EXECUTIVE SUMMARY

Of the eight Northeastern states, namely Assam, Meghalaya, Sikkim, Tripura, Arunachal Pradesh, Manipur, Mizoram and Nagaland, the last four share a common international border with Myanmar, the world's second largest illicit opium producing country. Following the introduction of heroin in the early 1970s, drug use among local youth in Northeast India particularly in the states closer to Myanmar took a new turn. Within ten years' time, heroin smoking a non-traditional form of opiate use replaced the age-old tradition of cannabis and opium use to a great extent in some of these states in the sub-region. Injecting heroin (locally known as "white sugar" or "number 4") soon took over. Many local young males, and to a lesser extent young females – in their mid-teens, started drug use. They began their habit by directly injecting as opposed to the traditional route, which involved gradually switching from non-injecting (e.g., via the ingestion of codeine-containing cough syrups or tranquilliser tablets) to injecting. It is important to recognise that a wide range of structural and environmental factors, including under-development, increased the vulnerability of local youth to drug use. Stringent laws and enforcement activity against heroin trafficking and peddling in the early 1990s in Mizoram, and in the early 2000s in Manipur, also resulted in another shift towards injecting dextropropoxyphene a synthetic pain reliever manufactured in the powdered form and dispensed in capsules. HIV broke out in this setting first among the Injecting Drug Users (IDUs) of Manipur in 1989.

According to sources used for the 2004 'National Survey on the Extent, Pattern and Trends of Drug Abuse in India', alcohol is the most commonly used substance in all states, except Mizoram. In the Northeast, in Assam, Meghalaya and Tripura, treatment centre attendees seek help mainly for problem alcohol use. Although the sale of alcohol is prohibited in Manipur, Mizoram, and Nagaland, alcohol users are the second largest group seeking treatment services in these states, after opiate users. It is worth noticing that unlike heroin injecting, the use of dextropropoxyphene[1], the opiate of choice for injecting in Mizoram, has been associated with higher risks of abscesses, non-healing ulcers and amputation thereby increasing the morbidity of drug users. Users of inhalants in Manipur and users of codeine-based cough syrups in Mizoram are the third largest group demanding treatment services. Cannabis users are the second largest group of treatment seekers in Assam, Meghalaya and Tripura. Heroin use has also made in-roads in Assam and Meghalaya. Tripura has reported minor tranquilliser use as reflected in records from addiction treatment centres.

[1] The powder emptied from the capsules is heated with water in a spoon or a metal cap of a beverage bottle and filtered through a cotton wad before injecting.

Drug trafficking across the common border of Myanmar and the eastern-most three Northeastern states of India (Manipur, Mizoram and Nagaland) occurs with ease. Production and drug trafficking in Northeast India features the following dimensions: (1) the illicit cultivation of opium and cannabis; (2) the smuggling of heroin and amphetamines into Northeast India from Myanmar in moderate quantities; (3) the trafficking of pharmaceuticals such as dextropropoxyphene and codeine-containing cough syrups from other parts of the country into Northeast India and their smuggling to neighbouring countries and (4) the trafficking of ephedrine and pseudo-ephedrine precursors for the manufacturing of amphetamines from India to Myanmar.

The havoc played by HIV in some of the Northeastern states over the last one-and-a-half decades demands that any discussion on drug use in the Northeast should also take HIV into account. Two of the six high-HIV-prevalence states in India – Manipur and Nagaland – are in the Northeast and now feature what epidemiologists call a 'generalised' epidemic with a strong IDU-HIV link. In a third state – Mizoram – the epidemic appears to be heading towards generalisation. Equally worrying is increasing evidence that the non-injecting sexual partners of injecting drug users are becoming infected with HIV in many Northeastern states.

Rapid Assessment Surveys (RAS) of drug use conducted in Manipur, Meghalaya, Nagaland and Mizoram in the beginning of the new millennium and 'HIV/AIDS Programme Needs Assessments' in these four states along with Assam conducted in 2005 clearly indicate that the existing targeted HIV intervention projects need to be strengthened rapidly to achieve significant risk reduction among a large portion of the estimated number of IDUs in the sub-region. It is true that the NACO sentinel surveillance round in 2004 has recorded lower HIV prevalence among IDUs in some of these states as compared with the data generated in previous years. While this may be seen as an achievement of ongoing interventions, it should nonetheless be noted that AIDS deaths took place in some of these communities in considerable numbers. Time series data on HIV incidence in IDUs which is essential to substantiate the claim for success of interventions is also lacking. Moreover, the distribution of the HIV sentinel sites has an urban bias and this skewed distribution may fail to capture the growth of the epidemic in new and rural population groups.

Community-based responses to the drug use epidemic in the Northeastern states of India have ranged from coercive measures against drug users by local pressure groups to various risk reduction approaches. The responses to drug use in the sub-region also include: (a) central and state government initiatives, (b) the conducting of studies and/or surveys by the medical, academic and research institutions, and (c) initiatives from UN and bilateral donor agencies. The element common to all these responses has been the active participation of local NGOs and CBOs, the formation of which was in many cases catalysed by ex- and current drug users.

Ever since the HIV epidemic was documented among the local IDUs, considering HIV/AIDS issues in drug demand reduction programmes has been another common feature in the response to drug use in Northeast India. A functional collaboration between the India Council of Medical Research (ICMR), the respective state governments and the NGOs run by ex- and current IDUs has played a pivotal role in bringing HIV to the centre stage of discussion in this regard.

Lastly, the organisations formed by the ex- and current drug users along with the organisations of women infected with and/or affected by HIV/AIDS have worked as a force for social change. Through them, the entitlement of HIV positive people to HIV/AIDS care and support, and the needs of the families and communities affected by HIV/AIDS in the sub-region have come to the fore.

Recommendations: Programmatic directions for future interventions, rooted in an analysis of the situation and responses presented in this document, are summarised below.

1. **Accurate monitoring of the drug use problem and evaluation of the past and ongoing interventions:** There is a need to establish effective drug use monitoring and reporting systems for all the eight Northeastern states of India. Additionally, these systems should be linked to HIV surveillance mechanisms. No network of such a kind exists as yet. Another gap is that there is a skewed distribution of HIV sentinel surveillance sites for IDUs in the Northeast towards urban settings. This captures only a snapshot of a select population of drug users and not the community of drug users in general. Separately, but as a part of the process of gathering evidence for programme responses, an impact evaluation of the ongoing interventions in the Northeast for drug users (especially IDUs) is also long overdue and should be carried out at the earliest opportunity.

2. **Community-level advocacy:** Given the hostility faced by drug users in the Northeast, planned and sustained advocacy with the community at large (including local pressure groups, law enforcement agencies and state-level policy makers) is a crucial positive step in fostering support for different intervention approaches. Such advocacy initiatives should follow a timed action plan rather than being ad-hoc, should form an integral part of a *'comprehensive intervention package'* and should be able to measure change in terms of more community support towards various risk reduction approaches and less coercive measures against drug users.

3. **Building capacity in human resources through training:** A key constraint in scaling-up intervention programmes for drug users in the Northeast is the lack of adequately trained human resources. On the one hand, those already engaged in delivering interventions need further training on: (a) how to establish and maintain quality in programmes, (b) how to improve the coverage of interventions (e.g., through outreach), and (c) how to design innovative responses based on the periodic updating of situation and response assessments. Mapping and size estimation exercises are two other issues linked to the scaling-up of interventions.

4. **Reducing the burden on women due to drug use by family members and/or by themselves:** This comprises three linked intervention areas. First, existing interventions that aim to reduce the vulnerability of (generally male) drug users – and IDUs in particular – to HIV should also address the vulnerability of their sex partners. The documented significant expansion of HIV to the non-injecting wives and partners of HIV-positive IDUs in the Northeast strongly underscores the need for such an approach. Second, interventions to minimise the burden of drug use by family members on women should

also go hand in hand with this effort. Third, currently interventions for female drug users are presently very few in number. These should also be enhanced as many of these users have an increased vulnerability to HIV and Sexually Transmitted Infections (STIs) due to the drug-sex interface. Of course, a functional HIV/AIDS care and support system is central to the success of all these three intervention approaches.

5. **Sexual risk reduction as part of a *'comprehensive package'* of services:** Data from several Northeastern states clearly show that drug users are exposed to various health hazards due to unprotected sex. Sexual risk reduction must therefore form an integral part of the '*comprehensive package'* of intervention for drug users. Previous approaches have tended to focus mainly on vulnerabilities resulting from injecting drug use. The *'comprehensive package'* should include condom promotion and improved detection and treatment of STIs for drug users and their sex partners.

6. **Resource allocation to guide operations and foster innovation:** Glaring gaps exist in the area of research, which could inform intervention programmes for drug users in the Northeast. A few examples would be: 'comparison of different drug treatment approaches such as short stay camps versus detoxification centres'; 'the efficiency of different delivery channels for oral sublingual buprenorphine tablets to be administered to IDUs'; 'the comparative efficacy of different ways of addressing the needs of women drug users' and 'formative research on amphetamine type substance use'. Resources should be applied to these research needs.

1. INTRODUCTION

The havoc played by the Human Immuno-deficiency Virus (HIV) in some of the Northeastern states of India over the last one-and-a-half decades demands that any discussion on drug use there should also take HIV into account.[2] Nonetheless, while HIV remains a concern to be addressed throughout the present document, the major focus will remain drug use and its consequences. The body of information presented in this monograph has been generated through an extensive desk review of research papers published in peer-reviewed journals, abstracts presented in national and international conferences, UN documents, annual reports of the Indian Council of Medical Research (ICMR) and several pieces of grey literature, including newsletters of the networks as well as status reports of NGOs working in the Northeastern states.

2. DRUG USE IN THE NORTHEAST: A SOCIO-POLITICAL CONSIDERATION

The seven Northeastern states of India having geographical contiguity with each other are Arunachal Pradesh, Assam, Manipur, Mizoram, Meghalaya, Nagaland, and Tripura. Sikkim, the eighth, is separated from the other seven states by the northern part of West Bengal. The National Human Development Report (Planning Commission 2002) stated that in the Northeastern states of Manipur, Meghalaya, Mizoram, Nagaland and Tripura, progress on shelter and the accessibility of safe water has been relatively weak and not much development took place during the period from 1980 to 1990.

Figure1: Aizawl, the capital of Mizoram

Changes in the global drug use scene in the 1970s found a breeding ground in this environment of social and economic underdevelopment. In contrast, the other parts of the country, which witnessed more growth during the same period, observed a less dramatic increase in non-traditional forms of drug use. This suggests a link between the socio-political climate and the shifting pattern of substance use. It is also worth noting that subsequently when non-traditional forms of drug use such as heroin-smoking gained a foothold in other parts of India, it mostly did so in the poorer sections of

[2] This assertion holds true also for Chennai, Delhi, Kolkata and Mumbai - metropolitan cities that witnessed diffusion of injection use of synthetic pharmaceuticals such as buprenorphine in the early 1990s - where HIV prevalence among IDUs varies from 2% to 40%.

society. It is therefore important to recognise that individual vulnerability to drug use needs to be addressed against a wide range of structural and environmental determinants. For example, the relatively high rate of literacy among both men and women in Mizoram (see Box 1). When compared with all the other Northeastern states, Mizoram could arguably have assisted an easier acceptance of the social awareness campaigns which rely mainly on written materials and social mobilisation. The percentage of people in the state below the poverty line stands at 19.5 per cent, which is the lowest in the region (and much below the average figure of 36 per cent for India as a whole). Mizoram is also known for its achievements in health care and often achieved targets of the national programmes (Panda et al 1999).

Although a substantial amount of documentation exists on the political history and social movements in Northeast India, including the movements against foreign migrants (Mishra 2000, Bajpai 2002), details on the health and social consequences of drug use, including alcohol, were difficult to obtain prior to 15 years ago. As part of a national study, an 'Assessment of drug abuse, drug users and drug prevention services in Dimapur (Nagaland), in Imphal (Manipur), in Guwahati (Assam) and in Shillong (Meghalaya)' was published only in 1989. In this study (Karna 1989), data from addiction treatment centres was collected, interviews were conducted with ex- and current drug users, and in-depth interactions were carried out with informed persons such as pharmacists, government officials, school teachers, businessmen, lawyers, police officers, social workers and religious leaders.

Widespread concern over drug use in Northeast India, however, only followed the outbreak of the HIV epidemic among local heroin injectors in Manipur in October 1989, which then attracted the attention of many national and international communities.

One of course sees heterogeneity in the HIV epidemic and drug use pattern across the Northeastern states. For example, Sikkim has only recently reported the presence of about 600 IDUs mostly in and around the capital city of Gangtok and is yet to characterise in detail the drug use pattern and the network of drug users except via a limited report on heroin smoking and dextropropoxyphene injecting. Tripura from where buprenorphine injection ampoules are reportedly smuggled across the border into Bangladesh (Panda et al 2002) has not yet reported any major drug use problem.

Box 1: Socio-Demography of the Northeast

State	Population	Population (M/F)	Literacy (%)	Literacy (M/F)
Arunachal Pradesh	1,091,117	573,951 / 517,666	54.74	64.07 / 44.24
Assam	26,638,407	13,787,799 / 12,850,608	64.28	71.93 / 56.03
Manipur	2,388,634	1,207,338 / 1,181,296	68.87	77.87 / 59.70
Mizoram	891,058	459,783 / 431,275	88.49	90.69 / 86.13
Meghalaya	2,306,069	1,167,840 / 1,138,229	63.31	66.14 / 60.4
Nagaland	1,988,636	1,041,686 / 946,950	67.11	71.77 / 61.92
Sikkim	5,40,851	2,88,484 / 2,52,367	70	77 / 61
Tripura	3,191,168	1,636,138 / 1,555,030	73.66	81.47 / 65.41

Source: Census of India 2001, Ministry of Home Affairs, Government of India. (M/F indicates ratio between males and females)

Heterogeneity in terms of HIV prevalence among IDUs in different Northeastern states is also noteworthy, and the reasons for this which are partly rooted in the differing abilities of the states to conduct epidemiological research and partly rooted in variations in drug use practices. Some other factors which might explain the difference in HIV prevalence among IDUs include: (a) the extent of switch from non-injection drug use to injecting and the reverse switch in local youths, (b) the sizes of networks of IDUs, (c) the presence of bridges between different networks, (d) the presence of shooting galleries, (e) the duration of the uninterrupted injecting life of a drug user[3], (f) the interface between IDU networks and sex workers and (g) the extent of safer sex and safer substance use practices by drug users and sex workers. It is therefore important to take these variations as well as the development and socio-demographic profiles of different states into account for better comprehension of heterogeneity in drug use pattern and HIV prevalence between these states.

3. A HISTORICAL ACCOUNT OF DRUG USE IN THE NORTHEAST: A SHIFTING PATTERN

Chewing betel nuts[4] with the leaves of the betel plant and lime paste, and smoking tobacco constitute the two most common traditional forms of substance use in almost all the Northeastern states of India. Most of these states also witness cannabis smoking, drinking of home-brewed rice beer and a limited use of opium (eating and smoking) in traditional tribal societies. Sipping nicotine water (known as '*tuibuk*', '*tuibur*' or '*hidakphu*' in some places)[5] and eating fried vegetable cakes (locally known as '*baras*' or '*pakoras*') prepared with cannabis leaves as one of the ingredients are two other examples of traditional use of psychotropic substances in this region.

Mills (1973) described the chronological shifts in drug use patterns in Nagaland. Among the Rengma Nagas, the consumption of rice beer was part of their culture. Its daily use did not cause any change in their active life style. Rice beer was considered extremely nourishing, so much so that old men used to live only on rice beer and little or no solid food. Among another group, the Ao Nagas, rice beer was consumed regularly. However, a shift in religious practices from Animism to Christianity in some of these tribes saw a reduction in the use of alcohol. During the British Raj, there was a shift from the consumption of rice beer to that of synthetic alcohol in many parts of Northeastern India. The British encouraged licensed shops for synthetic liquor but banned home brewed liquor. This was not the only change, as

[3] For example, dextropropoxyphene injectors very quickly tend to exhibit blocked superficial veins and in the case of extravasations, ulcers on the extremities due to the irritant nature of the chemical on soft tissues and might stop injecting for a considerable spell, which is not the case with heroin injectors. It is worth noting that dextropropoxyphene is used more commonly in Mizoram, which has consistently recorded a lower HIV prevalence in IDUs compared with that in Manipur where the drug of choice for injecting is heroin. Moreover, unlike Manipur shooting galleries are rare in Mizoram.

[4] Incompletely processed or in the raw form (having high concentration of arecholine) as harvested from trees.

[5] A survey conducted during September-December 2001 among all the adults (≥ 15 years of age) in Aizawl district in Mizoram and Churachandpur district in Manipur (25 randomly selected villages from each district was sampled) revealed that about 7% of men and women were using tobacco water. Water impregnated with tobacco smoke in a water receptacle is poured out through the mouthpiece of a pipe into a tobacco water flask and preserved for personal use by these men and women. Apart from this household manufacturing of tobacco water, production as a small-scale industry by using imported tobacco from Myanmar was also documented in this study (Sinha et al 2004).

excessive use of opium was later documented. For example, in Moulgyimen village, within a few years of its establishment, there was hardly any house that did not use opium. The villagers mixed opium with betel (locally known as '*pan*' or '*koa*') leaves, dried the mixture over the fire and smoked it in a pipe. Travellers used to keep the ball in their mouth until it dissolved (see Mills 1973 and the Imperial Gazetteer 1907 cited in Charles et al 1999).

The changing pattern of opium use has been studied in Assam. Mahanta and colleagues from the Regional Medical Research Center (RMRC) under the Indian Council of Medical Research (ICMR) in Dibrugarh conducted a study in the Tinsukia district of upper Assam to assess the pattern and prevalence of opium use (Mahanta et al 1997) and compared this with earlier findings contained in a survey carried out in 1981. Their work indicated a significant decline in the prevalence of opium use over the years in some of the villages, which had previously (1976–1986) been described as high prevalence zones of (locally-grown) opium use.

The evidence of the earliest use of heroin (smoking) in the Northeast dates back to 1974. Case studies recorded in 1983 from Manipur clearly speak about it. One such case study has been cited in Box 2. Following the introduction of heroin in Northeastern India during the early 1970s, drug use among the local youths took a new turn. Within ten years' time, heroin smoking – a non-traditional form of opiate use – replaced the traditional use of cannabis and opium to a great extent in some of the Northeastern states. A fairly large number of heroin smokers subsequently switched to injecting heroin and synthetic pharmaceutical painkillers such as dextropropoxyphene (sold under the trade name Proxyvon® or Spasmoproxyvon®)[6] for various reasons as described latter.

Injecting heroin subsequently became popular among the local youths in the early 1980s. The major reason for this shift from smoking to injecting was increased tolerance. More money was needed by the long-term heroin smokers for frequent 'chasing'[7] to obtain the same effect that they used to get with lesser amount of heroin during the early days of heroin use. Injecting heroin, therefore, became a practical solution to this

Box 2: Earliest evidence of heroin use (smoking and injecting) in the Northeast

Kamkholian, an active member of the Youth Association, aged 28 years, belongs to a family of a [tribal] chief and has relatives among the top-ranking officials of the state government. He has graduated from the local college at Churachandpur. He began using heroin (chasing) before his 20th birthday (before 1974) when he was still in school.... He is losing his appetite very fast and his face gives a look of an extreme case of anaemia. According to him "the number-4 used to provide a panacea but I do not get it any more". He feels that to get the kick he will soon begin to inject the drug into his veins for immediate effects like some of his friends are doing. (Source: Roy and Rizvi 1986)

[6] Note: the trade names used in this document under which dextropropoxyphene is sold in the market are not intended to imply any pejorative sense.

[7] 'Chasing the dragon' is the street term for heroin smoking. The impure form of heroin (known as brown sugar) is heated up on an aluminium foil where it turns into a blackish liquid, which moves like a dragon and the smoke emanating from it is inhaled through a paper, wooden or metal pipe.

Box 3: Switch to injecting from heroin smoking

Phungzalian is a young man of 22 years working in a rice mill and is one of the long-term addicts of the area. In the beginning he used to smoke opium and number-4 through pipes but since the introduction of the technique of injecting it, he too adopted this method since 1982. According to him, five years ago nobody ever heard of its intake through hypodermic needles. (Source: Roy and Rizvi 1986)

problem (Box 3) as bio-availability of the drug increases through this route compared with smoking. At the same time, the loss of some of the heroin in smoke vapours is eliminated.

The HIV epidemic followed the injecting drug use epidemic close on its heels as sharing of injection equipment became the norm among IDUs.

The seizure of amphetamines from the sub-region during two successive years 2000 and 2001 (Narcotics Control Bureau 2000–2001) marked the entry of a new substance in the list, which may presage a further change in drug use patterns. One can also find corroboration to this finding of amphetamine use in the study entitled 'Substance Abuse among Women' (henceforth the Women's Study) coordinated by Kapoor (2001) and the 'Burden on Women due to Drug Abuse by Family Members' (henceforth the Burden Study) coordinated by Shankardass (2002) under the aegis of the United Nations Office on Drugs and Crime Regional Office of South Asia (UNODC ROSA) and the Ministry of Social Justice and Empowerment. These two studies are cited in later sections of the present monograph, which highlight oral use of amphetamines by drug users in Northeast India.

Stringent laws and enforcement activity against heroin trafficking and peddling in the early 1990s in Mizoram, and the early 2000s in Manipur, resulted in a shift among local youths towards dextropropoxyphene injecting (Panda 2002a). The synthetic powder, emptied from the capsules of Spasmoproxyvon® or Proxyvon® obtained from peddlers or procured over-the-counter, is injected after dissolving it in water by heating up the solution in easily available containers such as a spoon or the metallic caps of beverage bottles. The solution is then filtered through a cotton wad at the time of drawing the drug into a syringe. While one-quarter to one-half of a gram of heroin is generally used for one-time injecting, 4-6 capsules of Spasmoproxyvon® or Proxyvon® are used for a single shot.[8] Two to three times a day is the frequency of injecting for most of the IDUs. Glue sniffing has been observed in the recent past among street children in Meghalaya. The state of Meghalaya is currently witnessing a rise in drug use, including injecting among local youths in Shillong, the capital city, and in the neighbouring coalmine areas in other districts.

The drug of choice for injecting among IDUs in the metropolitan cities of India is, however, buprenorphine. This is yet to be recorded in the Northeast region. Buprenorphine, a synthetic analgesic, comes in 2ml. ampoules (0.3mg/ml.) and is procured illegally over-the-counter or through street peddlers. It is injected alone or after being mixed with a sedative or antihistaminic preparations in cities such as Chennai, Delhi, Kolkata, and Mumbai. Cases of heroin injecting have, however, also been reported from Chennai, where the quality of heroin is poor and known on the streets as 'brown sugar'.

[8] While a heroin injector would spend Rs 100 to Rs 400 a day for injecting drugs (smoking the same form of heroin would cost three times the amount to obtain a similar effect), a dextropropoxyphene injector would spend Rs 100 to Rs 150 per day. Dextropropoxyphene is a synthetic pain reliever, and although banned for sale in some of the Northeastern states, it is trafficked from other states into the sub-region and is freely available from drug peddlers for around Rs. 40-50 for 6-8 capsules.

4. NORTHEASTERN STATES OF INDIA: TRAFFICKING OF HEROIN AND OTHER DRUGS

Drug trafficking in Northeast India features the following dimensions:

a) The illicit cultivation of opium and cannabis.

b) The smuggling of heroin and amphetamines into Northeast India from Myanmar in small quantities.

c) The trafficking of pharmaceuticals from other parts of the country into Northeast India and their smuggling to neighbouring countries.

d) The trafficking of ephedrine and pseudoephedrine – precursors for the manufacturing of amphetamines – from India to Myanmar.

Illegal poppy cultivation in the villages of the Northeastern sector of India close to the international border caters to the local clientele (UNDP, UNODC-ROSA and ILO office India and Bhutan).[9] During 2004, over 46 tonnes of cannabis herb was seized in Northeast India, which is over one-third of the country's total seizures of 140 tonnes (see Box 4). By contrast, seizures of heroin in this region have been consistently lower at about 1 per cent of all Indian seizures. Abuse of certain pharmaceutical drugs has increased phenomenally, particularly in Mizoram and Nagaland (NCB Annual Report 2002). Large quantities of cough syrups are reportedly smuggled into Bangladesh and in some cases, pharmaceuticals are also smuggled into Myanmar (NCB Annual Report 2002).

Box 4: Significant seizures in the Northeastern sector of India year 2004

- *There were 24 significant seizures of drugs, including ganja (cannabis herb), amphetamines and pharmaceutical preparations, in Northeast India during 2004.*
- *Over 46 tonnes of ganja was seized (18 cases) in the region, which accounted for over a third of total ganja seized in the country.*
- *4,632 tablets of amphetamines were seized on January 29, 2004, by customs in Imphal.*
- *10,499 tablets of methamphetamine were seized on December 14, 2004, by customs at Moreh.*
- *1,600 tablets of Nitrazepam were seized on April 2, 2004, by state excise department in Mizoram.*
- *34,512 tablets of Spasmoproxyvon® (a preparation of dextropropoxyphene) were seized on May 13, 2005, by customs in Assam.*
- *80,000 bottles of Phensedyl® (a codeine based cough syrup) were seized in September 2004 by Tripura Police.*

(Source: Compiled from monthly Drug Situation Reports prepared by Narcotics Control Bureau, Government of India.)

[9] The Central Bureau of Narcotics (CBN) carried out a survey in the Lohit District of Arunachal Pradesh, which was intended to lead to the promotion of alternative livelihood strategies in the area. Apart from poppy cultivation, it is common knowledge that illicit cannabis cultivation in the villages of the Northeastern states is widespread as is the wild growth of cannabis throughout most of the area.

Similarly, a number of reports have indicated the smuggling of ephedrine and pseudoephedrine[10] across India's Northeastern states into Myanmar for the production of methamphetamine (NCB Annual Report 2002).

Drug trafficking across the common border of Myanmar and three Northeastern states (Manipur, Mizoram and Nagaland) occurs with ease. There are seven major routes between the two countries (Tarapot 1997). Despite the existence of heavy security, heroin does transit the border and is therefore accessible to the local youth of these states.

Routes along which heroin is trafficked

A substantial amount of the purer form of heroin (locally known as Number 4, which is injected) from Myanmar enters via Moreh and its bordering town of Chandel in the eastern district of Manipur. From here, it is transported via National Highway 39 to the capital city of Imphal. From there, it travels to Kohima, the capital of Nagaland and onwards. Consignments from Tahan and Falam, two major points of origin in Myanmar are, on the other hand, sent to different parts of Mizoram and then onwards to Bangladesh and to the neighbouring Indian states of Tripura and Assam (Tarapot 1997). Apart from the consignments coming via National Highway 39 from Imphal, Nagaland also witnesses an additional supply of heroin trickling into the state from across the border with Myanmar through entry points near Tuensang.

Figure 2: A border post on the Indo-Myanmar border

Two other Northeastern states, Assam and Meghalaya, have no common border with Myanmar. Meghalaya, due to the presence of many educational institutions of repute, attracts students from all over the Northeast and is well connected by road to both Guwahati, the capital of Assam and Aizwal, the capital of Mizoram. While these extensive road connections facilitate transportation of synthetic pharmaceuticals such as dextropropoxyphene[11] between Meghalaya, Assam and Mizoram, the states bordering Myanmar (Manipur, Mizoram, Nagaland and Aunachal Pradesh) have witnessed heroin trafficking across their state boundaries.

With regard to heroin smuggling, it is important to recognise that no single state can be identified as a 'source' state, since drug trafficking routes do change their course in order to avoid interception by law enforcement and yet reach where demand exists.

[10] Ephedrine and pseudo-ephedrine are known as 'chemical precursors' used in the production of amphetamine and amphetamine type substances (ATS). India produces over 500 tonnes of ephedrine and pseudo-ephedrine every year for use in legitimate industry and both these chemicals were declared as 'controlled substances' under the Narcotic Drugs and Psychotropic Substances (NDPS) act as amended in December 1999 (Narcotics Control Bureau 2000-2001).

[11] Sold as capsules under the trade name Proxyvon® or Spasmoproxyvon®.

It is also relevant to note that, of all the states of Northeast India, those which are distant from the Indo-Myanmar border, have generally reported fewer episodes of heroin injecting, as well as fewer heroin seizures, when compared with the states which are closer to the border. Thus, there is a direct correlation between proximity to the border and drug abuse.

With the turn of the millennium, the Northeastern region of the country witnessed a new development in drug trafficking. During the year 2000, 3 kg of amphetamines were seized in 11 cases in this sector (Narcotics Control Bureau 2000–2001). Seizures of amphetamines in this area have continued till date. Seizures also picked up during the same time for ephedrine,[12] 930 kg of which was seized during 2001, 126 kg during 2002, 3,234 kg during 2003 and 72 kg during 2004. Although ephedrine was seized in other parts of the country as well, a majority of the ephedrine seizures relate to consignments destined for Myanmar, where a significant illicit amphetamine type substance (ATS) manufacturing capacity is known to exist.

This evidence of changing trafficking patterns as well as reports on the use of ATS by drug users from Manipur and Mizoram may presage a change in drug use patterns in the Northeastern sector of the country.

5. DRUG USE IN NORTHEAST INDIA — FINDINGS FROM THE 'NATIONAL SURVEY ON EXTENT, PATTERN AND TRENDS OF DRUG ABUSE IN INDIA'

Three fairly recent studies have illuminated different aspects of drug use in India, including the Northeastern states:

(1) the National Household Survey (NHS) of Drug and Alcohol Abuse in India

(2) the Drug Abuse Monitoring System (DAMS)

(3) the Rapid Assessment Survey (RSA) of Drug Abuse in India

All are referred to in the combined 'National Survey on Extent, Pattern and Trends of Drug Abuse in India' (UNODC and MSJE 2004), henceforth the 'National Survey'.

According to the National Survey, alcohol is the most commonly used substance in all the states, except Mizoram. Treatment centre attendees are seeking help in Assam, Meghalaya and Tripura most commonly for problem use related to alcohol. Although alcohol is not readily available in Manipur, Mizoram and Nagaland,[13] after opiate users, alcohol users are the second largest segment seeking treatment services in these states as reflected in DAMS.

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[12] Ephedrine and pseudo-ephedrine are known as 'chemical precursors' used in the production of amphetamine and amphetamine type substances (ATS). India produces over 500 tonnes of ephedrine and pseudo-ephedrine every year for use in legitimate industry and both these chemicals were declared as 'controlled substances' under the Narcotic Drugs and Psychotropic Substances (NDPS) act as amended in December 1999.

[13] Due to the restricted alcohol licensing system in these states resulting from various social, political and religious pressures.

Box 5: Reported drug of abuse among the treatment-seekers in descending order of frequency from DAMS			
(the first three frequent occurrences have been cited)			
Assam	*Alcohol (60%)*	*Cannabis (24%)*	*Heroin (4%)*
Manipur	*Heroin (32%)*	*Alcohol (19%)*	*Inhalants (7%)*
Mizoram	*Propoxyphene (25%)*	*Alcohol (25%)*	*Cough syrup (20%)*
Meghalaya	*Alcohol (77%)*	*Cannabis (3%)*	*Heroin (2%)*
Nagaland	*Propoxyphene (47%)*	*Alcohol (14%)*	*Heroin (8%)*
Tripura	*Alcohol (74%)*	*Cannabis (15%)*	*Tranquillisers (9%)*
India	**Alcohol (44%)**	**Cannabis(12%)**	**Heroin (11%)**

While users of dextropropoxyphene are the largest users of services in Mizoram and Nagaland, heroin users top the list in Manipur. The use of dextropropoxyphene (heated with water and filtered through cotton wads before injecting) has been seen associated with a higher risk of abscesses, non-healing ulcers and amputation- thus increasing the morbidity of drug users. Users of inhalants in Manipur and users of codeine-based cough syrups in Mizoram are the third largest group demanding treatment services. Cannabis users are the second largest group of treatment seekers in Assam, Meghalaya and Tripura. However, heroin use has already made in roads in Assam and Meghalaya. Tripura has reported minor tranquilliser use and this is reflected in records of addiction treatment centres (Box 5).

5.1 National Household Survey of Drug and Alcohol Abuse in India (NHS)

While the design of the NHS allows us to draw a picture of drug use patterns for the whole country, using information from its report in a fragmented manner to draw inferences for individual states will be inappropriate. The clinical epidemiology unit of the All India Institute of Medical Sciences, New Delhi, conducted a study (Srivastava et al 2002) during 2001. A total of 40,697 respondents were covered from the whole country in this study. The Ministry of Social Justice and Empowerment funded the nationwide survey and the United Nations Office on Drugs and Crime (UNODC) in New Delhi supported the training activities under this project. The scope of the study comprised the non-institutionalised (i.e., not staying in hostels, prisons or other institutions) male population of 12-60 years in all the erstwhile 25 states of India as defined by the 1991 census, excluding Jammu and Kashmir due to the unsettled law and order situation there. Both the rural and urban populations were included. The sample to be covered from an individual state was decided in relation to its percentage of the national population. Although this sampling technique ensured representation of all the states in the estimation at the national level, the sample was not large enough to provide reliable estimates for individual states. Inferences about substance use of less than 1per cent prevalence at the national level in this study were also limited.

Alcohol use in the last 30 days was noted to be highest in Nagaland at 99.6 per cent; the lowest use was noted in Tripura at 1.5 per cent and Gujarat 6.2 per cent. Cannabis use was seen to be highest in Manipur at 24.6 per cent but there were some states where it was not reported at all.

These included Tripura, Orissa, Nagaland and Arunachal Pradesh. Maximum opioid[14] use was noted in Nagaland at 32.6 per cent with Goa, Tripura, Karnataka and Kerala documenting no opioid use. Of course, it was acknowledged in the study that the inability to detect the use of any substance in the sample surveyed at the state-level estimates does not mean an absence of users of a particular substance because the study was not designed to generate state level estimates.

5.2 Drug Abuse Monitoring System (DAMS)

The DAMS was an effort jointly supported by UNODC and MSJE to set up a system of monitoring drug abuse in the country. The main source for the collection of data in DAMS was treatment facilities, including counselling centres run by the Ministry of Social Justice and Empowerment (MSJE) and the Ministry of Health and Family Welfare (MHFW). Data was collected for a period of three months from August through October 2000 (Siddiqui 2000). It should, however, be appreciated that the analysis of data obtained from drug treatment centres reflects different aspects of drug users who seek treatment but not of drug users on the streets who have never been able to seek treatment due to various reasons. As a result, non-treatment seekers will not have a representation in this system of monitoring. Except for Arunachal Pradesh and Sikkim, the rest of the Northeastern states contributed data to the DAMS (see Box 5). A critical examination of the NHS and DAMS data together reveals that they should be used as complementary to each other rather than stand-alone assessments as each of them has their respective strengths as well as limitations.

5.3 Rapid Assessment Survey of Drug Abuse in India (UNODC, MSJE and UNESCO)

Rapid assessment surveys (RAS) were carried out in 14 cities[15] during 2000-2001 and included drug users from all over the country. UNODC supported surveys in nine of these sites and UNESCO supported the surveys in five others. The surveys were carried out on the basis of guidelines for collection of qualitative and survey data developed by UNODC. The overall aim was to support the development and implementation of effective strategies to address drug use and associated adverse consequences (UNDCP ROSA and MSJE 2002). The limitation of the RAS was that it generated data from one city for each state and that the sampling strategy adopted in different cities for the RAS was also different. This led to a process of interviewing only injectors in some cities whereas in others the sample comprised mixed groups of opiate users who used to take drugs by smoking and / or injecting.

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[14] Soon after the development of totally synthetic entities with morphine-like actions such as buprenorphine, the word opioid was introduced to refer in a generic sense to all drugs, natural and synthetic, with morphine-like actions. Some writers continued to use the term opiate (originally used to refer to any drug derived from opium) in generic sense, and in such contexts opiate and opioid are interchangeable.

[15] Cities included Delhi, Mumbai, Kolkata, Imphal (in Manipur), Chennai, Thiruvananthapuram, Bangalore, Hyderabad, Amritsar, Jaipur, Goa, Ahmedabad, Dimapur (in Nagaland) and Shillong/Jowai (in Meghalaya).

Box 6: Rapid assessment survey in select cities in Northeast India		
Study-City/cities	*Supported by*	*Drug users interviewed from the community*
Imphal (Manipur)	*UNESCO*	*306 current IDUs*
Dimapur (Nagaland)	*UNODC*	*34 current IDUs, 27 ex-IDUs and 200 non-IDUs*
Shillong *Jowai* *Lad Rymbai*	*UNODC*	*47 current IDUs, 12 ex-IDUs and 92 non-IDUs* *No current IDUs, 2 ex-IDUs and 147 non-IDUs* *4 current IDUs, 0 ex-IDUs and 16 non-IDUs (Meghalaya)*

Of the total rapid assessment sites, three were in the Northeast (Box 6). The findings of this assessment clearly indicate that the existing targeted intervention projects need to quickly achieve significant risk reduction among a considerable proportion of the estimated number of IDUs. In all three study states in the Northeast – Manipur, Meghalaya and Nagaland – 20 per cent of the injectors recruited from the community had reportedly shared their syringes and needles during their last injecting episode (NEIDAC 2000, Singh & Sharma 1999–2000, Vivekananda Education Society 2000). Sharing was reported by an even higher proportion of IDUs if injecting practices during the preceding six months were taken into consideration.

Against the backdrop of high baseline HIV prevalence in some of these states and the efficiency of transmission of HIV and other blood borne pathogens such as Hepatitis B and Hepatitis C, such high proportion of needle-sharing is of major concern.

The 'HIV/AIDS Programme Needs Assessment' conducted in 2005 in Manipur, Meghalaya, Nagaland and Assam revealed similar concerns and also identified areas where the quality of the programme needs to be immediately improved (Panda et al 2005).

Rapid Assessment Surveys also indicated that interventions to promote safer sexual practices among drug users (both injecting and non-injecting drug users) are important, as 25 per cent, 26 per cent and 60 per cent of the respondents, respectively, reported having had sex with female sex workers in Nagaland, Meghlaya and Manipur. Moreover, the surveys reported multi-partner sex within the last one year among the respondents from these states in both married and unmarried drug users. Consistent condom use while having sex with sex workers was reportedly low and condom use with wives was even lower among the survey participants (NEIDAC 2000, Singh & Sharma 1999–2000, Vivekananda Education Society 2000).

6. DRUG USE AND WOMEN: DATA FROM NORTHEAST INDIA

Some of the path-breaking initiatives to reduce the burden of drug use in the family have actually been achieved through self-help groups in the Northeast, some of which are spearheaded by women. Outstanding examples are the Meira Paibis (see Box 7) (see also Murthy 2002) and the Nagaland Mothers' Association (see Tarapot 1997).

It should, however, be noted that excesses sometimes carried out by some of these pressure groups have forced drug users to go underground. This, at times, has proven counterproductive since it limits the opportunities for drug users to weigh and access different intervention options, including treatment for addiction. The topic 'Drug use and Women' raises two issues: (a) drug use by women and (b) the burden on women due to drug use by male family members. Each of these issues has been explored through small-scale studies in Northeast India.

6.1 Drug use by women

Drug use in women in the Northeast can be broadly categorised as either traditional or non-traditional. The earliest study (Roy and Rizvi 1986) on this topic analysed drug abuse in two villages (henceforth village A and village B). Both were located in a southern district of Manipur named Churachandpur. The study was conducted in 1983. The researchers selected village A because it was in close proximity to the only township of the district. The village was founded in 1942. Village B was situated far away from the nearest township and was one of the oldest settlements on the Indo-Myanmar border. Distinguishing the villages from each other, the researchers wrote, "If a comparison is made in terms of scale of exposure, we find that village A can be considered as an acculturated section while village B an isolated section of the

Box 7: Meira Paibis in Manipur

The Meira Paibis are groups of old women who keep all-night vigils in the villages of the Northeastern state of Manipur to ward off crime. They have extended their activities to include alcohol and drug addiction as well. These tribal women began by patrolling the valley, armed with torches and iron gongs. They imposed fines of Rs. 150 and tied empty liquor bottles to necks of men found drinking in public and Rs. 5,000 on sellers of alcohol. In areas patrolled by these women, drug use patterns changed substantially, with decline in riotous behavior, and greater safety for women at night.

Box 8: Distribution of drug use in two villages of Manipur
(Source: Roy and Rizvi, 1986)

	Village A		*Village B*	
	Total population - 392		*Total population - 413*	
	Male 205	*Female 187*	*Male 188*	*Female 225*
Tuibuk (Nicotine water)	*117 (57%)*	*83 (44%)*	*98 (52%)*	*67 (30%)*
Kani (Opium)	*76 (37%)*	*50 (27%)*	*65 (34%)*	*35 (15%)*
Kani Powder (Heroin)	*29 (14%)*	*17 (9%)*	*40 (21%)*	*37 (16%)*

Note that poly-drug use was more among males than in females and heroin was mostly smoked during the time when this study was conducted which changed drastically afterwards as many local youths including males and females took to injecting.

tribal society". Village B was actually situated in such a place that it only received occasional travellers from Manipur, Mizoram and the Chin State of Myanmar. The study findings revealed (see Box 8) that despite their different socio-cultural settings, not much difference could be observed in the prevalence of non-traditional drug use (i.e., heroin use) among men and women of these villages.

Currently, it is not unusual to see female injecting drug users in the states of Manipur, Mizoram and Nagaland. However, intervention responses are yet to address this aspect adequately and facilities for addiction treatment for women as well as other risk reduction interventions are meagre. Cross-sectional studies in the late 1980s and early 1990s, recruiting injecting drug users from the community, addiction treatment centres, remand homes, and jails revealed that while 5 per cent of the IDUs in Manipur and Nagaland were female, the proportion was as high as 15 per cent in Mizoram (Sarkar et al 1993).

A later study examined the interface between drug use and sex work in Imphal (Panda et al 2001). Based on interviews by outreach workers of 69 women drug users who were also in sex work, this study revealed the following:

- Thirty eight women (55 per cent) were injecting drug users.
- Eighty per cent of the respondents had sex with non-regular partners in this study.
- Two-thirds of the injectors as well as non-injecting drug users reported sex work in exchange for money or drugs.

While the substance of choice for non-injectors in this study was mostly alcohol, for the injectors, it was the purer form of heroin (locally known as Number 4 or white sugar). A smaller number of the female IDUs first used cannabis, nitrazepam tablets or codeine-containing cough syrup before switching to injecting. Most of the female IDUs, however, reported only alcohol use (locally-made rice beer known as *sekmai*) and heroin injecting. HIV prevalence among female IDUs was 57 per cent in this study compared with 20 per cent among non-IDUs (Panda et al 2001). This represents a statistically significant difference. The authors therefore stressed the need for an outreach strategy for effective implementation

of interventions among women IDUs and non-injecting drug users who operate from the streets as sex workers to support their drug use as well as livelihood.

A 'Focussed Thematic Study' conducted by UNODC from March through May 2001 attempted to document extent, pattern, trends in and consequences of substance use among women in India. Twenty-five women substance users were interviewed from each of the cities of Mumbai, Delhi and Aizawl for this purpose. While all the respondents from Aizawl (the capital city of Mizoram) were from addiction treatment centres, working women were recruited from Delhi and the respondents from Mumbai were street women who were involved in sex work. Apart from these major differences in respondent characteristics, unlike Delhi and Mumbai, the key informant interviews with concerned groups (to test their in-depth understanding of the problem) such as the staff of drug treatment centres, public hospitals, police officials, self-help groups, general practitioners and lawyers were not conducted in Aizawl (Kapoor 2001), thus rendering the studies non-comparable. The study in Mizoram generated the following profile of female drug users:

- The age of women using drugs in Aizawl was within 15 to 25 years.
- Eighteen of the 25 respondents had dropped out of primary or middle school.
- Of the 25 women, 16 had never married.
- Six of the married women had either been separated or divorced and the rest were living with their spouses.
- While 4 of the women earned their livelihood through drug peddling activities, only one had a regular service. The rest of the women reported no training in any specific trade or vocation.
- Seventy per cent of the respondents reported injecting drug use - mostly with dextropropoxyphene and the next common drug injected was heroin.
- Drugs used by the non-injectors were codeine containing cough syrup, alcohol, tranquilliser tablets and amphetamines .

6.2 Burden on women due to drug use by family members

Since the mid-1990s, the impact of drug using family members on women has come to worldwide attention. Earlier, the focus was mostly on women as participants in the drug use scene (be it cultivation, production, trafficking, peddling or consumption). An exploratory and qualitative study on the burden of drug use on women was conducted in eight centres throughout India in Bangalore, Chennai, Delhi, Haryana, Himachal Pradesh, Manipur, Pune and Thiruvananthapuram from February through September 2001. The study was commissioned by UNODC (Shankardass 2002).

In order to study the burden of drug use on women, 22 women who had a drug-using family member, were interviewed from Manipur and six key informant interviews were also conducted involving two male respondents from each of the agencies of police, relevant government and non-government organisations (NGOs).

The profile of women who had drug-using family members was as follows:

- A large number of women respondents were married and had a family. One was divorced and she lived with her drug-using son. Two were widows of whom one had a drug using son and the other a drug using brother.
- One woman was unmarried and she also had a drug-using brother.
- Among the married women, 11 had a drug-using husband and 5 a drug-using son.
- While 40 per cent of the women respondents of this study lived in joint/extended families, the rest were with nuclear families.

Unlike other states of India, in Manipur, a comparatively smaller proportion of women from the sample stated that they were in 'no way involved with drug purchase for the user'. This was corroborated by the response obtained from a sub-inspector during a key informant interview that mentioned — "most of the peddlers at some places are women who are supporting their families as well as their husbands' drug supply". Even some of the wives, without being involved in drug peddling, were forced to go and buy drugs for their husbands during withdrawal symptoms and in the process a few of them also took to drugs over a period of time.

On the other hand, a significant proportion of women also expressed their concern over drug use by family members. The concerned women even urged them to quit drugs. Means such as 'restricting outside-home movement of the drug using member' or 'threatening to leave the house' were tried by them to achieve this. Financial constraints, however, did not allow them to seek appropriate help in many situations. As one of the respondents from Manipur said, "I finally approached a local NGO for my husband's treatment, but I lost heart the moment I heard the fee for a month of treatment. It was equal to what we earn in 3 to 4 months. I feel it is hopeless" (Shankardass 2002).

Although most of the women respondents in this study were not fully aware of the types of drugs used by the drug using family members, nor the period from when they started using each type of drug, one important finding was the reported use of amphetamines which marked a new shift. Even within the small sample size covered under this study, 4 respondents reported 'ever use' of amphetamines and 3 reported amphetamines use by family members within the last month by family members. This information from Manipur along with the drug use profile of women drug users from Aizawl (see Section 6.1) and the report of the Narcotics Control Bureau (NCB), on seizures of amphetamines from Northeast India during 2000–2001 (see Section 4 and Box 4) strengthens the view that any place which is used as a 'transit route for transportation' of psychotropic substances, ends up being a 'user site' for the same substance/s sooner or later.

There is increasing evidence that the non-injecting sexual partners of injecting drug users are becoming infected with HIV in places like Manipur, which highlights another aspect of burden on women due to drug use. In one study (Panda et al 2000), 161 HIV-infected IDUs and their wives were recruited. The HIV status of wives was determined by enzyme-linked immunosorbent assay (ELISA) plus Western blot. Seventy-two wives

(45 per cent) in this study were found to be HIV-positive. The following elements were associated with HIV infection of the wives:

(a) a sexually transmitted disease (STD) in either member,

(b) an estimated duration of HIV in the husbands for more than 8 years, and

(c) a history of blood transfusion in the wives.

Improved control of STDs, condom promotion, and improved blood screening in Manipur were recommended based on this study's findings.

Laboratory investigations on serum samples collected for the couple study mentioned above (Saha et al 2000), evaluated the prevalence of Hepatitis C (HCV) and Hepatitis B virus (HBV) infections among 77 couples wherein all the husbands were IDUs and HIV positive. This study showed for the first time a high prevalence of HCV (92 per cent) and HBV (100 per cent) infection amongst the HIV positive IDUs in Manipur.

7. HIV PREVALENCE AMONG IDUs IN NORTHEAST INDIA – AN EPIDEMIC WITH MULTIPLE WAVES

HIV can spread within and from IDUs due to risk-taking injection as well as sex practices. Two of the six generalised-HIV-epidemic states in India – Manipur and Nagaland – are in the Northeast and feature a very strong IDU-HIV link.[16] In the late 1980s, HIV made inroads among injecting drug users in Manipur, Mizoram and Nagaland, three of the four Northeastern states having a common international border with Myanmar (Pal et al 1990) from where injectable drugs could be sourced. Within the next decade, Manipur and Nagaland moved into a generalised epidemic situation. In Mizoram, the epidemic now appears to be heading towards generalisation (Panda et al 2005).

The current dimensions of the HIV epidemic in Manipur and Nagaland are of great concern because HIV has made significant inroads in these states in other population groups, including women in the reproductive age group and newborn children (NACO 2004).

The HIV epidemic in Mizoram and Meghalaya has a similar potential for spreading through drug-sex interface due to the existing unorganised sex trade and the practice of injecting drug use by both men and women. Moreover, AIDS deaths have taken place in considerable numbers in some of these communities. But they are not reflected in the existing system of health records.

Limited reach of the present sentinel surveillance sites and their skewed distribution mostly in urban areas should also be taken into account before ascribing any reduction in HIV prevalence among IDUs to the success of on-going interventions.

[16] Classification of HIV/AIDS epidemic: **'Low level'**– HIV prevalence less than 5% in any (high-risk) sub-population, **'Concentrated'** – more than 5% prevalence in any (high-risk) sub-population but less than 1% among pregnant women and **'Generalised'** – HIV prevalence of more than 1% among pregnant women. (Source: UNAIDS/WHO 2004)

8. OTHER FINDINGS ON DRUG USE IN THE NORTHEASTERN STATES OF INDIA

Contrasting with earlier studies which documented an explosive HIV epidemic in the drug-using population in some of the Northeastern states and which played a key role in drawing national and international support for HIV intervention, later studies have conducted in-depth investigations into drug use in the states receiving a more limited focus or in those states which had not been well covered in the previous studies. While some of these later studies looked into issues related to drug use in multiple townships in any particular state (e.g., Nagaland) others attempted to generate data from different states through interstate networks of NGOs. Conducting studies in states which did not have much information on drug use (e.g., Assam, Meghalaya and Arunachal Pradesh) was another focus of the later investigations. The following is an account of such efforts.

8.1 Study on drug use in multiple townships in a single state

Kumar and colleagues from the Regional Medical Research Center (RMRC), located in Dibrugarh (Assam), coordinated a study conducted in Nagaland from October 1992 to November 1993 (Kumar 1996). The sites covered were Dimapur, Kohima, Mokokchung and Tuensang. Of the 395 drug users registered, 88 per cent were primarily injectors of heroin and 81 per cent administered drugs by injecting. Home-made syringes, devised by fitting hypodermic needles to ink-droppers, were being used by IDUs in some of the places during this study. The mean age of first using heroin was 18 years and the mean duration of dependence was four and a half years. Needle sharing was found to be a widespread phenomenon with 98 per cent injecting several times a day. Codeine-containing cough syrups and tranquilliser tablets were other drugs of abuse when the drug of choice was in short supply. Other than this, concurrent use of other drugs among heroin injectors was less frequent.

8.2 Study by a network organisation on drug use in different states in the Northeast

The North East India HIV/AIDS Network has reported a profile of drug users from selected states (NEIHAN 2003),[17] which is similar to the findings of other studies such as more dextropropoxyphene use in Nagaland and Mizoram and predominant use of heroin in Manipur. The data collected from 865 respondents was presented separately for 5 study states in this report. While more than 90 per cent of the drug users reported injecting drugs in Manipur, Nagaland and Mizoram in this study, around 50 per cent reported such practice in Meghalaya and Assam. The common striking feature in all the five states was the low age (<20yr) at onset of drug use; one-third of the respondents were also married. The employment status of the respondents varied according to the opportunities for jobs in private and public sectors in the respective states, which was generally low.

[17] The states in which the study was conducted were: Meghalaya, Assam, Nagaland, Manipur and Mizoram. In all, data was collected from 10 sites, spread over these five states.

8.3 Studies from states which historically did not have much information on drug use

Arunachal Pradesh, for a long time, was considered to be a state from where data on drug use was scarce. In order to bridge this information gap, an epidemiological study was carried out to assess the prevalence and pattern of use of various substances (Chaturvedi and Mahanta 2004). A representative sample of 5,135 people aged 10 years or older was interviewed. Overall, the prevalence of substance use was about 31 per cent tobacco, 30 per cent alcohol and 4.8 per cent opium, which varied across location, gender, race, age, education, and occupation. Poly-drug use and high opium use prevalence was described as alarming by the authors.

In order to generate data from Meghalaya and Assam, another study was conducted by Chaturvedi and his colleagues (Chaturvedi et al 2003), in which 1,831 people (age 10 years and above) were interviewed about their drug use. The mean ages for substance use initiation were 18 years for tobacco, 22 years for alcohol, and 26 years for opium. The prevalence of substance use was 29 per cent tobacco, 12 per cent alcohol, and 5 per cent opium. Opium and cannabis users were mainly confined to Assam, which was close to the Arunachal Pradesh border, indicating a regional influence. On the other hand, a different study, which was qualitative in nature, conducted in and around Guwahati – the capital city of Assam – identified Spasmoproxyvon®, heroin and Fortwin® as the drugs most commonly injected by the local IDUs. Many of these IDUs came from Manipur and had settled down in localities mostly inhabited by Manipuris in Assam. Based on key informant interviews with law enforcement officials, service providers as well as in-depth discussions with IDUs, this study reported that injecting drug use had peaked in the mid-1990s in Assam and declined thereafter (Sarin 2004).

9. RESPONSES TO DRUG USE EPIDEMIC IN NORTHEAST INDIA

Responses to drug use epidemic in the Northeast region of the country can be classified into three broad categories: (a) those by the central and state government initiatives, (b) the conducting of studies and/or surveys by the medical, academic and research institutions and (c) initiatives from the UN and bilateral donor agencies.

The common element in all these responses has been the active participation of local NGOs and CBOs, the formation of which in many cases were catalysed by ex and current drug users. Since the HIV epidemic was documented in local IDUs, considering HIV/AIDS issues in conjunction with drug use has been another common characteristic of these responses.

(a) Central and state government initiatives

The Ministry of Social Justice and Empowerment (MSJE) of the Government of India has been implementing the 'Scheme for Prevention of Alcoholism and Substance (Drugs) Abuse' since 1985 to provide services for preventive awareness on alcoholism and drug

Box 10: Number of MSJE supported NGO addiction treatment and counselling centres in Northeast India under the scheme for prevention of alcoholism and substance abuse	
Assam	*7 deaddiction centres of which 4 are in the capital city of Guwahati.*
Manipur	*19 deaddiction centres of which 15 are in the capital city of Imphal.*
Meghalaya	*2 deaddiction centres in the capital city of Shillong.*
Mizoram	*7 deaddiction centres- all in the capital city of Aizawl.*
Nagaland	*7 deaddiction centres of which 3 are in the capital city of Kohima.*
Sikkim	*1 deaddiction centre in the capital city of Ganktok.*
Tripura	*2 deaddiction centres and one counselling centre — all in Agartala the capital city of Tripura.*

use, treatment of drug users, followed by their after care and rehabilitation. Under the scheme, NGOs have been entrusted with the responsibility for delivery of services and the Ministry bears substantial financial responsibility (90 per cent of the prescribed grant amount). Of 362 such NGOs currently functioning all over the country (the earliest ones being established in 1980s), eight have been identified to function as 'Regional Resource Training Centres' (RRTCs) for which the terms of reference were issued in early 2003. The aim of this initiative has been to help form a regional resource base and also build capacity of the other NGOs running addiction treatment centres through planned training activities. Forty-six addiction treatment centres (including one in Sikkim) and three RRTCs are located in the Northeastern region of the country (Box 10).

While in most of the Northeastern states the addiction treatment centres are concentrated in and around the capital cities, drug use has diffused over wide geographical areas. Such a distribution of drug use calls for community-based outreach activity. While the ultimate goal set out by the addiction treatment and counselling centres for drug users is abstinence it is realised that this may not be an immediately achievable goal for many drug users. These drug users will therefore require – as an interim measure – services aimed at reducing the harmful consequences of their drug use. Community-based outreach can be of great help to deliver such interventions. High relapse rates (often over 80 per cent) among opiate users, and cost implications of repeated admissions for drug treatment also underline the importance of an approach emphasising safer practices, which has been initiated by some NGOs in the Northeast.

The HIV epidemic among IDUs in the Northeastern states was responsible for the mobilisation of additional support to the ongoing MSJE programme by the National AIDS Control Organization (NACO) which operates under the Ministry of Health and Family Welfare. NACO, under this inter-ministerial collaborative programme, provides funds to NGOs carrying out an alcohol and drug demand reduction programme under the MSJE for training of staff and the appointment of one HIV field worker in each NGO. Further details and findings of the assessment of this initiative entitled 'Integration of HIV/AIDS issues in drug demand reduction programme' are provided later in this monograph.

NACO also provides support to the 'State AIDS Control Societies' (SACS) for targeted interventions. These interventions are carried out primarily by different NGOs and CBOs. The ultimate goal of these targeted interventions is to reduce the vulnerability of IDUs and other high-risk population groups to HIV. The component of care and support is also integral to the HIV/AIDS programme run by the SACS. However, an impact evaluation of these ongoing interventions is yet to be conducted on a large scale and, once undertaken, this evaluation could provide useful insight for setting up minimum essential quality criteria for the interventions. Nonetheless, researchers, through a close examination of the existing needle syringe exchange activities and programme needs assessment, have argued that the present extent and quality of coverage of targeted interventions needs to be expanded immediately (Sharma et al 2003, Panda et al 2005).

(b) Studies and/or surveys by medical, academic and research institutions

The Indian Council of Medical Research's (ICMR) unit[18] for research on AIDS in the Northeastern states of India under the National Institute of Cholera and Enteric Diseases (NICED) in Kolkata have played pivotal roles in documenting the explosive spread of HIV among local heroin injectors in Manipur (Pal et al 1990). Collaboration between NICED and the respective state governments in the early 1990s in Northeast India generated data of significant public health importance. Since 1986, blood samples collected from IDUs from the Northeast were tested for HIV at the Regional Institute of Medical Sciences in Imphal,[19] Manipur and subsequently confirmed at the laboratory of NICED (a permanent ICMR institute) in Kolkata as a part of the nationwide sero-surveillance.[20]

Key Lessons learnt from the ICMR-WHO collaborative project

1. Outreach to the larger community must occur before outreach to IDUs.
2. Outreach to drug users is most effective with involvement of ex- and current drug users.

The epidemiology and virology divisions of NICED, through different workshops, also helped in building the capacity of the state AIDS control programme officers, microbiologists and laboratory technicians from the various Northeastern states on HIV surveillance and laboratory testing procedures (NICED 1991). This, in turn, helped in the subsequent development of the HIV/AIDS programme in the sub-region and its implementation.

Within four years of the outbreak of HIV among IDUs in Manipur, women attending antenatal clinics (Sarkar et al 1993) and children (Panda et al 1994) started testing positive for HIV. A significant spread of HIV to the non-injecting wives of HIV-positive IDUs was also detected through the research activities of the Imphal-based ICMR unit,

[18] The National Institute of Cholera and Enteric Diseases (NICED) under the ICMR in Kolkata, housed this unit. The unit had a field station in Imphal, the capital city of Manipur.

[19] Previously known as Regional Medical College.

[20] Moreover, the epidemiology and the virology divisions of NICED, through different workshops, helped to build the capacity of the state AIDS control programme officers as well as the microbiologists and laboratory technicians from the Northeastern states in HIV surveillance and laboratory testing procedures (NICED 1991).

which collaborated with the state government of Manipur and the University of California, Los Angeles in this regard (Panda et al 2000). While the concordance rate for HIV-positive test results in couples was 45 per cent, only five of the 161 women recruited in this case-control study had reported extramarital sexual relations.[21] All this evidence clearly highlighted the need for developing interventions related to the sexual transmission of HIV to spouses as well as sex partners of IDUs.

With the support of the state government of Manipur, and in collaboration with the World Health Organization (WHO), the ICMR unit implemented an outreach project in 1994 for drug injectors and their sex partners to promote risk reduction. This ICMR-WHO collaborative project also established a drop-in-centre for IDUs, which was attended by a large number of young male IDUs. This project was located in Churachandpur, one of the districts hardest hit in Manipur by HIV and generated two major lessons. Firstly, outreach to the larger community appeared essential before launching outreach to the IDUs in any area so that the community at large does not misperceive the risk reduction approaches. The second important observation was that outreach to drug users was possible by involving ex- and current drug users in a developing country setting such as India (Hangzo et al 1997).

(c) Initiatives from UN and bilateral donor agencies

Following documentation of the explosive HIV epidemic among IDUs in the Northeast by ICMR and a gathering[22] in 1992 entitled the 'Sub-regional conference on HIV/AIDS in Imphal for Northeastern states', proposals for HIV intervention were developed by the local NGOs. As a follow up, the Swedish International Development Agency (Sida) undertook capacity-building activities in 1993 with five NGOs in the areas of outreach, counselling, IEC and information system development that continued for two years. Three of these five NGOs were from Manipur, one was from Assam and the rest from Nagaland. Subsequently, Sida withdrew from targeted intervention projects and supported networking activities among the NGOs in the Northeast (e.g., North East India HIV/AIDS Network, NEIHAN). The major objective of this network was to facilitate the scaling-up of HIV interventions among drug users.

OXFAM had given support to the local NGOs formed and run by ex-IDUs, which pioneered a home-based, HIV/AIDS care programme in Manipur (Sharma et al 1997). While the state government of Manipur recognised the strength of this approach and finally adopted the model as a part of the state-sponsored 'Rapid Intervention and Care Project' (MSACS 1998), many other states in India also took note of this 'continuum of care' initiative in Manipur and drew upon its learnings. Some like-minded agencies and individuals from Northeast India, who had been involved in drug and HIV interventions, finally spearheaded the formation of North East India Harm Reduction Network (NEIHRN) in 2002. The activities

[21] Importantly, HIV-positive IDUs and women (both HIV positive and negative) worked as field-workers-cum-researchers in this study and many ex-IDUs played the role of advisers to the research team. The Manipur state level network of HIV positive people (MNP+) was established after completion of this research with some of the field researchers serving as founder members of the network. Additionally, through this research, women field workers started appreciating the extent of the spread of HIV among women who were not injecting drug users and subsequently started working with women, many of whom had lost their husbands to AIDS.

[22] Coordinated by UNDP and supported by UNDP, UNODC and DfID (then known as ODA).

of NEIHRN include the sharing of information, experiences and lessons learnt on HIV/AIDS and drug-use-related interventions through formation of e-groups,[23] and the holding of workshops to influence policy change through the regional coalition of stakeholders in Northeast India.

A unique inter-ministerial collaboration which was mentioned in the earlier part of this section was initiated in November 2000 involving representatives from MSJE, NACO, UNAIDS, UNODC and NGOs. Its aim was to enhance the reach of HIV prevention initiatives to the vulnerable drug-using populations in India.[24] Following the results of this workshop, NACO allocated funds for HIV field workers to be appointed in the initially selected 94 NGOs (one in each) who were already implementing alcohol and drug demand reduction programmes across the country with funding from MSJE. NACO also provided funds for the training of these field workers as well as other staff working in these addiction treatment facilities through the Regional Resource Training Centres[25] (RRTCs) functioning under MSJE. Out of the 46 NGOs supported by MSJE in Northeast India (including the one in Sikkim), initially 19 were covered under this inter-ministerial collaborative scheme entitled 'Integration of HIV/AIDS issues in drug demand reduction programme' for recruitment of HIV field workers.

Figure 6: A UNODC-funded drop in centre being inaugurated.

In 2004, the Family Health International (FHI) office in India, at the request of NACO and with funding support from USAID, assessed this collaborative programme after two years of its functioning. An independent team carried out the assessment, documented the lessons learnt and charted a road map for future scaling-up of this initiative (Panda et al 2004). The uniqueness of the collaboration was underlined by the fact that transfers of funds for the programme took place from NACO to MSJE demonstrating commitment at the highest level. The assessment also identified that had it not been for this programme, many addiction treatment centres would not have addressed HIV/AIDS issues in their routine drug-related care services. It was mentioned that with the strengthening of programme management and quality of services, this collaboration could become an excellent example of inter-sectoral /multi-ministerial response to HIV/AIDS in India and help integrate HIV/AIDS issues in drug demand reduction services.

[23] For example, neihrnimph@yahoo.co.in and neihrners@yahoogroups.co.in.

[24] UNODC facilitated this consultative workshop, which was attended by in-country experts on HIV prevention and substance abuse. The Expert Committee formed in this workshop prepared a proposal for which funding support was sought from the National AIDS Control Programme (NACP) Phase II (1999–2006). Subsequently the proposal was sent to NACO and approval for the proposal was officially communicated by NACO in March 2001 to MSJE.

[25] RRTCs are NGOs/agencies selected by MSJE on the basis of their experience in the field of addiction treatment and capacity to work as a resource base. Eight RRTCs were nominated in 2001 by MSJE from among the existing addiction treatment and counselling centres (of which there are approximately 350 functioning all over the country, the earliest ones having been established in 1980s) based on their performance. The terms of reference to establish RRTCs were issued in February 2003 with the aim that they would help form a regional resource base and build the capacity of the other centres through planned training activities.

FHI-India along with NACO and ICMR also undertook an exercise of mapping and estimating the size of IDU populations in Manipur, Meghalaya, Nagaland, Mizoram and Assam in 2003-2004. The regional ICMR institute (RMRC Dibrugarh) played the role of nodal coordinating agency in this endeavour. Local academic, medical and non-medical institutions carried out this activity on mapping and size estimation. Capacity enhancement of the local organisations was a major focus throughout this exercise and appropriate training was organised. The ultimate goal was to facilitate decision-making on resource allocations for targeted interventions at par with the estimated magnitude of the injecting drug use problem in the sub-region.

Recognising that drug use in the Northeast was not just limited to cities but has become diffused into rural areas, a four-year project entitled 'Community wide Drug Demand Reduction in the Northeastern states of India' was initiated by UNODC. The aim of this project was to mobilise community-based organisations and enterprises to reduce and prevent drug abuse in the seven Northeastern states. The project was designed to motivate, enable and equip community groups and other institutions to address the issue of drug demand reduction. Simultaneously, it aimed to improve the quality of services available to drug users as well as supplement and enhance services supported by the Government of India. UNODC also provided financial and technical support to the 'Regional Resource and Training Centres', which serve as drug demand reduction hubs across India. As mentioned above, three of the eight RRTCs are located in the Northeast – one in Manipur, one in Mizoram and one in Nagaland.

In 2004, drawing on global lessons learnt about the utility of self-help groups, UNODC started another project entitled 'Formation of Peer Networks to address HIV risks in injecting drug using populations'. This project emphasised the role of the peer educators. By its end in 2005, it had fostered linkages with community-based groups, NGOs and civil society, state governments as well as multilateral and bilateral agencies. Through the initiation of community-based peer-driven interventions that followed risk reduction approaches, this project reached out to those drug users who could not be reached by treatment facilities.

Of the five other projects[26] of UNODC with 'capacity building', 'community empowerment' and 'gender equity' at their core, CHARCA (the Coordinated HIV/AIDS/STD Response through Capacity-Building and Awareness) has been a unique one being a joint UN system project in partnership with NACO. It aims to reduce the vulnerability of young women (aged 13-25 years) in the general population to the risk of HIV infection. It is being implemented in six localities in India of which only one is in the Northeast and that is in the state of Mizoram. The key activities of CHARCA are: (1) awareness creation, (2) capacity building, (3) strengthening services, (4) creating an enabling environment, and (5) building support structures.

In 1999, the Australian Agency for International Development (AusAID) carried out a situation assessment of the HIV/AIDS epidemic and responses (Panda et al 1999) in the states of Manipur, Meghalaya, Mizoram and Delhi in order to contribute effectively to planned responses.

[26] The project titles are as follows: 'Prevention of spread of HIV amongst vulnerable groups in South Asia', 'Prevention of transmission of HIV among Drug Users in SAARC Countries', 'Coordinated HIV/AIDS/STD Response through Capacity-Building and Awareness (CHARCA)', 'Empowering communities for prevention of drugs and HIV in India' and 'Reducing substance use-related HIV vulnerability in female drug users and female partners of male drug users'.

The common themes that came through in this analysis were the vulnerability of the poor (seen especially in the slum populations of Delhi and among the rural poor in Mizoram), of women (especially as young girls, widows and sex workers), of youth (especially those who choose to experiment with readily-available drugs), and of children (especially street children in Meghalaya and orphans and the newly-born children of HIV-infected mothers in Manipur). An additional concern, specific to Meghalaya, was that the development of the coal industry in places like Jowai, Lad Rymbai and Bapung (Jaintia Hills) had been associated with an increase in heroin use (mostly smoking and some injecting) possibly due to the sudden influx of money, easy availability of drugs and migrant labour. As the HIV epidemic was at a much earlier stage in Meghalaya, the window of opportunity to respond vigorously through training and capacity-building was highlighted. However, this was not followed by implementation of intervention due to various administrative difficulties.

Subsequently, in 2004, the Australian government expressed interest to work in collaboration with the UN system in India to address the HIV epidemic in select Northeastern states. In collaboration with NACO and UNAIDS, AusAID proposed a special five-year project for Manipur, Meghalaya, Mizoram and Nagaland. The overall goal of the project is to contribute to the national response in reducing the risk and impact of HIV/AIDS in the four states. The purpose is to improve the quality and delivery of the national HIV/AIDS prevention and control programme in the four states. The major components of this project include capacity-building, advocacy, care and support for women and children and state-specific interventions.

10. SUMMARY OF LESSONS LEARNT AND DIRECTIONS FOR FUTURE INTERVENTIONS

The pattern of use of psychotropic substances in the Northeastern states of India has changed significantly from a traditional to a non-traditional usage over the last 30 years. While heroin smoking by local youths in the early 1970s marked the beginning of this transition, injecting drug use in a large number of young people in the early 1980s came with its additional health and social consequences, including HIV. The past few years have witnessed a new entry – 'amphetamines' – in the list of drugs that are used in this sub-region.

A thorough understanding of the shift in drug use patterns, the vulnerability of individual drug users to different health and social consequences of drug use, the burden of drug use on women due to drug-using family members and the socio-political factors that impact upon these issues in the Northeast is necessary to frame an adequate response to this modern day epidemic.

Lessons learnt from the past also underline the fact that epidemiological, operational and public health research through collaboration between state governments, academic and medical institutions, foreign universities and research organisations such as ICMR can generate data of relevance to intervention design. It is, therefore, necessary that all the concerned agencies, including UN organisations and bilateral donors, work in synergy to build a comprehensive intervention response guided by evidence and that they strengthen the relationship with NACO, ICMR, the local state governments and NGOs as well as CBOs in Northeastern India in order to curb the harm caused by drug use. If this is not done, it will

not be possible to maintain the minimum essential quality of interventions and at the same time reach out to a large mass of drug users with different intervention options within a short enough period of time.

While the sentinel surveillance round in 2004 has recorded lower HIV prevalence among IDUs in some of the Northeastern states, and while this may be seen as an achievement of ongoing interventions, there is no time-series data on HIV incidence to substantiate such inference. It should also be recognised that deaths taking place in considerable numbers in HIV positive IDUs in some of these communities either due to AIDS or other causes could also be responsible for the lowering of HIV prevalence. Finally, the distribution of the HIV sentinel sites has a strong urban bias and this skewed distribution is unable to capture the growth of the epidemic in new and rural population groups, reflection of which is necessary for a sound inference regarding the growth or decline of the HIV epidemic among IDUs.

The programmatic directions recommended below are rooted in the concerns described in this monograph, as well as available epidemiological information. They are summarised for various levels of actors, at the political and policy level, at the level of immediate surroundings of drug users formed by NGOs, CBOs, other service providers, family members and law enforcement agencies and, finally, individual drug users and their social networks.

1. **Accurate monitoring of the drug use problem and evaluation of the past and ongoing interventions:** There is a need to establish effective drug use monitoring and reporting systems for all the eight Northeastern states of India – Arunachal Pradesh, Assam, Manipur, Mizoram, Meghalaya, Nagaland, Sikkim and Tripura. Additionally, these systems should be linked to HIV surveillance systems. No network of such a kind exists as yet in Northeast India. One current gap is that there is a skewed distribution of HIV sentinel surveillance sites for IDUs in the Northeast towards urban settings that captures only a snapshot of a select population of drug users and not the community of drug users in general. Separately, but as part of the process of gathering evidence for programme responses, an impact evaluation of the ongoing interventions in the Northeast for drug users (especially injecting drug users) is also long overdue and should be carried out at the earliest opportunity.

2. **Community-level advocacy:** Given the hostility faced by drug users in Northeast, planned and sustained advocacy with the community at large (including local pressure groups, law enforcement agencies and state-level policy makers) is a crucial step to foster support for different intervention approaches. Such advocacy initiatives should follow a timed action plan rather than being ad-hoc, should form an integral part of a *'comprehensive intervention package'* and should be able to measure change in terms of more community support towards various risk reduction approaches and less coercive measures against drug users.

3. **Building capacity in human resources through training:** A key constraint in scaling-up intervention programmes for drug users in the Northeast is the lack of adequately trained human resources. On one hand, those already engaged in delivering interventions need further training on (a) how to establish and maintain quality in programmes, (b) how

to improve the coverage of interventions (e.g., through outreach) and (c) how to design responses based on the periodic updating of situation and response assessments and on the other hand, capacity building needs in areas witnessing diffusion of drug use needs to be assessed. Mapping and size estimation exercises are two other linked issues to scaling-up of interventions that require planned capacity building initiative for enabling grassroots level organisations to follow robust and scientifically valid methods.

4. **Reducing the burden on women due to drug use by family members and/or their own drug use:** This comprises three linked intervention areas. First, existing interventions that aim to reduce the vulnerability of (generally male) drug users – and IDUs in particular – to HIV should also address the vulnerability of their sex partners. The documented significant expansion of HIV to the non-injecting wives and partners of HIV-positive IDUs in the Northeast strongly underscores the need for such an approach. Second, interventions to minimise the burden of drug use by family members on women should also go hand in hand with this effort. Third, interventions for female drug users are at present very few in number. These should also be enhanced as many of these females have an increased vulnerability to HIV and Sexually Transmitted Infections (STIs) due to the drug-sex interface. Of course, a functional HIV/AIDS care and support system is central to the success of all these three intervention approaches.

5. **Sexual risk reduction as part of a 'comprehensive package' of services:** Data from several Northeastern states clearly shows that drug users are exposed to various health hazards due to unprotected sex. Sexual risk reduction must therefore form an integral part of the 'comprehensive package' of intervention for drug users. Previous approaches have tended to focus mainly on vulnerabilities resulting from injecting drug use. The 'comprehensive package' should include – everywhere in future – condom promotion and improved detection and treatment of STIs for drug users and their sex partners.

6. **Resource allocation to guide operations and foster innovation:** Glaring gaps exist in the area of research, which could inform an intervention programme for the drug users in the Northeast. 'Comparison of different drug treatment approaches such as short stay camps versus detoxification centres', 'efficiency of different delivery channels for oral sublingual buprenorphine tablets to be administered to IDUs', 'comparative efficacy of different ways of addressing the needs of women drug users' and 'formative research on amphetamine type substances use' are a few examples in this regard. It is therefore recommended that future programme planning addresses these needs and ensures appropriate resource allocation failing which the interventions might fall short of the desired impact by not being able to incorporate newer elements based on evidence.