poppies could not grow.

The Taliban who had control of 95 percent of Afghanistan in hand, had jailed some farmers until they agreed to destroy their poppy crops. Even though the Taliban in Afghanistan almost stamped out poppy growing in the areas they controlled, they did almost nothing to stop the refining and export of heroin from huge stockpiles within their borders. Even some diplomats suggested the Taliban was simply trying to drive up the price of opium they had stockpiled. Some also suggested Afghanistan could do more by destroying drug stockpiles and heroin labs and arresting producers and traffickers.

Following the military events after September 2001, large quantities of opiates were made available from illicit stocks. The availability of heroin originating in Afghanistan has remained high in the region. Most of the drugs that reach the West now go out through Iran, which has about a million and a half addicts of its own.

With the fall of the Taliban, there are fears Afghanistan may quickly reclaim its status as the world's largest producer of illicit opium (table 1).

Table 1: The area under opium poppy cultivation in
Afghanistan in the years 1994-2001; the estimates of
production for the year 2002 are worrying.
Sources: UNCDP, Opium Poppy Survey, 2001

Year	Cultivation in hectares
1994	71 470
1995	53 759
1996	56 824
1997	58 416
1998	63 674
1999	90 983
2000	82 172
2001	7606
2002*	45 000 - 65 000

^{*} Preliminary estimate

Opium production in north Afghanistan

Political and military events after September 2001 has changed the situation of poppy fields and may further change it in the coming years. Illicit opium poppy cultivation increased in the parts of Afghanistan controlled by the Northern Alliance and recently has expanded to other districts, many of which are close to the northern border of Afghanistan. Opiates originating in Afghanistan continue to be smuggled into and through Iran and Pakistan. There has been a significant increase in the quantity of drugs from Afghanistan seized in some countries in Central Asia. Heroin seizures in Tajikistan have not decreased so far, though it is not known whether the confiscated narcotics had originated from "stocks", or whether they came directly from cultivated areas.

The colder climate of north Afghanistan usually delays the season farmers plant the poppy opium and so cultivation and also harvest takes place later than areas in the south.

The UNDCP is trying to evaluate the new situation in regions where poppies had been cultivated in 2001, in particular in areas that were controlled by the Northern Alliance at that time (3,000 hectares). These areas have invreased following the fall of Taliban. Some recent estimates suggested that opium cultivation would increase by 657 % in 2002 (in relation to its 2001 level).

In 2001, opium cultivation had fallen to an estimated 7606ha. But it is currently estimated by the UNDCP to be of the order of 45,000 – 65,000ha (*table 1, again*). According to the latest findings in 2002, the total area under opium poppy cultivation in northern Afghanistan has increased by 47 %, from 6,640 hectares in 2001, to 9,750 ha in May 2002. Unlike the previous two years, farmers have said that climatic conditions were favorable. The resulting potential opium production could reach 240 metric tons.

The current government in Afghanistan has banned opium trade and also instituted an especial commission to follow this ban. This commission has approved a compensation of \$ 350 US for burning every acre of land (about a fourth of a hectare in Afghanistan) under opium cultivation but this is not a considerable amount as such an area of land can produce 5 kilos of opium extract worth 240 US dollars. So Farmers could get 1200 US dollars if they sell the harvest of opium in the market. In a situation like this, they might bribe the government officials to keep the poppy cultivation on their land, and the current estimation of 3500-4000 tons of opium production point to the same possibility.

European Union commissioner for external affairs, Chris Patten, recently mentioned worries of the recent 10 times increase in opium and heroin production in Afghanistan, as the resultant profit would have a monetary value more than all the financial aid by the international community to the new government.

It is not just the household economical problems of Afghan farmers that keeps the opium

farming running; as probably narcotics help finance fundamentalist groups in Central Asia, such as that of Juma Namangani, one of the founders of the Islamic Movement of Uzbekistan, whose bases are located in northern Afghanistan. After leading 750 men on an incursion into Kirgizistan in 1999 in an effort to reach Uzbekistan, Namangani had to retreat in the following year, but not before inflicting heavy losses on that country's police forces. He and his men then entered Afghanistan and changing strategies, infiltrated in small groups into northern and western Uzbekistan. This young warlord whose brutality is legendary, allegedly seeks to control the prime drug transit routes in order to increase his market "area", and thereby his power. It is interesting to note that both the incursion in 2000 and that of 1999 came just after the opium harvest, as if their aim was to gain control of transit routes for the fruits of the harvest. While Ben Laden probably does not need to revert to drug money to finance his anti-Western struggle, this is not the case for those local warlords who hope to destabilize Central Asia. The potential for instability is still there!

We still can see all the ingredients for illicit opium cultivation in parts of Afghanistan: civil war, an absence of law and order and no alternative for farmers. The criminal gangs who control the refining and shipment of heroin are still very much in place.

Conclusion:

It can be concluded that addressing the serious drug control situation in Afghanistan needs the support and cooperation of the international community, in particular the neighboring countries. Achieving peace, security and development in Afghanistan is closely linked to the solving of the drug control problem.

The key is to mobilize resources from the international community to provide farmers with the irrigation, seed, fertilizer and machinery they need to raise alternative crops. Priorities include repair of irrigation systems, provision of improved seeds and fertilizer, credit for impoverished farmers and assistance with market access.

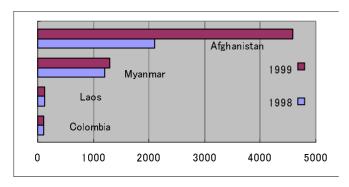
Afghanistan needs a comprehensive strategy that can provide sustainable alternatives to poppy cultivation. Wheat and cotton are the most widely touted alternatives to poppy for local farmers. But to flourish, production would need far more rain than the region has received, and large-scale improvement of irrigation facilities across the region is necessary.

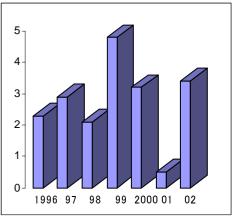
Also credit must be offered to local farmers to help them escape the debt trap. Many farmers are in debt to local drug lords who are demanding they grow poppy. Even farmers who cultivate cereals are struggling to feed themselves, as their entire crop is taken to repay the debts they have accumulated. Apart from a long-term restructuring plan, they also need immediate assistance.

References:

- 1) Limbs of no body: World's indifference to the Afghan tragedy, Mohsen Makhmalbaf, June 20, 2001: http://www.iranian.com/Opinion/2001/June/Afghan/index.html
- **2)** Terminology and information on drugs, by the Scientific Section (Laboratory) Policy Development and Analysis Branch Division for Operations and Analysis, United Nations Office for Drug Control, 1999.
- **3)** Access to Labour: The Role of Opium in the Livelihood Strategies of Itinerant Harvesters Working in Helmand Province, Afghanistan. United Nations Office for Drug Control, Final report June 1999.
- **4)** Global illicit drug trends 2002, ODCP studies on drugs and crime, Statistics Branch of he United Nations Office for Drug Control, 2002.
- 5) Selected reports and interviews from reliable news agencies as BBC, CNN, Reuters.

Pictures:





Global (left) and Afghanistan (right) opium production, in metric tons.

Figure 1. The large and soaring share of Afghanistan in the global production of opium in recent years. Between 1994 and 1998, annual opium output was between 2,000 and 3,000 metric tons of raw material. The majority of this was turned into morphine and heroin in Turkey, and to a lesser extent in Pakistan and in certain Central Asian republics and the Caucasus. Only a fraction of the opium was transformed inside Afghanistan. All previous records were broken in 1999 and 2000 when opium production in Afghanistan reached 4,500 and 3,200 tons respectively.



Figure 2. The "poppy" plant with its characteristic red flowers, and the notorious capsules.





Figure 3. Cannabis plant, and its resin and fine powder (Hashish).



Figure 4. Many of the factories that are used to process opium into different types of Heroin, may be nothing more than a shack.

OPIUM PRODUCTION

UZBEKISTAN TAJIKISTAN

TURKMENISTAN Sharif

Peshawar

Romdaliar

Peshawar

Romdaliar

I Morphine base - shipped to the West via Iran and Turkey

Heroin trafficked through Central Asian republics to Russia.

Heroin exported into Pakistan and India en route for international markets.

SOURCE: UNDCP

Figure 5. This map shows both opium production density in different areas of Afghanistan in the year 2000, and also the important traffic routes of the products to the neighboring countries for the final delivery to the world market.