CHAPTER II

REVIEW OF EXISTING LITERATURE

2.1 DRUG TRAFFICKING: AN OVERVIEW

Drug trafficking is an organized crime which presuppose the involvement of a producer, a trafficker, a street dealer and a buyer. Drug trafficking is an organization which implies the existence of a clear leadership, a hierarchy, a division of labour and continuity overtime. By contrast, the criminals who work together in relatively small or medium sized groups appear to collaborate on an informal and temporary basis (Herber, 2009).

Chin and Zhang (2007) found that small time players increased in number in drug trafficking business. They were called as “ants moving house.” They identified three kinds of players in the drug trafficking process. One, drug dealers in the border region who provide the drugs; two, the numerous mules who transport the drugs little by little like ants- towards the interior and coastal provinces; and three, the bosses in various parts of the country who took drugs and sold them into different levels of distributors and retailers. The laborers were recruited by the drug traffickers and given huge profitable amount plus their travel allowance. They found that all their subjects were motivated by the prospects of quick money. They also found that the drug addicts involved in drug trafficking business for two reasons. First, they had accessed to the drugs of their choice; and second, they could make money to support their habit. In their study, they found that the subjects fell into three general categories, 45 percent were charged for drug transportation, 39 percent for cross border drug trafficking; and remaining 16 percent for distribution or sale of drugs. They also found that the profit was in excess of 20 million Yuan in one deal.
Guizado and Restrepo (2000) pointed out the intermediaries had the significant role in the drug trafficking process. They classified the intermediaries into two categories. On the one hand, they were “chichipatos”, small and intermediate buyers who dip into the large intermediaries ample profit margins or corner the local market when prices were low. On the other hand, they were the big intermediaries who handled large amounts of money; they were main buyers of opium as well as suppliers of the chemicals, precursors.

U.S. Department of State (2010) reported that India was one of the main drug transit countries. The drug transit country was identified by some measurement like a country which produced opium in 1000hectare or more was stamped as a drug transit country. And also it was reported that India was the major source of precursor or chemicals or essential chemicals used in the production of illicit narcotics. India was listed out as the major money laundering country. It was defined by statute as one “whose financial institution engage in currency transactions involving significant amounts of proceeds from international narcotics trafficking.” India was identified as major money laundering country by International Narcotic Control Board.

U.S. Department of State (2010) documented that Indian authorities had made significant efforts to control the illicit drug trade as opium and heroin smuggled from Afghanistan and Pakistan entered India across India-Pakistan border and the drugs were destined outside of India. Indian brown sugar heroin was also available in Nepal, Bangladesh, Sri Lanka and Maldives. Most seized “white” heroin was destined for West Africa and Europe. Joint investigations taken by the NCB and DEA showed that the traffickers continued to use internet and commercial courier services to distribute the drugs and pharmaceuticals of kinds from India to the US and other countries.
Historically, India has been an important transit area for South Asia heroin from Afghanistan and Pakistan and lesser from South Asia, Burma, Thailand and Laos. Most heroin transiting India appeared bound for Europe. It also reported that the heroin seizure in past two years has been domestic origin, was seized in South India and was destined for Sri Lanka. India is located between golden crescent and golden triangle and continued to be a major drug transit country.

2.2 DRUG TRAFFICKING: DEFINITION AND MEASUREMENT

The term “drug trafficking” explained the activities which include standing watch to warn dealers of the police, holding drugs or money, guarding the supply of drugs, or conducting sales transactions in which drugs are exchanged for money (Dembo, Hughes, Jackson and Mieczkowski, 1993; Black and Ricardo, 1994; Li, Stanton, Feigelman, Black and Romer, 1994; Stanton Romer, Ricardo, Black Feigelman and Galbraith, 1993).

Drug trafficking is defined as,

It is short term economic gain at the expense of long term consequences. The traffickers gave some reasons for their involvement in drug trafficking such as power, money, respect and admiration from peers, success (Whitehead, Peterson and Kalijee, 1994; Weinfurt and Bush, 1995; Ricardo, 1994; Li Santon, Black and Feigelman, 1996). Ruggiero and South (1995) explained the term drug trafficking by using the theory of “techniques of neutralization” whereby dealers justified their activity by claiming that they provided a service to needy people similar to them.
“Trafficking” is a business which was dominated by groups of entrepreneurs, mainly considered a way to make money according to the roles individuals play in trafficking operations (Chin and Zhang, 2007).

May and Hough (2001) explained the terms dealer and seller. The terms are used interchangeably. According to them, where the market is structured, a dealer or seller will sell drugs to a ‘runner’ and will have little contact with buyers. Where the market is fragmented, dealers/sellers will, more often than not, sell directly to a buyer. In each case, dealers/sellers will have an understanding of retail market operations.

However, in a structured market, they are unlikely to have a clear knowledge of supply routes into the market. Individuals who deliver drugs to drug users or sellers are referred to as runners. Runners are found only in a structured distribution system. What differentiates them from sellers is that they sell for the latter on commission.

The term user-dealer refers to drug users who finance their use by buying drugs for others, thereby reducing the cost of their own use.

Drug trafficking is about the monopolization of illegal market (Buchanan, 1973; Hellman, 1980; Luksetich and White, 1982; Reuter, 1983; Rubin, 1973; Schelling, 1967). It was said that the traditional organized groups established smuggling network and involved in profit generating illegal activities such as narcotic trafficking, human trafficking (Choo, 2008). The drug trafficking viewed that five major factors were believed to determine the profitability of an industry. It stated the extent of rivalry among existing firms, the number and kind of potential entrants, the bargaining power of the buyers or consumers, the bargaining power of suppliers and the threat of substitute products or services (Lampe, 2006). Drug production and trafficking ranked first in five leading organized crime problems in Asia (Finckenauer and Chin, 2006).
It was documented that there were three production centers for opiates which supply three distinct markets. The flow of drug trafficking was stated as follows.

1. From Afghanistan to neighbouring countries such as South, South West and Central Asia, Middle East Africa and Europe

2. From Myanmar/Laos to neighbouring countries such as South East Asia (mainly China) and Oceania region (mainly Australia)

3. From Latin America (Mexico, Colombia, Guatemala and Peru) to North America (notably USA) (UNODC, 2009).

The major identified criminal groups involved in illegal importation or exportation of goods including drugs, alcohol, precursor chemicals (Serious Organized Crime Agency, 2006). It confirmed the shipment of heroin from Afghanistan via Pakistan to China and shipments of heroin from Afghanistan via Central Asia to China and also smuggling heroin from Myanmar to China. In 2006, Pakistan authorities reported that 137 seizure of heroin was transported by air destined to China. It was proved that the opiates were smuggled into USA and Canada directly from Afghanistan and via Pakistan and India. Canada reported that 83% of heroin seized in market in 2006 originated in South West Asia. In 2006, UNODC estimated that 53% of all opiates left Afghanistan via Iran, 33% via Pakistan and 15% via Central Asia.

According to Office of National Drug Control Policies’ (ONDCP) report from 1999 to 2000, out of 76,952 defendants in U.S. district courts, 27,274 (35.4%) had committed a drug offence. Most (93.8%) of these drug offenders had committed trafficking offense and 91.2% of all drug defendants were convicted (ONDCP, 2001). It was reported that two-thirds of persons who involved in drug trafficking became
illicit drug users (Li, Feigelman, Stanton, Galbraith and Huang, 1998). One study showed that when 20 youths were asked which came first, drug trafficking or drug use, all 20 youths indicated that drug trafficking preceded drug use (Okundaye, 1999). Boys involved in drug trafficking were also more likely to drop out from the school, to fail out of school, or to have communication problems with their parents (Black and Ricardo, 1994).

Based on a survey (Stanton et al., 1993) of three hundred youths in six housing projects approximately 30 youths (10%) admitted to selling drugs and one hundred (30%) acknowledged that close friends sold drugs. Forty youths were initially selected out of the 300 in the original sample. All the forty youths admitted to drug trafficking.

Okundaye et al., (n.d) conducted the qualitative study with 20 youths (ages 11-17), six of whom were involved in drug trafficking in an urban area. This study took place in three urban low-income housing projects. At the end of screening and interviews, 20 youths out of the original 40 youths sampled agreed to participate. Each informant was compensated 10 dollars for participating in each interview. Consent from the youths and their parents were obtained prior to each interview. Of the twenty, 40 percent admitted to involvement in drug trafficking activities. Eighty-five percent of the informants were male, 15 percent female; however, none of the females admitted to being directly involved in drug trafficking. All but one youth reported regular school attendance and most of the youths came to the recreational center, where the interviews were held, at least three times weekly. Information was collected via semi-structured, in-depth interviews of the 20 youths over a six-week period (October through November 1994) regarding their attitudes toward, and experiences with, drugs and drug trafficking. The youths were interviewed and found that six of the 20 youths
interviewed admitted to recent involvement in drug trafficking. Drug trafficking activities included standing watch to warn dealers of the police, holding drugs or money, guarding a stash of drugs, or conducting sales transactions in which drugs are exchanged for money. None of the six who were involved in drug trafficking was female. They also found that none of those involved in drug trafficking lived with their biological father. The majority of youths, regardless of drug trafficking status, lived with their biological mother. In addition, extended family members (aunts, uncles, nieces, cousins, etc.) were consistently found to be living in these African-American households. Overall there were about 71 persons living in the households. Of these, 20 youths lived in an average household size of 3.6 persons. There was only a slight difference in the average size of the households for youth that were involved in drug trafficking (3.3 persons) when compared to youth that were not involved in drug trafficking (3.6 persons). Many of the young adults who sold drugs eventually used drugs and became addicted to drugs.

Inciardi (1990) assessed 611 "seriously delinquent" Miami youth and found around 60% of their criminal offenses in the past year to be in some way related to drug dealing which include the manufacture, transportation and distribution. Stanton and Galbraith (1994) estimated that one of ten urban teens had been involved in drug dealing, with an even higher percentage being approached to sell drugs. This estimate is consistent with findings of MacCoun and Reuter (1992), who reported that one in six African-American males born in 1967 had been charged with a drug selling offense. In an intensive evaluation of the prevalence of youth drug dealing, Li and Feigelman (1994) conducted a survey of children and adolescents aged 9-15 residing in or near public housing in Baltimore. In 1992, 9% of the youth reported having participated in drug dealing (11% of the boys, 7% of girls). In this survey, rates of involvement in
dealing were higher for youth aged 13-15, averaging around 15% for youth in this age bracket. Youth were also queried as to their perceived likelihood of becoming involved in drug trafficking in the next six months; 11% of youth who had not sold drugs in the past predicted they would become involved in selling, while 41% of those who had previously participated perceived themselves as likely to sell or deliver drugs. In this study, more than 40% of girls and more than 30% of boys reported that their friends or family members sold or delivered drugs.

A similar pattern of findings was obtained by Bush and Lanotti (1993) who surveyed 173 youth from Washington, in sixth and seventh grades, and then a year later, when the youth were in seventh and eighth grades. Approximately 4% of the younger adolescents and 7% of the older adolescents reported having been involved in drug trafficking. The study also found that 17% of the younger boys and 30% of the older boys reported having been asked to participate in drug trafficking. In another study, Altschuler and Brounstein (1991) found 13% of a sample of 387 boys from recreational centers and from ninth and tenth grade classes in the Washington, DC, schools reported that they had sold drugs in the past. Similarly, Reuter et al., (1990), estimated a prevalence of drug dealing among adolescents in Washington as one in six overall, and one in three for those over 16.5 years of age.

Stanton and Galbraith (1994) found that African-American youth, who comprise about 60% of the adolescent population in Baltimore, accounted for 91% of all juvenile drug arrests in 1991.

Many of the researchers found that juvenile were mostly involved in drug dealing. In Baltimore, it was reported that 12,235 juvenile arrests in 1991, 16% were drug related. More of these arrests were for selling drugs than for using drugs. From
1986 to 1991, arrests for drug dealing increased substantially while arrests for drug use declined (Stanton and Galbraith, 1994). Surveying data from the District of Columbia's Pre-Trial Services Agency from 1985 to 1987, MacCoun and Reuter., (1992), noted that those charged with drug dealing were predominantly male (88%), young (40% were aged 18-24), and African-American (99%).

Junninen (2008) interviewed 21 professional criminals and found out 7 out of 21 had narcotic trafficking as their primary illegal activity. And 8 members had narcotic trafficking as their secondary criminal activity. 5 persons involved money laundering activity as their secondary illegal activity.

2.3 DEMOGRAPHIC VARIABLES AND DRUG TRAFFICKING

2.3.1 Age and Drug Trafficking

Howell and Gleason (1999) found that the largest proportion of the gang members who involved in the drug sales were juvenile (ages 15 to 17). The level of involvement of gang members who were 18 and older in drug sales were moderate or high. In their study they found that 42% of the gang members were juveniles (age 17 or younger) and 58% were young adults (age 18 and older). They mentioned the prevalence of younger adult gang members whose number increased significantly in drug distribution. The gang members aged 18 and older were significantly more involved in both the sale and distribution of drugs.

U.S. Department of Justice (1999) pointed out in the survey that 16% were estimated to be under age 15, 34 percent were of age 15 to 17 years and 37 percent were of age 18 to 24 years and 13 percent were over the age of 24.
Office of National Drug Control Policy (2001) pointed out in their report that young adults (age 18-30) were the group mostly likely to sell heroin in the street. It also mentioned that the street dealers are using teenagers (age 13 – 17) to sell these drugs as predominant sellers and they are split evenly between adolescents and young adults.

Curtis et. al. (2002) conducted ethnographic observational study with 73 dealers and 93 users. They found that the majority of the study sample fell in to 25- 40 age group. But there were a few who were 18 and 19 and several who were over 55 years of age. The oldest distributor in the sample was 62 years old. Also they pointed out the little evidence that the substantial numbers of youth under age of 18 were involved in drug dealings.

Williams (1989) argued that teenagers are drawn into drug dealing simply not only because they wanted job, but also they were pulled by flash and dazzle.

Chin (2007) conducted the study among the prison inmates and found that the average age of prison subjects were 35.5 years old, the median and mode value they made it as 34 years old. Majority of surveyed inmates were below the age of 40. They also found that females were slightly older than males, with an average age of 37.29 years compared to the average age of 33.56 among the males.

Hales and Hobbs (2010) found that the younger age (13 or 14) were used for delivering drugs after a deal had been agreed. They also pointed out in their article that the retail dealing activity conducted by young men in their mid to late teens, with drugs delivered and cash collected by youths and the younger age 15 years run the street level dealing in their estate.
Adalf et. al. (1995) pointed out in his article about the involvement of youth in drug trafficking. Youth could be and directly involved in the production, exportation, trafficking and the purchase of drugs. Youth who were under 12 were brought into the drug world by adult or older youth offenders (Haberfeld, 1992).

Okundaye et. al. (n.d) strongly argued that young adolescents were preferred target group for drug trafficking. Li and his colleagues (1996) and Stanton and his colleagues (1993) reported that 7 to 10 percent of cohort of 9 – 15 years old were involved in drug trafficking. They also found that young adolescents were typically seen as more advantages for employment as drug traffickers because they worked for lower wages and even if they were arrested, they were returned rapidly to the community.

Leviton and his colleagues (1994) conducted the study among 20 youths (age 11 – 17), six of whom were involved in drug trafficking in urban area. The survey was conducted by Stanton, et. al. (1993), among 300 youths in six housing projects, approximately 30 youths (10%) admitted to sell drugs and 100 (30%) acknowledged that close friends sold drugs.

Herber (2009) pointed out in his article that persons involved in serious drug crime, including drug smuggling were often males in their thirties. The author also pointed out in one study which was conducted among prison inmates and showed that the average age was 34 years and there were no notable difference in the age of male and female member of the group. They youngest in the principal population was 17, while the oldest member of the group was 62.
Traub et. al. (2003) found that the range of age of person who involved in drug trafficking was 18-63 and median range was 38 years. Gruter and Mheen conducted the study among 38 respondents and found that the range of age of drug traffickers was 26 to 54 and median age was 40 years.

Reuter (2009), mentioned in his article that in the drug market, most of the sellers were very young. Centers et al. (1998) strongly pointed out that youngsters involved in drug trafficking was slightly increasing. Stanton and Galbraith (1994) argued that youngsters involved in drug dealing with an even higher percentage being appointed to sell drugs. The author also mentioned that 9 percent of the youth reported that they participated in drug dealing (11% of the boys 7% of the girls). In this survey, the range of age was higher for youth (13 to 15). They also found that 11 percent of youth who had not sold drugs in the past predicted they would become involved in selling, while 41 percent of those who had previously participated perceived themselves as likely to sell or deliver drugs.

2.3 GENDER

U.S. Department of Justice (1999) pointed out the gender variation in the gang members who involved in the drug sales and gang control of drug distribution. They found that females represented a small proportion of gang members in jurisdiction. Females were significantly less likely to be member of gangs that controlled drug distribution. In the 12 jurisdiction, 11 reported of gang control of all of the drug distribution and also reported the gender of gang members. Females represented only six percent of gang members compared with a national average of eleven percent.
Chin and Zhang (2007) conducted the study among the drug offenders in prison. They found that actual male to female ratio was 3 to 1. Females were slightly older than males, 31 percent were single and 44 percent married, 17 percent divorced and 8 percent separated or widowed. They found that the traffickers came from diverse backgrounds, ranging from illiterate peasants to college professors and from street vendors to ranking police officers. The majority of the traffickers tend to be poorly educated and without stable occupation in their sample survey and 88 percent completed no more than a middle school education. About half of them were unemployed at the time of arrest, and majority of those who were unemployed were peasants or village people.

2.4 OPIUM TRADE

2.4.1 Opium Cultivation and Production

One of the world’s major opium cultivation and heroin producing area was the golden triangle, 150,000 square mile, mountainous area located where the border of Myanmar, Laos and Thailand meet (Chin and Zhang 2007; United Nation International Drug Control Programme, 1997). In the late 1990s, it was estimated that Myanmar produced more than 50 percent of the world’s raw opium and refined as much as 75 percent of the world’s heroin (South Asian Information Network, 1998). In 1990s, the golden triangle enjoyed an infamous reputation as the “bread basket” of the world’s heroin trade (Chalk, 2000).

There was a mutual relationship between the ethnic groups and Burmese Government in connection with opium trade, the ethnic groups promised not to tight against the Burmese Government, and in return the Burmese authorities allowed these
ethnic group to keep their armed forces and stay involved in the opium trade (Albor, 1992; Trkano, 2002).

US sources estimated that Myanmar’s opium production rose from 1,250 metric tons in 1988 to 2,450 metric tons in the following year and continued to rise to 2,600 metric tons in 1997. Hong Kong was the organizational and financial center for the region’s heroin trade. For years, Myanmar had occupied the position of the largest opium cultivated country. After few years, Afghanistan had replaced Myanmar as major supplier of opium and heroin in the world (Chin and Zhang, 2007).

State Commission of Investigation (2002) pointed out that the production of opium occurred mainly in Afghanistan. All its 34 provinces had opium production and it was reported that there were 16 million opiate abusers and 10 million heroin abusers in Afghanistan, but the South East Asia reduced its production by 78 percent since 1996.

In 2009, globally the poppy cultivation was carried out in 181,373 hectares. It was highly reported in South West Asia (124,779). In this year, opium poppy cultivation decreased by 15% from 2008. It was due to a large decrease in opium poppy cultivation in Afghanistan, which was not offset by increases in Myanmar and the Lao People’s Democratic Republic. In 2009 two-thirds (66%) of global opium poppy cultivation was concentrated in Afghanistan. Individually, Afghanistan ranked first in poppy cultivation. It was reported that poppy was cultivated in 123,000 hectares. In South East Asia, it was reported that poppy was cultivated in 33,600 hectares. It was reported that the opium poppy cultivation in 2010 may remain at about the 2009 level. In Pakistan, Afghanistan’s neighbour, the 2009 opium poppy cultivation remained at about the same level of less than 2,000 ha as in previous years. Myanmar was the
second largest opium poppy cultivating country (17% of global cultivation). Opium poppy cultivation in the Lao People’s Democratic Republic remained at a low level of about 2,000 ha with no significant changes since 2005. Mexico remains the third largest cultivating country, showing a large increase in the area under opium poppy cultivation between 2007 and 2008. Second consecutive decrease since 2007, when global opium production reached a peak of 8,890 mt, with an estimated potential heroin production of 757 mt. Opium yields in Afghanistan remained very high in 2009. The potential opium production was estimated at 6,900 mt. About 56% of the total opium production was estimated to be potentially exported as morphine and heroin, corresponding to 548 mt heroin in Equivaregions (UNODC, 2011).

According to the UNODC’s (2008) Afghanistan Annual Opium Survey, the historic high-water mark of 193,000 hectares of opium cultivated in 2007 has dropped by 19% to 157,000 hectares. Opium production declined by only 6% to 7,700 tonnes: not as dramatic a drop as cultivation because of greater yields (a record of 48.8 kg/ha against 42.5kg in 2007). Eradication was ineffective in terms of results (only 5,480 ha and about one-quarter of last year’s amount), but very costly in terms of human lives. They identified some reasons for opium cultivation in Afghanistan such as that low cost of inputs (seeds, fertilizer, Labour), encouraged by external influence, need for personal consumption, high demand for opium, possibility of obtaining loan, high sale price of opium, high cost of wedding and poverty alleviation.

Globally, it was estimated that 7,755 mt of opium was produced in 2009. It was decreased by 10% from 2008. Over one-third (37%) was estimated to be available on the drug market as opium, the remainder being converted into morphine and heroin. This would correspond to a potential heroin production of 657 mt. when global opium
production reached a peak of 8,890 mt, with an estimated potential heroin production of 757 mt. Opium yields in Afghanistan remained very high in 2009. The potential opium production was estimated at 6,900 mt. About 56% of the total opium production was estimated to be potentially exported as morphine and heroin, corresponding to 548 mt in heroin equivalent. Afghanistan remained by far the largest opium producing country, representing 89% of the global illicit opium production. Despite the increase in cultivation, opium production in Myanmar decreased by 20% to only 330 mt, due to lower yields. In South West Asia, it was highly reported that 6,944 metric tons of opium was produced. It was reported that 341 mt of opium produced in South East Asia. (UNODC, 2011).

International Narcotic Control Board (2008) reported that illicit opium cultivation area in Myanmar decreased from 130,000 hectare in 1998 to 21,500 hectre in 2006. But in 2007, it has increased up to 27,7000 hectare. In Laos people of Democratic Republic, it decreased from 2,500 hectare in 2006 to 1,500 hectare in 2007, the lowest level recorded since 1992.

In Afghanistan, the illicit opium cultivation continued to increase at an alarming level. In 2006, it reached 165,000 hectare and increased upto 55 percent when compared with 2005. It increased 17 percent in 2007 and was recorded as 193,000 hectare. According to Afghanistan Opium Survey 2007, it was reported that they could produce 42.5 kg of opium per hectare in 2007 and produced totally 8,200 tons of opium. It was recorded that 34 percent more than in the year 2006 (6,100 tons). Afghanistan continued to be the world’s largest producer of opium poppy and major source of heroin.
Smith and Kethini (2007) conducted the study among the opium farmers in India and found that opium farmers felt that opium cultivation was a respectable occupation and profitable one and they could earn huge money as a profit. They had the experience in the opium cultivation upto 25 years and above. He reported that as a farmer they could earn upto Rs. 70,000 as annual income. And also they reported that licit opium cultivation brought India much needed foreign exchange besides being part of its larger trade relationship with United States (Hag, 2000).

Guizado and Restrepo (2000) mentioned in their article that a farmer could produce 5 kg of latex (wet opium) per hectare in every six month and quantity of heroin per unit of latex gum was 1 to 10. Another categorized “direct producers” into two types. The first was peasant farmer which included indigenous peoples, longtime farmgate residents. The second type of direct producers was “raspachines” that was migrant workers who worked as hired labor in the harvesting and the incision of the poppy bulb. India was the only country to produce opium by using traditional methods of incising the bulb.

### 2.4.2 Diversion

Guizado and Restrepo (2000) found that the intermediaries the middle men had the significant role in drug trading process. They acted as bridge between producers and whole sellers. They had common place to pay in advance to cultivate the opium poppy. Thus it replaced crops for illegal ones.

Naylor (2001) reported that the countries where the poppy crops were legalized for pharmaceutical industry had some problems because some of it could be diverted to heroin laboratories, as it was the case in India. A fraction of India’s production was diverted to heroin factories. They also reported that the opium seizure (2.031 metric
tons in 1998, 1.189 tons in first three quarters of 1999) originated either from the diversion of legal crops or from small farms with illegal crops, in particular in Northern India, where 132 hectare was destructed in 1998 and 291 hectare of poppy land destroyed in first three quarters of 1999. The author imported the crucial fact that heroin seizure (655 kg in 1998 and 388 kg in first three quarters of 1999) had three origins. First, production diverted from legal opium crops, second, imported from Pakistan and third, imported from Burma.

U.S Department of State (2010) reported that the diversion of licit opium crops into illegal market continued in India. And it reported that most of India’s “brown sugar” heroin came from diverted licit Indian opium and it was locally manufactured. The chemical lab originated in Uttar Pradesh and it depended on diversion from the licit crop in that state.

Charles (2004) strongly noted the possibility of diversion of opium from the licit channel. According to him, opium was diverted at least 10% from the licit cultivation. For the last decade as per the data available the main source of brown sugar or heroin consumed across the country except for the northern states were largely met by diversion from the licit market. It was identified that around 79% of 889 kg seized was from processing of Indian opium. The diversion from licit source occurred from 1992. The author also pointed out the farmers was given government license for cultivating opium in a fixed land area. However, a farmer who has been given the license to cultivate 1,000 square meters generally exceeded the area by about 300-400 square meters. The excess of produced opium was sold in the open market. He mentioned that such excess produce is around 1-2kg per hectare. The main seizures within manufacturing facilities in India have been in the cultivating state of Uttar
Pradesh, Rajasthan and Madhya Pradesh. This is an indication that diversion exists in India in spite of the drug control activities. The farmers involved in diversion for local consumption. He strongly pointed out that 90% of the local need for heroin in Mumbai is met by diversion from licit cultivation. The diverted opium was packed in the range of 250-450 gms and it was sealed in plain polythene bags with double or triple bags being used. The packets were then wrapped in brown paper. Near the cultivating area and other parts of India, these drugs packets were then carried in ordinary marketing bags made of cloth. The attempt was to merge with surrounding as far as possible.

Discrepancy between the government prices on opium and that of the illicit market was identified as another factor to be considered. While the government offers Rs.1000 (around 20 euros) per kilo, the illegal market offers Rs.10,000 to Rs.15,000. Price for opium in the illicit market ranged from Rs.5000 during crop season in April to Rs.15,000 to Rs.20,000 during the months of December and January.

Paul and Rao (2002) reported that there was a substantial leakage of this licit product of opium from the cultivation areas such as Madhya Pradesh, Uttar Pradesh and Rajasthan. Finally, the diverted opium was converted into illicit heroin production. They also stated that in 1991, the production of opium was estimated to be 483,000 kg. Only 307,740 kg was sold to the government by the license-holders and the rest 175,000 kg became illicit to be diverted to the black market to be either sold as it is or illicitly converted into killer drug called heroin and brown sugar.

Kramer et. al. (2010) mentioned in their article that when the opium price was increased in the market, the quality of opium also dropped and the sellers mixed other materials with opium.
Illicit Cultivation

According to UNDCP (2003), poppies were grown illegally in an approximately 1,000 hectare in Arunachal Pradesh which was the only North Eastern State to have a sizable number of opium addicts and it reported that illicit opium poppy cultivation covered thousand of hectare in some remote areas of India, including along the border with Bangladesh.

U.S. Department of State (2010) reported that illicit opium poppy production had also been observed in certain areas of the country such as West Bengal, and the state of Uttaranchal. It also pointed out that the bulk of India’s illicit poppy cultivation had traditionally been confined to Arunachal Pradesh, the mountainous and most prone and remote state of North Eastern India. The tribal groups involved in the poppy cultivation in these states.

Paul and Rao (2002) noted that illicit cultivation of opium has been noticed in many parts of the country like the hill tracts of Chakrata, Uttar Kashi, Arunachal Pradesh, and other North Eastern States, West Bengal, Kerala, Tamil Nadu, etc. This is in addition to other known licit cultivation areas like Uttar Pradesh, Madhya Pradesh and Rajasthan. The licensed farmers got advance or borrowed from dealers on forecast of future crops. They also pointed out that an average of 2000 kg of opium which was derived from illicitly cultivated opium poppy was seized annually in India.

Charles (2004) assured that illegal poppy cultivation was undertaken in Arunachal Pradesh in North East India and in the hilly terrains of Uttar Pradesh and Himachal Pradesh. Most of the areas, especially Lohit, Yingkiong, Changlang, and Khansa districts of Arunachal Pradesh were identified as illegal poppy cultivation areas. But these areas were difficult to access. It was found that 100 districts in
Arunachal Pradesh dealt with illicit cultivation. It reported that destruction of 144 hectares of illicit poppy cultivation in Lohit area and 74 hectares in Upper Siang area of Arunachal Pradesh. 35 hectares of illicit poppy cultivation was destroyed in Anantag and Pulwana in Kashmir valley. Illicit cultivation also occurred in parts of Andhra Pradesh and West Bengal.

2.4.3 Clandestine Lab

Office of the National Drug Control Policy (2004) reported that domestic lab seizure continued to rise in every year. The Drug Enforcement Administration’s (DEA) El Paso Intelligence Center (EPIC) received the report of more than 110,000 labs seizure in 2003 compared to the 9,193 seizure reported for 2002. They identified two labs, large labs called “super labs” and small labs called “mom and pop labs or small toxic labs”. “Super labs” were used for production of huge quantity of synthetic drugs and small toxic labs were used to produce the small quantity of drugs in local use. They identified that those small labs can be located in trailers, hotel rooms or ordinary rooms.

U.S. Department of State (2010) reported that the synthetic drug producers misused the chemicals which were needed for commercial pharmaceutical purposes for production of illegal drugs. The criminals illegally diverted the chemicals that they needed from licit trade. It also mentioned that diversion from licit trade was mainly by two forms, the criminals purchased the chemicals from manufacturers or distributors and chemical producers also might be complicit in diversion schemes. The traffickers used some techniques in smuggling the chemicals. They concealed their original identities and misused the names of well known legitimate companies. They also obtained chemicals by bribing or blackmailing the employees of legitimate companies.
and through theft either from storage or during transit. In some cases, they disguised the destination or nature of chemical shipment by mislabeling or repackaging controlled chemicals as unregulated materials. China was identified as one of the world’s largest chemicals industries producing large quantities of chemicals which were needed to produce the illicit drug such as acetic anhydride, Potassium permanganate, piperonyl methyl ketone (PMK) and pseudoephedrine and ephedrine. In India, some of labs were identified in the state of Uttar Pradesh.

Hales and Hobbs (2010) identified the persons involved in the production of illicit chemical trade. They found that professional chemists or technicians could set up and run small labs. Transporters and persons who provided the locations to set up the lab were also involved in the illicit chemical trade.

Charles (2004) argued that in addition to heroin, India is a major source for chemicals for manufacturing synthetic drugs. These chemicals were supplied by factories located on the border of Maharashtra and Gujarat and states in the south.

According to UNODC (2011) report, only eight countries reported destruction of clandestine opiate-processing laboratories in 2008. It was identified that 69 laboratories were destroyed in Afghanistan, 5 in Myanmar, 1 each in Mexico and Peru, destruction of clandestine opiate processing laboratories were reported from Belarus (1), Greece (2), New Zealand (1) and the Russian Federation (1). Much higher numbers were reported in 2007 (639). It was found that most of these laboratories were small-scale kitchen laboratories. It can be assumed that most heroin production still occurs in countries where opium poppy is cultivated or in their close proximity.
2.4.4 Heroin Production

Paul and Rao (2002) reported that from the year 1990-1991, the opium cultivators started illicit manufacturing of heroin and brown sugar. This added a new dimension to the entire clandestine business and opium cultivation. The Secretary of all India Opium Cultivators’ Association said “every cultivator in the Mandsaur and Ratlam districts is connected to some smuggler or the other who are involved in converting the pilfered opium into heroin and brown sugar and politician involvement. The whole clandestine activities were reportedly done with the active connivance and possibly involvement of the politicians, and corrupt officials and members of the police force.”

Charles (2004) stated that diverted opium was finally converted into heroin. It was undertaken in different places of Rajasthan (Bhawani, Mandi and Jalawar), Uttar Pradesh (Rae Barelli Bara Banki, BadaywnShahajanpur) and Madhya Pradesh (Mandsaur). Those involved in heroin processing are also involved in smuggling of acetic anhydride needed to convert opium into heroin. In this part of the country, the chemical is available in abundance as it is produced in fourteen factories across Uttar Pradesh from where it is diverted to the illicit channel. He also recognized other places in cultivation states such as Neemuch, Mandsaur, Ratlam, Badawn Gwalior, Chittorgargh, Bhawanimandi, and Barely etc. These places were identified as heroin production sources.

2.4.5 Transportation

Office of National Drug Control Policy (2004) identified various methods of transportation which was carried by the transporters. It documented that, in 2000, 63 percent of smuggling was carried by airline, 27 percent by express mail, and 10 percent
by shipping in United States. In 2003, it was reported that 26 percent by airline, 19 percent by mail, 7 percent by express mail, 8 percent by shipping and 40 percent by other means.

Curtis et. al. (2002) noted that at the beginning of the shift, the transporter travelled with contraband substance of prepackaged bags by foot, taxi, subway, bicycle, skateboard, or rollerblades and they returned with the cash and unsold product at the end of the shift.

Chin and Zhang (2007) found that most of the drugs were transported in small quantities by large numbers of individuals or “mules” who know little about the organizers behind the scene. Cartel members were involved in transportation of drugs and acting as middle men between the cartels and the more local dealers (Bean, 2002).

International Narcotic Control Board (2008) reported that smuggling of narcotic drugs and psychotropic substances was transported through various courier services. It was reported in several countries in different regions. It also specified that the experience of law enforcement authorities in some countries including Poland, Venezuela indicated that drug trafficking organizations had realized that using courier services method was a relatively secure method of drug transportation as it allowed the drug smugglers to maintain their anonymity, and it kept the risk at minimum and operational costs low. The misuses of courier services were on rise in Bangladesh and India. In 2007, it was reported that the drug traffickers used Bangladesh and Indian courier services to ship illicit drugs to Canada and South Africa. In July 2007, Narcotic Control Bureau of India identified 1kg of heroin in two parcels in a courier office in New Delhi. One parcel was destined for Canada and other was destined for South Africa.
Office of National Drug Control Policy (2004) reported that the drug was transported through commercial aircraft and maritime vessels. The transporters mostly used commercial and private vehicles, trucks, buses and railcars.

Office of National Drug Control Policy (2003) documented that the fishing vessels were used for transportation of drugs from southern Tamil Nadu to western Sri Lanka. The transporters bought boats from fishermen and hired a crew for the trip. Private planes were also used in some cases. Commercial ships and commercial planes were used less commonly for transportation.

Hales and Hobbs (2010) identified that the transporters used some techniques to avoid risks. The transporters usually preferred frequent trips from origin place to destination places by using various routes and various vehicles.

Massari et. al. (2003) also mentioned about the small quantity transportation “ant moving house”, to make big one. Korrstrand and Jonsson (2007) mentioned in their article that narcotic were buried in desolate places and maps which showed the shipments of drugs given to the other one.

Office of National Drug Control Policy (2009) documented that the small quantity sent through the postal system. The large quantity was to be transported in bulk carriers or container shipping. They used circuitous routes, multiple transit points and false declaration and documentation. And also they corrupted dock-workers, port officials, airline staff, immigration staff and freight handlers.

Weenink and Lann (2007) identified that the traffickers smuggled the drugs mostly by air, as mules and couriers.
Office of National Drug Control Policy (2004) documented that the transporter parceled the drugs in small to moderate size quantities usually below 30 grams. They used various vehicles for their transportation. In his study he found that private vehicle (52.7%), hand or body carrier (24.7%), unknown (16.2%), commercial airline (7.5%), private mail (7%), commercial bus (5.3%), rail passenger (4.4%), electronic mail (1.4%), commercial ship (0.9%), commercial van (0.9%), private boat (0.4%) and rail (freight) (0.3%). He also found out that the various transportation places at which the drugs were in transported from one person to another. According to his study, the transportation took place at single family home (38.5%), public area (35.3%), apartment (30.6%), entertainment (9.8%), unknown (7.6%), commercial place (4.9%), public housing (3.8%), abandoned building (0.5%) and office building (0.2%).

Charles (2004) pointed out there are three ways in which drugs are exported from India, through air, sea and postal services. The latter has been in practice for more than two decades, but it is very difficult to detect and prove. He also found that the drugs were exported with the help of couriers. According to him, “two different types are employed. One is the professional courier and the other is that who do not know that they are carrying drugs. The second group only knows that someone known to them has given them a packet to be delivered to another person and do so it in good faith.” Other than getting information from informal sources, officials make their detection based on body language and this is possible only when the person is aware that he/she is carrying narcotics”. Some of the most common indicators for those who carry drugs by swallowing are that they arrive at last minute, do not eat or drink anything on the flight. Maximum they have is a glass of lime juice before flight. He also found that 250 kgs of brown sugar which was seized in southern region was only smuggled by air into Sri Lanka. The remaining quantity was meant for smuggling by
boat through porous Tuticorn coast. He reported that other “potential places” such as Kodiayakarai, Vedaranyam, and Muthupet, are also near to Colombo and from where commodities were taken by boat in 1980s. He found that drug trade was routed to Sri Lankan both from Tamil Nadu and Kerala. In case of Kerala, the routing is from cultivating areas to Mumbai and subsequently to destinations outside the country through sea. In case of Tamil Nadu too, sea route is used for exporting drugs. He identified that some routes to South India are from Jaipur-Mumbai-Trivandrum-Nagercoil-Kanyakumari-Tuticorn. Another being from Jaipur–Mumabi-Chennai-Tiruchirapalli-Madurai-Rameshwaram-Tuticorn. Another route is from Ujjain-Ratlam-Mumbai-Banglore-Hosur-Salem-Maduari-Tuticorn- Rameshwaram. This is an indication that there are many routes. The routes used to transport both heroin and opium to South India is similar. Besides data from informants, this is also indicated in media articles. Till recently, the drugs from India were routed through Dubai to hide the source country. Now it is routed through countries that are not considered to be in the “red” zone. There is also an indication that heroin is taken to southern part of the country and then export done through different small islands as well.

Paul and Rao (2002) identified that the narcotic drugs were transported to Rajasthan via Pratapgarh, which is on the border with Pakistan, while consignments bound for Dubai and Mumbai were dispatched via Indore. And also they pointed out Mandasaur district was a major center for supply of drugs to Mumbai, Indore, Ahmedabad, Delhi and Pune. Indore has attained the status of a main peddling centre.

2.4.6 Modus operandi

Office of National Drug Control Policy (ONDCP) (2004) listed out various modus operant adopted by the traffickers in smuggling drugs. He found that the drugs
were wrapped in clear, plastic and duck tubes, transport tractors which contain commercial goods. The concealment of drugs ranged from technological to simple concealment methods. Commercial and private vehicles equipped in traps and concealed within furniture were also adopted.

Hales and Hobbs (2010) identified some techniques which was adopted by the transporters for transportation. They concealed the drugs inside the vehicle classic or train, concealed in their bags or specially designed luggage.

Karrstraud and Jonsson (2007) pointed out the “swallower” in drug smuggling; lately it was replaced by smuggling of larger consignment by boat. They also pointed out the smuggling of large consignment of drugs hidden in lorries.

Office of National Drug Control Policy (2009) reported that the smugglers used legitimate goods to cover the drug package loads hidden among legitimate goods, packaged in terms of the paper trail. The load was also hidden in the structure of vehicle. The small quantity was also swallowed or inserted into the body cavities.

Gruter and Mheen., (2005), found that most of the transporters swallowed small balls of illicit drugs and carried drugs in their luggage or concealed it in their body.

Hergan et. al. (2004) found that body packaging was a distinct method of smuggling. The handmade or automatically produced packets were swallowed rectally or vaginally inserted and transported to somewhere. They used condoms, latex, cellophane and other synthetic materials. There were formed to ball or oval shaped an objects which were sized between 2-4 cm. The swallowed packets were smaller than rectally or vaginally inserted drug packets. The mechanically produced packets had a uniform, round and were 2cm in diameter. They also found the characteristic of body
packers. They found that they exposed themselves as tourists and not as business men. They carried along with their luggage, special utensil such as condoms, latex fingers and gloves, petroleum jelly, coconut oil for swallowing the packets, toilet paper, sprays and deodorants which was used against bad smell after vomiting and flatulence.

Charles (2004) observed that several persons who swallowed heroin in the form of capsules were apprehended and he also found that some techniques which were adopted by the traffickers for transportation of illicit drugs. According to him, before transportation, the traffickers packaged the drugs into several packets, each packet contained 1Kg of substance and was sealed using either red/green/blue seals. On the packing were made markings as “555”, “777” etc. For avoiding detection of drugs, the smugglers were involved in intestinal drug smuggling (Bots and Meijer, 2005).

Silverberg et. al. (2006) in his study made between the years 1990 and 2005 found out that 27 patients were admitted to Elmhurst Hospital with internal body concealment which required surgery. They found that their median age was 38 years (range: 18–63 years). Nineteen (76%) were men. Eleven (44%) of the total patients presented after disembarking from flights originated from Colombia. One patient was brought from a nearby correctional facility. Information on the origin of the others was not obtainable. Information regarding the type of drug was obtained by history and occasionally confirmed by urine toxicity screening. Eleven (44%) patients were carrying packets containing cocaine, 8 (32%) containing heroine, 2 (8%) patients had packs with combined heroin and cocaine and 2 (8%) had marijuana.

Taheri et. al. (2008) studied 12 cases in a hospital where persons were admitted for the treatment of body packing. Among them, 9 cases were brought by the police with no symptoms and 3 cases referred with symptoms or signs of opium intoxication.
They found that mean age of patients was 28.2 years (ranging 17–35 years) and among them 11 were male. In all cases, the presence of opium in packets was confirmed by chemical analysis and their CT scan could show the packets in GI lumen. Number of ingested packets was at least 2 up to greater than 100 packets. One patient swallowed 175 packets (equal to 1500 g of opium), three patients swallowed 50–100 packets and three of them more than 100 packets. Regarding anatomical location, 10 cases had packets in colon, but in 4 of these cases, some packets were in stomach too. Two cases have had packets only in their stomach. Details of the cases are also mentioned in the below table.

Table 1

<table>
<thead>
<tr>
<th>Patient no</th>
<th>Sex</th>
<th>Age (year)</th>
<th>Number of packets</th>
<th>Location of packet</th>
<th>Density in CT scan (Hounsfield)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>28</td>
<td>3</td>
<td>Stomach/Ascending colon</td>
<td>172–190</td>
</tr>
<tr>
<td>2</td>
<td>Male</td>
<td>32</td>
<td>2</td>
<td>Stomach/Transverse colon</td>
<td>150–180</td>
</tr>
<tr>
<td>3</td>
<td>Male</td>
<td>35</td>
<td>175 (1.5kg)</td>
<td>All parts of colon</td>
<td>150–170</td>
</tr>
<tr>
<td>4</td>
<td>Female</td>
<td>18</td>
<td>6</td>
<td>Stomach</td>
<td>200–300</td>
</tr>
<tr>
<td>5</td>
<td>Male</td>
<td>25</td>
<td>&gt;100</td>
<td>All parts of colon</td>
<td>150–200</td>
</tr>
<tr>
<td>6</td>
<td>Male</td>
<td>28</td>
<td>10</td>
<td>Ascending colon</td>
<td>160–190</td>
</tr>
<tr>
<td>7</td>
<td>Male</td>
<td>30</td>
<td>&gt;50</td>
<td>All parts of colon</td>
<td>180–200</td>
</tr>
<tr>
<td>8</td>
<td>Male</td>
<td>32</td>
<td>&gt;100</td>
<td>All parts of colon</td>
<td>150–200</td>
</tr>
<tr>
<td>9</td>
<td>Male</td>
<td>26</td>
<td>15</td>
<td>All parts of colon</td>
<td>170–200</td>
</tr>
<tr>
<td>10</td>
<td>Male</td>
<td>32</td>
<td>50</td>
<td>Stomach/Small intestine/Colon</td>
<td>127–197</td>
</tr>
<tr>
<td>11</td>
<td>Male</td>
<td>17</td>
<td>20</td>
<td>Stomach</td>
<td>180–220</td>
</tr>
<tr>
<td>12</td>
<td>Male</td>
<td>35</td>
<td>50</td>
<td>Stomach/Colon</td>
<td>177–217 in vivo</td>
</tr>
</tbody>
</table>

*Adopted from Taheri et al. (2008)*
They found that only one woman was involved in the case and she was 18-year-old. They identified that body packers concealed the drugs in the gastrointestinal or genital tracts, usually wrapped in aluminum foil, condoms, balloons or plastic wrap.

Meyers (1995) argued that for over 30 years, international drug smugglers used body packing to avoid the detection of their illicit drugs.

The body packers can be identified through suspicious signs, such as persons behavior, origin and destination of their traveling, doubtful declaration about their journey, halitosis, seating without mobility and the specific smell of their mouth because of the effect of gastric acid on the packets cover may notify the police of body packing cases (Heinemann et. al. 1998; Hassanian-Moghaddam and Abolmasoumi, 2007).

The body packet typically contains approximately 8–10 g of drug, and if the packet contains opium, rupture of even a single packet is life-threatening. A rosette-like appearance performed by air-trapped knot where a condom is tied and a double-condom sign in which air trapped between layers of latex (McCarron and Wood, 1983; Hierholzer, et. al., 1995; Traub, et. al., 2003).

2.4.7 Distribution

U.S. Department of Justice (1999) found that some of the smugglers were interested to distribute the drug in their localities. In this survey, the researchers found that nearly half (47%) of the respondents distributed the one-forth of drug distribution in their localities and less than one-third of respondents felt that gang controlled more than half of drug distribution in their jurisdictions.
Office of the Drug Control Policy (2001) mentioned that the drug sales or distribution involved hand to hand sale through acquaintance network. It also stated that the drug was distributed by delivery type services and it was sold via the internet. The drug transactions were conducted via introduction, that the sellers were introduced to potential buyers by a liaison or mutual acquaintance.

Office of National Drug Control Policy (2004) discussed the distribution of drugs through internet or online. The National Center on Addiction and Substance Abuse (CASA) reported the explosion of illegal distribution of drugs over internet. The exact number of online pharmacies was difficult to ascertain. It was found that 495 websites offered the prescription of illegal substances. It was also found that these sites did not have any mechanism to prevent the children from purchasing prescription drugs.

Curtis et. al. (2002) found that there were three kinds of drug delivery operations over their research period. There were freelance delivery, bar delivery and corporate delivery services. The researchers pointed out two kinds of organization of distribution such as social organization of distribution and technical organization of distribution. In social organization, they referred to the issues of cooperation, differential responsibilities and power, and authority among distributors. In technical organization, they referred to the issues of physical location, policies, procedures, technology and equipments employed by the distribution. They also found that a variety of street location and abandoned buildings were taken over for drug sales. These locations were generally run by large corporate organizations. They used thousands of people for watching the police on rooftops or street corners and for alerting the distributors. They also pointed out the distributors purchased and distributed the drugs.
at regular interval. They had a schedule with customers that allowed them to spend only few hours for this purpose. The researchers mentioned about the places of distribution. The hotel was the main distributing area for distribution of drug to white collar workers. It was identified that a hotel which sold millions of dollars worth of illegal substances to white collar workers and place of vehicle services also indentified as location for delivering heroin in radio dispatched cabs. The distributors roamed from bar to bar and looking for familiar faces and convinced them to become intermediaries. They also indentified three kinds of distribution techniques. First one, drug dealers in the border region were provided the drugs. Secondly, numerous mules transported the drugs little by little. They are also called “ants moving house”. Thirdly, the bosses of various parts of the country took the drugs and sold them to different levels of distributors and retailers.

Office of National Drug Control Policy (ONDCP) (2003) reported that foreign dealers were also involved in the drug distribution. They mentioned that home delivery services were also available in distribution circle.

State Commission of Investigation (SCI) (2002) explained that the entire process of distribution started from drugs cultivation/importation or whole sale distribution to further commercialization and final sale to end users.

Ruggiero (2010) mentioned in their article about minimum wage street sellers. The growing number of dealers was not accompanied by increasing number of users. But presumably the paucity of earnings available to those who can be termed “minimum wage” street sellers (Bourgois, 1995). The author also explained about the process of distribution wherein the resellers bought the opium latex from farm gate and sold it directly to customers/or shipped it to other cities for street distribution. In the
second market, the intermediaries bought the drugs and took them into other places. It was extremely difficult to know that how many intermediaries took part in the whole process. According to United Nation Research Institute for Social Development and United Nation University, several divergent patterns of illicit drug distribution were in the drug market. First, depending on activity whether they are whole sellers, middle men or retailers. Second, degree of organization whether traffickers had payrolls/enforceable “personnel policies”, developed specialized departments, have vertical integration, build or fight over regional/country wide market share. Third, type of drug market (cannabis, cocaine, heroin, opium). Fourth, existence of traffickers’ insurgent-terrorist alliance. Fifth, way of organized traffickers competes for market shares.

Criminal Intelligence Service Canada (CISC) (2007) reported that the drug distribution methods and practices vary among the street gangs. In western Canada, street gangs operate mobile, street level distribution network commonly known as “Dial-a-Dop” operation. In some districts, the street gangs used some locations as trafficking zones.

International Narcotic Control Board (2008) reported of the distribution of drugs through internet and smuggling of drugs by express mail. Individuals who ordered from illegal internet pharmacies had been able to obtain illegal substances. Internet continues to be used as a source for chemicals required for manufacturing drugs.

Hales and Hobbs (2010) pointed out some techniques which were adopted by the dealers in distribution process. According to them, the dealing of illegal substances took place in housing estates and the deal was arranged by mobile telephone and conducted in public locations such as communal stairwells and adjacent parkland. They
selected some location notably a busy main road. The dealer used the estates as big
distribution area. The young people who visited the estate and young people who lived
in the estate were frequently approached by drug dealers for buying drugs. The police
authorities in this particular area received numerous calls in connection with approach
of drug dealers on young people.

They also mentioned that young persons aged 13 or 14 delivered the drugs. The
street level drug distribution was at bar station, fast food restaurant, grocery shop which
was run by a family.

Other distribution places were identified as pubs and clubs. Large quantity of
drugs was distributed in pubs (Pearson, 2001) and the distribution was associated with
football supporters on match days.

Duffy et al. (2008) interviewed 182 young people who were involved in drug
transaction, and found that only 6 percent of dealers bought the drugs from unknown
sellers, while majority bought from friends, family members and acquaintances.

Massari (2005) identified some drug distribution markets in private settings and
public places such as pubs and clubs. Although some dealers were mostly foreign
migrants who operated in the open drug scene, and drug was also sold on the streets
which was closed to clubs, pubs and other meeting places. In some other places, it was
sold at “coffee shops”. He also found that the heroin was sold by foreign dealers mostly
newcomers. He also identified the increased popularity of home delivery services,
spreading of the delivery or order by phone. They documented the chain of distribution.
Based on their findings, they identified six level distribution chain like importers,
distributors, large scale whole sellers, small scale whole sellers, street distributors, or
user sellers and end users (Preble and Casey 1969, Moore, 1977 and Lewis, 1994).
Johnson, et. al. (2000) reported that “seller style” included phone and delivery services as well as free lancers. Reuter (2009) documented that the distribution of drugs as a result of the dissemination of beeper and cell phones. It occurred in some locations such as apartments, restaurants, offices which were agreed upon by the buyer and seller for their mutual convenience.

Centers et al. (1998) found that the students from middle and upper schools were asked to sell drugs. The distributors had the source within the region. They purchased the drugs locally for sales locally.

Reuter and Kleiman (1986) reported that the distribution chain is long and typically involved in sales between independent buyers and sellers. Each importer sold to a small number of high level domestic dealers, each of whom sold to a slightly large number of middle level dealers. The length of the chain was a matter of conjecture. They also found that the distributors were affected by the physical characteristics of drugs. The distribution of drug was high in some drugs which had the low market value than other drugs which had the high market value.

Office of National Drug Control Policy (2004) documented in their report that the criminal gangs were involved in whole sale distribution and retail distributions. They used commonly cut houses, store front and open air market for distribution. They packaged the drugs in small baggies and plastic vials and sold in open air market. The teenagers and youth were involved in retail level distribution. He reported that in one of his research areas (Turin), heroin was mostly sold by foreign dealers mainly new comers who occupied the richest sector of the market which was highly exposed to seizure and arrests. He also pointed out some retails point very closed to clubs and discos for “recreational” use of heroin. He discussed in his report that some ethnic
group occupied street level distribution and it has increased the popularity of home delivery services.

Asian Drug Advisory Group (ADAG) (2005) conducted the study and found that street level distribution was carried out by dealers who used drug only occasionally and distribution was carried out by both males and females. Some dealers sold only to those with whom they were comfortable.

Hales and Hobbs (2010) found that drug dealing used with the help of mobile phone and carried out in public locations such as commercial stairwells and park land, was generally between dealers and users who were known to each other. They selected some locations like a busy main road.

Blickman et al (2003) stated that those ethnic groups were involved in distribution. They mostly selected clubs and pubs as distribution locations. And they selected closed semi open settings such as flats, houses, hotels where money – drugs exchange could take place safely.

Gruter and Mheen (2005) found that dealers used their own houses as means of selling drugs. Reuter (2009) found that the public market were large public location like park, train or bus stations and school yards and also apartments, restaurant, office that was agreed upon by the buyer and seller.

Astorga and shirk (2010) found that new groups as gangs were involved in lower level drug distribution at street level, called “narcomenudeo” or small time drug dealing.
2.5 CRIMINAL GROUP

Naylor (2001) argued that Tamil separatists of Sri Lanka had the deal with Indian mafia and paid their arms purchase with drugs. It also stated that highly structured criminal organization operated in India, drugs was a main only one element among many of their activities. They had the network with Liberation Tigers of Tamil Elem (LTTE) revealed in June 1999, by demanding a large network of Mumbai, NewDelhi mafia.

U.S Department of State (2010) reported that the insurgents in Jharkhand, financed their operation through opium cultivation for laboratories in Uttar Pradesh. It was found that the trafficking groups operating in India fell into four categories by region wise. West African trafficking groups operated in Mumbai and New Delhi. The trafficking group who maintained the familial and tribal tie-up to Pakistan and Afghanistan were responsible for the trafficking of Pakistan and Afghanistan heroin into India. In south India, Tamil traffickers involved in the smuggling between Indian and Sri Lanka. Indigenous tribal groups in the north eastern state operated the drug smuggling between Burma and India. They also kept tie–up with Burmese trafficking organization. The precursors entered into Burma and “white sugar heroin was smuggled into India across Indo-Burmese border. In addition, the insurgent groups in India operated drug smuggling process for the finance support.

Abeyratne (2008) mentioned in his article that the United Nation had estimated that the annual total income of Al-Qaeda was 2.4 billion US dollars from illicit drug trade. It also claimed 12 of 28 organizations had been listed as terrorists organization. The author also listed out that the criminal groups ranged from “Sender Luminoso” of Peru to the “Tamil Tigers” of Sri Lanka who were involved in illicit drug trade.
Paul and Rao (2002) realized the fact that the processes of drug trade included production, transportation and distribution have taken shape due to the involvement of several major gangs/mafias in the generation and inter-state movement of narcotics drugs. According to them, the most important players are the fully organized drug syndicates, with their wide network of operations spreading over transnational places like Ganganagar (Rajasthan), Indore (Madhya Pradesh), Mumbai (Maharashtra), Kolkata (West Bengal) and even Dubai and other western countries.

Paul and Rao (2002) recognized that the drug kings operated mainly in Jodhpur, Jaisalmer, Barmer etc. and also said that they smuggled drugs with arms. They reported that there was a considerable drug trafficking by Sri Lankan Tamil militants masquerading as refugees and residing in different camps. And also they recognized that Tamil militants were engaged in drug trafficking outside southern states too. But things have changed with the time. Various reports suggested that places like Chennai, Rameswaram and Madurai etc. were also used.

2.5.1 Organization network

Curtis et al. (2002) pointed out the term of corporate type of enterprise on drug trafficking. According to them, corporate enterprise had the great deal of division of labor and functional specialization such as “owners”, “managers”, “workers”, “lookout”, “touts” etc, and often paid wages to their “worker on a regular pay day”. They studied one drug organization and found that the business employed about 10-15 runner and 2-3 dispatchers. It had two owners, one owner purchased large quantity of drugs required to keep the service running, relying on three or four regular whole sale suppliers and received the bulk of the profits. The other was responsible for packaging drugs for sale and managing the staff and officers. The term of “secondary market” in
drug trade means someone bought the drug and it was accomplished through accessing personal networks, rather than through the anonymous public markets. Some researchers used different terms like “mutual societies”. The mutual society was a friendship or acquaintance based network of drug users, some of whom, some of the time, supplied the drugs to others. Every user was potentially a supplier and everyone was expected to help out everyone else-members of mutual societies or users or dealers as they were some time called constitute a large population in relation to other types of traffickers. The critical feature of the secondary market was the use of a person who was not a “professional dealer” to facilitate the purchase of drugs, a person who in essence, works as an agent for the consumer rather than the distributor.

Chin and Zhang (2007) found that in the drug trade, between the drug manufacturer and users there were multiple and often overlapping layers of transportation and distribution network, each involving some people.

Office of National Drug Control Policy (2004) documented that drug traffickers maintained separate office for moving loads of drugs from the center. So the transportation is handled separately by this office of transportation. The manager of this office coordinated all aspects of transportation. The transportation fee depended on the function of time, cost method and risk of route. The brokers worked in distribution officers to deliver the drugs to buyers. After delivering, the brokers got back with money through office of the finance which launders proceeds. This organization structure affords a great deal of flexibility and protection. The office of transportation had no contact with the office of finance.
State Commission of Investigation (2002) analyzed the extent nature of drug market and found that drug market were mostly populated by agile, loosely structured, open and highly adaptable network which successfully managed the entire process of drug business. It was started from synthetic drugs importation or whole sale level distribution to further commercialization and final sale to end users. He found that there was no indication on the presence of criminal groups who were able to dominate from a monopolistic position, the market. In Turin, the Italian traditional mafia type organization exercised a certain level of territorial control and was involved in numerous legal and illegal markets. Well structured, hierarchical, pyramidal criminal groups seemed to be not interested in the business.

Lyman (1989) summarized about the many levels that existed in the drug trafficking business, from the harvesting of opium poppy gum to street level distribution. All of them were motivated only by huge profit.

Office of National Drug Control Policy (2009) documented that the group of people involved in drug trade had a network structure and rely process on the services. In addition, the industry required a wide range of specialized personnel including chemists, chemical engineers, pilots, communication specialists, money launderers, accountants, lawyers, security guards and hit men.

MacDonald and Marsh (2002) found out that drug dealing network developed, first as a result of more occupational choices and second through the involvement in the hidden economy.

Ruggiero (2010) stated that the growing demand for such drugs function as an incentive for the formation of dealing networks.

1. Family network- Families appeared to indulge in drug business and kept touch with large distributors and international traffickers.

2. Mono-ethnic network- In this network, local level users and small dealers claimed that business could only be conducted with their own people.

3. Issue- specific network- In this network, different kinds of actors was involved.

4. Value adding network- In this network, they kept alliance with other ethnic groups and had a clear division of labour.

Guizado and Restrepo (2000) pointed out in their article about the role of producers and intermediaries. According to them, the intermediaries, that was, the middle men generally came from the big cities. They did not live in the area of drug production.

Colombian trafficking operates only in cartels that are best characterized as a federation of multiple independent groups. The function of cartels like legitimate business, with sections concerned with distribution, sales, financing, product promotion and security (Bean, 2002). Garcia (2011) stated that the cartel bosses either intimated or bribed judges and police officers, as well as legislators, journalists, politicians, Roman Catholic priests, trade union leaders, left-wing activists, human rights offenders, ex-guerrilla fighters and many more.
Lampe (2009) reviewed the book authored by Scott et al. (2008). Scott conducted the study among 34 drug offenders who agreed to interview among 73 individuals and found that two of them were identified as manager of operation who run the whole operation. The majority of the respondents that was 22 out of 34 were identified with transportation related activities. Among 22, 14 were transportation managers, 6 were transporters, and 2 were off loaders. Five respondents functioned as brokers in between suppliers and buyers, two were involved in money laundering and three didn’t have any role in the drug trade. All the respondents described as “office” organized specific aspects of operation such as supply, packaging, transportation, distribution and money management. Broker had the key role in the network. He combined the drugs from several small suppliers in to large shipments. The process had several stages and in each stage, ten to 15 persons might be involved.

Hales and Hobbs (2010) defined the market including the profile of the customers(demand) and sellers(supply) and configuration of transportation and described seven types of market;

- drug dealing on and from local authority and housing association estates,
- drug dealing from otherwise legitimate business premises
- drug dealing in prison
- recreational drugs market including those in pubs and clubs
- commuting out of actual place to deal drugs elsewhere and
- drug importation and distribution.

Gruter and Mheen (2005) studied the intermediaries and defined the “middle market” as covering all domestic levels between import and retail. Some drug dealers seldom see the trade substance, because their function was only ‘intermediaries’. Their
role was characteristic for drug middle men (Korf and Verbraeck, 1993; Pearson, 2001).

Gruter and Mheen (2005) described the intermediaries as bridge builders. One study conducted in the English middle market showed that the persons who were involved in the drug scene showed themselves as middle men. Reuter (2009) classified the illicit drug market. He explained the market as below,

Table 2
Classification of illicit drug market*

<table>
<thead>
<tr>
<th>Dealers</th>
<th>Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly Residents</td>
<td>Mostly Outsiders</td>
</tr>
<tr>
<td>Mostly Residents</td>
<td>Local</td>
</tr>
<tr>
<td>Mostly Outsiders</td>
<td>Import</td>
</tr>
</tbody>
</table>

*Adopted from Reuter (2009).

According to him, markets were characterized (Table 2) by mostly resident dealers and customers were labeled local markets. Export markets were ones in which residents of the neighborhood sold drugs to non-residents. Markets where mostly non-resident dealers sold to local residents were characterized here as import markets. Finally, markets where both sellers and customers are mostly non-residents were labeled here as public markets because they tend to occur at large public locations like parks, train or bus stations, and schoolyards.

Natarajan and Belanger (1998) found that “corporate” organizations were also involved in the dealing at retail level. The small freelance groups were involved in distribution chain.
May and Hough (2001) studied two markets and identified the second market as “active” because drugs could be obtained 24 hours a day, 7 days a week. Like Market 1 which had contact with the sellers by using mobile phones, Market 2 was described as having a ‘free market’ selling structure with many sellers working independently. Buyers also felt that there would be little competition or resistance to new sellers sprouting up in the area.

Natarajan (2000) analyzed drug trafficking organization through wire tap records and other prosecution materials. It was used to uncover the structure of a large drug trafficking organization in New York city. She used a variety of techniques, including network analysis. Wiretap conversations were analyzed in detail to determine the roles and status of individuals in the organization. She concluded that the organization was of the "corporate" type, involving a large number of individuals, clear division of labor and a recognizable hierarchy. Her wiretap surveillance, conducted in the course of investigating the case yielded nearly 600 pages of transcripts of 151 telephone conversations, ranging in length from two to ten minutes. He recognized that the number of persons involved in the organization ranged from boss to field workers. And their conversations were analyzed through content analysis and net work analysis, task analysis. Figure1 shows the drug organization structure which was operated in New York City.
2.5.2 Communications

Curtis et al. (2002) explained the role of communicative devices in drug businesses. As per their observations, the public telephones were used by the customers to page dealers when they were nearby, thereby allowing them to arrange for a location and time to meet. After the dealers started to use the cell phone, prepaid cellular services become especially popular among drug dealers.
In the report of National Drug Control Policy (2004), it was reported that most of the traffickers communicated through text message, pager system, over the counter, two way radio, and cellular phone with two way radio capabilities, pay phones, stolen and cloned cellular phones and prepaid cards.

State Commission of Investigation (2002) identified that mobile phone was used for home delivery services. It was ordered by phone system directly at home or in agreed meeting places. The customers should only have a number and contact and requested them to deliver the drugs. Sometimes they used metaphorical languages and passwords for their safety.

Hales and Hobbs (2010) also found that the drug dealers used mobile phone and they had particular phone numbers and attended only known call. They delivered the drugs to customers whenever ordered through the mobile phone. During the time of mobile phone conversation, they used metaphorical languages and passwords only.

Gruter and Mheen (2005) found that the communication was between the sellers and customers either by via direct contact in the street or using mobile phone and some dealers used both the methods.

Natarajan (2000) stated that there was new development of communication technologies in illicit drug trafficking and that was using clone phones.

The study for Office of National Drug Control Policy (2004), identified that the various devices used by the traffickers for their communications according to his study, it was found that pager (71.15 %), face to face contact (68.7%), telephone standard/unsecured (55.6%), telephone cellular/unsecured (51.1%), intermediaries (13.9%), cloned phones (13.5%), phone cards (10.1%), mail (2.6%), private mail
(2.5%), telephone secured (2%), computers (0.8%) and fax (0.6%) were some of the devices used for communication.

Increasingly contact is now made by the buyer ringing the seller’s mobile and making an appointment to meet at an agreed place. Mobile phones have facilitated the transition from open markets to closed ones. Risks associated with illicit transactions are also minimized as police surveillance becomes impractical and expensive (Natarajan, 2000).

May and Hough (2001) studied two markets and found that sellers conducted their businesses using either pagers or mobile phones. Two runners also reported using walkie-talkies and scanners which was used for tracing police radios and police cars.

Soudijn and Kleemans (2009) found that the traffickers used telephone for their communication and communicated themselves by using nickname.

2.6 MONEY RELATED VARIABLES

2.6.1 Misuse Banking

State Commission of Investigation (2002) reported the dealers’ involvement in drug related money laundering. They documented that the agency arrested assistant vice president of International Bank on charge of money laundering, illegal structuring the cash deposit, operating money related business without license and also seized $15.8 million from 39 accounts handled by the defendant at the bank. Bureau of Immigration and Customs Enforcement Office Of Investigation (BICE/OI) agent determined that the defendant was responsible for the international private banking and maintained 250 accounts, 44 of which were in the names of non-existent million
through currency exchange firms and money was sold on Black Market Currency Exchange (BMCE).

Salama (2000) found some techniques of financial transaction of drug money, that were wide-spread over and under-billing, transforming of funds from one account to another, using offshore location, certain banks practicing secret or double book-keeping, investing the short term high risks products, giving legal status to sums received and finally a plethora of avenues to repatriate capital.

Criminal Intelligence Services Canada (2006) reported that criminal groups continued to exploit domestic financial institutions for money laundering purposes. Criminal groups typically sought to insulate themselves from the laundering process through the use of third parties, financial professionals and other financial intermediaries such as online payment system, currency exchange and shell companies.

U.S. Department of State (2010) reported that the common method adopted by the criminals in India for money laundering was through misusing banking sectors. They opened multiple bank accounts, intermingling criminal proceeds with assets of a legal origin, purchasing bank check with cash and routing through complex legal structure.

Office of National Drug Control Policy (2001) identified that the drug organization transferred the money through the shipment of cash, money orders and checks. Some banks provided the services on to meet individuals needs. The services included multi-numbered accounts, international wire transfer online, tax protection etc. The European Union Bank which provided such services called “first offshore bank operating via internet” and offered to represent money laundering services that were being advertised through the internet.
Cotterill (2002) pointed out that criminals moved money between banks, between financial instruments and in and out of tangible assets such as business or property. They tried to change the shape and size of the financial holding by using different currencies and by adding to and subtracting from the amount so that it was more difficult to identify criminals and also used “shell-companies” (Entities that had no physical presence or staff and existed purely to create invoices and to receive money for non-existent services to launder the money).

Salama (2000) stated that the drug traffickers used their bank accounts where they are making their “dirty” drug money “clean”. They collected the money from street-corner dealers and deposited the money in the nearest bank. They used multiple banks and multiple accounts. The banks were delighted to have this sudden stream of wealth pouring through their doors. Even if it was quickly transferred to its next destination, the interest generated by massive–short term loans between banks could turn a handsome profit for minimal effort. The bank turned blind eye to the source of funds.

Schneider and Windischbauer (2008) argued that the smugglers misused the internet in order to undertake illicit transactions in the form of Online Banking, Cyber money and Electronic Purse.

2.6.2 Bulk of Cash Smuggling

State Commission of Investigation (2002) documented that Colombia DTOs and other criminal groups often smuggled bulk quantities of US currency to Colombia via couriers travelling on commercial aircraft or by air cargo and abroad commercial maritime cargo vessels, frequently within automobiles equipped with hidden compartment. One case registered the smuggling of $90,000 which was wrapped in
carbon paper and identified through X detection at airport. He also found that smugglers met courier server and paid 2 to 5 percent of the total smuggled.

Office of National Drug Control Policy (2004) reported that drug industry had the revenue most ranged from $300 billion to $500 billion.

Garcia (2011) analyzed the economic impact of drug trade. According to him, the greater profit was made in the whole sale market than were made by those who sold the product at the final retail price. Drug traffickers’ investment can also be seen in what was called “informal commerce” (black market) as well. The net income liable to be repatriated oscillated around 4.4% of the Colombia in GDP over the period from 1982 to 2000. Three-quarters of this income (3% of the GDP) was repatriated by means of money transfer and black market imports and to a lesser degree, by means of fiddle accounts.

According to Salama (2000), “arm trafficking, procuring, HCL smuggling, clandestine smuggling and narcotic trafficking brought 24 to 32 billion dollars a year in Thailand, which was the sum equivalent to the budget of state. The narcotics trafficking alone to Thailand was estimated at a billion dollars”.

Centers et al. (1998) pointed out the profits of person involved in drug trafficking and found that they could earn more money than the earning of a legitimate employee.

Mieczkowski (1990) reported that weekly earning of drug dealer was $5000. The juvenile had mean weekly earnings of $672 (Dembo et al.1993).
Maccoun and Reuter (1992) found that 37% of dealers had median earning $721 per week and $2000 per month. It was higher than the mean earning ($800) of legitimate employment. The mean hourly wage of $30 per hour for drug dealing as $7.00 per hour for legitimate employment stated the huge income of the dealers.

Charles (2001) found that drug industry had evolved into a source of income in Himachal Pradesh which involved cultivation, local trade and international level trafficking. The profit was derived from international and state level trade.

Garcia (2011) analyzed the profit in each stage of drug trade like cultivation, transportation and distribution. He found that the producer of drug made least profit (2.5% of distribution) from the drug trade. Next, the national middle man had 15% of profit; the profit in distribution was 26% for international traffickers and 54% profit made by distributors in consumer countries. He pointed out that the courier got Rs. 1,500 – 2000 per job.

May and Hough (2001) studied two markets and found that weekly earnings of sellers ranged from £650 to £50,000 and it is a 22% profit.

### 2.6.3 Money laundering

The Financial Action Task Force (2000) on Money Laundering (FATF) is a 31-member inter-governmental organization under the auspices of the Organization for Economic Co-operation and Development (OECD) which cites the common estimate that the aggregate size of global money laundering is 2 to 5 percent of world economic output.
Chin and Zhang (2007) stated that there was an improvement in the relationship between Burmese Government and ethnic groups in the Shan state. As a result, more and more drug money is transferred into legitimate business and expanded the Burmese Economy.

Chalk (2000) pointed out 221 kg of heroin from golden triangle were confiscated in some places which borders Hong Kong in 1991. From 1991 to 1997, law enforcement agencies across China arrested 568,000 for drug trafficking and seized about 30 tons of heroin and 14.4 tons of opium.

State Commission of Investigation (2002) mentioned in their article about vast money laundering in Latin America that was fueled primarily by illicit drug proceeds. It was identified that the drug criminal used drug money to purchase electronic and clothes in bulk and shipped directly to mother places where they sold at discount prices.

Garcia (2011) reported in his article that the drug traffickers’ investment can also be seen in what was called “informal commerce” (black money) as well as in the hotel business and in casinos, where cash transactions were the normal rule.

The drug traffickers’ tendency to invest in real estate and in costly structures presumed the undeniable dynamism due to the investment of repatriated drug. The author also revealed the positive impacts of both technology and infrastructure in the areas of agriculture and grazing as well as investment in urban properties, the media, chain stores such as pharmacies and certain industries. It invested expensive construction. It also had negative impacts on investment and growth, and the amount came into the black market. It was also found that the Colombia had an economic growth through the dedication of drug money into financing contraband, overseas tourism and capital flight. The author found that the luxury building did benefit from a
process of speculation due to drug traffickers acquisition of sumptuous properties. The evidence showed that the sector dynamism was the result of factors proper to that of the industry itself, independent of the drug trade. Jurado stated that laundering is more than an ensemble of techniques aimed at transforming or in other words, changing the form of “dirty” money.

Salama (2000) explained the term of “recycling laundering”. According to him, laundering–repatriating does not always succeed in giving an honorable status to money, it does however follow set paths, the drug money being invested in real estate, cattle rising and financial speculation. Laundering also further aided to more laundering through the expansive corruption. The investment can be called “recycling laundering.” The traffickers’ investment activities fell in to two categories. First is “support laundering” that is, investment in hotels, restaurants, gambling halls and so on. Second is speculative ventures that is, investment in cattle rising, real estate construction, highly rated stocks. The author also pointed out that the recycling took place primarily in certain sectors like tourism (restaurants, hotels, casinos), in real estate speculation and purchase of land and in pharmaceutical industry. Investments were done in real estate and construction sectors. In Bolivia, drug money was invested in entertainment, television and radio stations and at least one soccer club which may have been acquired to influence people in favor of traffickers. Import businesses were also opened for money laundering purpose. In Canada, US reported that it invested in small, cash rich business which needed no issue of official invoices.

Rios (n.d) pointed out “a study which was conducted among farmers and found that the drug money was utilized into constructed houses, buy cattle, animals. The traffickers invested the drug money mostly in real estate (45%), in cattle (about 20%)
and other forms of legal commerce (about 15%). It has been documented that traffickers’ demand for luxurious housing significantly benefited the constructive business (ONDCP, 2004).

Criminal Intelligence Services Canada (2007) reported of the money laundering process in Canada. As per the data collected from the International Monetary Fund, it was estimated that 22 to 55 dollar million was laundered annually in Canada. It also reported that criminal groups utilized the drug money in purchasing legitimate business such as restaurants and clothing stores.

Naylor (2001) reported that total amount of drug-generated money reinvested in the world economy annually was around US$ 350 billion to US$400 billion and drug plant producers and end product sellers represented 5$ billion and 100$ billion respectively. It also mentioned that “the laundering process improved the daily life and involved less or more, insignificant investment such as bicycle, car, building materials and purchasing other goods like gold diamonds, non feron materials”. The criminal groups like LTTE utilized the drug money to purchase arms.

Office of National Drug Control Policy (2004) reported that annually the drug money between 300$ billion and 500$ billion laundered internationally. These criminals purchased and invested in legitimate business.

U.S. Department of State (2010) reported in its annual report of 2009, that India was one of the countries among 60 major money laundering countries. According to this report, a major money laundering country is defined by statute as one whose financial institutions engage in currency transaction involving significant amounts of proceeds from international narcotics trafficking. Money laundering took place in India through the charities and non-profit organization.
Hales and Hobbs (2010) found out that drug money was invested in legitimate business particularly in building and food industries. Courakis (2001) defined money laundering as criminal elements which legalize their illegal gains from criminal activities such as gun running and drug trafficking.

Taylor (1992) described that money laundering is the process of transferring “hot money” earned in the drug economy into offshore banking facilities, so as to be recycled into more legitimate business activities.

Salama (2000) described about the cyber laundering that internet provides new and undetectable methods of money laundering. It is interface between money laundering and technology. Cyber laundering is cheaper and more secure mean of moving financial information. International Monetary Fund estimated that 2-5 percent of the global gross domestic product was from laundered money. The drug cartels and the man who laundered the drug money have developed an enormous and growing capacity to conceal the source. They used some innovative methods to conceal the vast sum of cash like coffee exports, car dealership, insurance annuities, construction projects etc. It has some stages, like pick up, transfer multiple banks merging with funds from legal sources and finally investment. He also mentioned that drug cartels have left the money laundering business. Now they have hired specialist in electronic banking. The deal with drugs and money laundering made enormous profit and used the same channels as legal business. Laundering is more than an ensemble of techniques aimed at transforming or in other word, changing the form of “dirty” money. He also mentioned about recycling laundering which is that corruption in laundering process. In this way, laundering also further aided to more laundering. Some areas of investment to support the laundering were hotels, restaurants, gambling halls.
and so on and speculate ventures (cattle rising, real estate, construction and highly rated stocks). According to him, Money is divided into three types namely white, gray and black. White money is used in legal business transaction; gray money involves a kind of middle ground in which parties seek to avoid taxes and black money as term suggests, is connected with illegal business activities such as drug trafficking and terrorism.

Charles (2001) found that money laundering becomes easy with tourism providing many avenues for both local and foreigners to launder money, by diverting drug money into legal business. The author conducted the study in Himachal Pradesh and found out some patterns of utilization of drug money. The drug offenders invested the dug money into hotels, guest houses, restaurants, and coffee shops. These ventures were undertaken by local, non local Indian, foreigners and Indian or local married o foreigners. The cover-up were bakeries and confectionaries, travel agency with trekking facilities, curio shop and health programmes.


2.7 LAW ENFORCEMENT AND DRUG TRADE

2.7.1 Law enforcement on illicit cultivation

Smith and Kelthini (2007) reported that with the trading and aid payments, the United States has pressured the Government of India to pass harsher penalties against the illicit cultivation and smuggling of number of drugs including opium and its derivatives (Kethineni et al., 1995). They also pointed out that the post independence drug law was NDPS Act (1985) which increased penalties against farmers who diverted crops to illegal markets (Kumar, 1989). They conducted the study among 50 farmers
and found that seven farmers (14%) had lost their licenses for under production at least once in five years, but they blamed drought and plant diseases.

Office of National Drug Control Policy (2004) mentioned in his article the efforts taken by the government authorities to curbing the poppy cultivation. In Afghanistan, most of the poppy land was eliminated in north and east zone. In 2008, it was estimated that 29 provinces were poppy free or producers of low levels of less than 6,000 hectare of poppy cultivation. Mexico law enforcement authorities strengthened their activities against drug cartel in 2008. As a result, they arrested several crucial, notorious elements of some cartels. Drug enforcement authorities continued to coordinate with Mexican under parts to support drug enforcement operation while providing training, public awareness, intelligence collection and operational assistance for reducing the trafficking.

The government of Columbia also expanded its contribution throughout the country, to reduce the drug violence by eliminating poppy cultivation, illicit trafficking, dismantling drug trafficking organization, disrupting the transportation network of the drug trafficking organization and increasing social justice programe against drug trafficking.

U.S Department of State (2010) documented that Central Bureau of Narcotics of India carried out the satellite photography and measured each farmer’s plot size and identified the illicit cultivation of opium in various part of India. If any farmer cultivated opium in excess of five percent of allotted cultivation area they were not only uprooted but also were subjected to prosecution.
2.7.2 Law enforcement on money laundering

In 2005, due to the investigation assisted by the US Drug Enforcement Agency and Australian Federal Police, the Burmese authorities closed the Myanmar Universal Bank and its 38 branch offices throughout the country and seized assets of over $18 million. The bank chairman and his associate were arrested and charged with money laundering offences.

Office of National Drug Control Policy (2004) documented about the US law enforcement efforts on resisting illicit financial transformation in connection with drug proceeds in the annual report of Office of the National Drug Control Policy. According to the report, efforts were taken by the Treasury Department’s Office of Foreign Assets Control (OFAC) to block illicit access to the US financial system and the financial services industry. OFAC sanctioned reinforce and augmented US and Mexican Law enforcement activities to counter cross border drug trafficking. OFAC continued to target the financial network of Mexican drug trafficking organization during the period of 2007-2009, as a result, 50 individuals and 39 entities were designated. Mexican authorities arrested five individuals on money laundering charges. In 2008, OFAC designated a pharmaceutical company tied to the Amezua Contreras drug trafficking organization which was involved in the illicit manufacturing of precursor chemical. The authorities also identified that bulk of currency smuggled through borders. DEA’s El Paso Intelligence Center (EPIC) acts as the central repository for all seizure information. EPIC analyzed the seized evidence and led it to target organization and further for investigation. The US had strengthened the law enforcement agencies for curbing the illicit drug money transaction.
Department of homeland security also actively targeted drug related money laundering especially bulk currency smuggling through the work of ICE and US Customs and Border Protection (CBP). ICE utilized its 26 special agents in charge office to work with state and local authorities throughout the nation to identify and intercept bulk cash shipments. ICE and CBP worked with international partners providing required training in bulk cash smuggling and investigation in global level. Recently ICE established bulk currency smuggling center in Vermont to serve with Federal, state and local agencies with critical intelligence and for providing support in connection with financial investigation.

Naylor (2001) reported that anti money laundering agency targeted banking secrecy, offshore centers, electronic money transfer and large scale operations. It made closure examination of major recipient of the proceeds of the production, transportation, trafficking and distribution of drugs.

Choo (2008) argued that criminals were motivated by huge profit and they could reach it through the drug trafficking. They used internet for financial transactions and involved cyber laundering.

2.7.3 Law enforcement difficulties

ONDCP (2003) documented the difficulties faced by the law enforcement agencies when they traced out the poppy cultivation area. According to this document, in mountainous countries like Afghanistan and Burma, it very was hard to interpret the accurate color spectrum of photograph taken by the satellites because it was affected by slopes, shades etc. Even the satellite photo accuracy was found impossible to ground checkup in some countries like Burma where the poppy crop were under the control of
armed groups. One more important issue mentioned in this article was that the Indian police were unable to distinguish synthetic drugs from medical drugs.

U.S Department of State (2010) pointed out that it was very difficult to monitor the sheer number of Indian farmers, farm workers and others who were involved in poppy cultivation and their lucrative gum diversion. It stated that the size of the area of poppy cultivation increased and local farmers joined together with large more organized drug syndicates. The effective law enforcement had been absent.

Office of National Drug Control Policy (2003) reported that several law enforcement authorities were killed and got injuries when they traced drug smuggling group. The FBI data indicated that 51 federal, state and local law enforcement officers were killed in line of duty in 2000. Out of 51 officers, 3 were killed while investigating drug related situation during the period of 1992-2000, 33 enforcement officers were killed in drug related matter.

Astorga and Shirk (2010) analyzed the drug related problems, risks and difficulties in connection with law enforcement. They reported violence from 2001-2009. There were more than 20,000 killing attributed to drug trafficking organization violence and at least 100 police officers and soldiers were killed in line of fire from 2006 – 2009.

Charles (2001) conducted the study in Himachal Pradesh and found that law enforcement faced problems when dealing the drug trade cases. The villagers prevented the police officer from arresting those dealt in drugs and they were not allowed to carry away the drugs seized. He identified administrative level difficulties such as in adequacies of law enforcement agencies, too few officials in the NCB, low priority given to the drug offences etc. He also found that young kids were trained to hide drugs
in their pocket and they learned to deny the involvement of parents in drug trade when questioned by the law enforcement authorities. Hostile witnesses are also the big challenged ones to law enforcement.

He also found the difficulties when tracing the money laundering issues. He stated that forfeiture of property had not been successfully implemented in India due to some provision in law. Section 68 stated that the action was taken on illegal acquired properties only when any person who was charged with an offence punishment under this act was already convicted and detained. The dealer can easily escape from the broken hand of law and they kept more than one lawyers.

Despite these various resources, police officers felt that they were unable to keep up with the technology used by dealers (May and Hough, 2001).

Charles (2004) argued that poppy cultivation across the different states is undertaken by one hundred thousand farmers, farming on individual land holdings less than 0.2 hectares and each makes it difficult to monitor. The situation becomes complicated as the yield depends on climatic changes and this is used as an excuse for under reporting the yield per hectare. Small land holdings make it difficult to estimate the actual yield per farm holding. According to informed persons who were part of the agency, during their tenure they used different mechanisms to control diversions during weighment period but the following year the local people found new ways to beat the system.

Paul and Rao (2002) commented that there are so many loopholes in the NDPS Act, 1988 in which the corrupt officials of the Narcotics Bureau take full advantage. For example, a person caught with one gram of opium has to face the same consequences as someone caught with 10 quintals. Secondly, declining image and
standards of the judiciary has resulted in the largest number of accused getting bail and getting away scot-free even though it is well-nigh impossible to get bail under the NDPS Act. It is said that people of Mandsaur right from government officials to the common man on the street, feel that their hopes are belied as there exists a strong unholy nexus between the cultivators, smugglers and corrupt officials of the Narcotics Control Bureau.

Need of the present study

There is huge volume of money transactions under process at the dark scene of the Indian economy and drug smuggling plays an important part. The transactions in drugs produce a parallel economy, which is detrimental to the economy of the country. This study will throw some light on the impact of drugs on the economy. And this study will alert the Indian policy makers to initiate new policies to handle the drug trafficking.

Since only limited numbers of studies have been conducted in this area in the Indian context, there is a need to conduct this study.

The present study aim to cover the various issues which are connected with the drug trade such as licit opium cultivation, illicit opium cultivation, production of opium, transportation and distribution of produced opium and heroin, smuggling of chemical precursors and so on. This study not only focused on the opium trade which includes cultivation, transportation and distribution, and also it covers cost benefit analysis and economic impact of opium trade.