

I. Integration of supply and demand reduction strategies: moving beyond a balanced approach

1. The ultimate goal of both supply and demand reduction strategies is the same: to minimize or eliminate the use and abuse of illicit drugs. If that goal is attained, the development of substance use disorders and the health and social problems associated with them will also be reduced. Since the supply of and demand for illicit drugs are inextricably connected, programmes aimed at reducing the drug problem should be integrated, complementary and mutually reinforcing rather than isolated or competing activities.

2. Illicit drug use is a complex behaviour dependent upon the individual, his or her environment and the drugs themselves. Illicit drug markets at all levels are affected by the interaction between the demand for drugs and their availability. The interaction is influenced by social, cultural, economic and political forces.

3. Early efforts to confront drug abuse issues, including international drug control instruments, focused on reducing the supply of illicit drugs. The first formal international recognition that drug supply is linked with demand was the inclusion of an estimate system for licit narcotic drugs in the 1931 Convention for Limiting the Manufacture and Regulating the Distribution of Narcotic Drugs, in order to prevent the diversion of such drugs into illicit channels.

4. The international drug control treaties¹ are the foundation of international efforts against the abuse of illicit drugs. They codify supply reduction measures and recognize the impact of the demand for illicit drugs on its relationship to supply. Parties to those treaties are required to, *inter alia*, give special attention to, and take practical measures to reduce, the demand for illicit drugs.

5. In previous reports,^{2, 3, 4} the International Narcotics Control Board has emphasized the need for a balanced approach to the world drug problem, noting that addressing the demand for illicit drugs must be combined with continued efforts to restrict their cultivation and manufacture, to limit the availability of source materials and precursors and to reduce the availability of drugs at the street level. The need for such a balanced approach has also been stressed in the

1987 Comprehensive Multidisciplinary Outline of Future Activities in Drug Abuse Control⁵ and in various resolutions of the General Assembly, the Economic and Social Council and the Commission on Narcotic Drugs.

6. The General Assembly at its twentieth special session adopted the Declaration on the Guiding Principles of Drug Demand Reduction (Assembly resolution S-20/3, annex), in which it called for a balanced approach between demand reduction and supply reduction, each reinforcing the other, in an integrated approach to solving the drug problem. The Joint Ministerial Statement and further measures to implement the action plans emanating from the twentieth special session of the General Assembly, adopted during the ministerial segment of the forty-sixth session of the Commission on Narcotic Drugs,⁶ reaffirmed the integrated and balanced approach.

7. Neither demand reduction programmes nor supply reduction programmes alone have been fully successful in addressing the drug problem. In the present chapter, the Board examines the relationship and interaction between the supply of and demand for illicit drugs and the synergistic impact of complementary efforts. It emphasizes the need for policy makers, competent and national authorities and others involved in implementing drug control strategies to utilize balanced, combined and integrated approaches at all levels for maximum effectiveness.

A. Market perspectives

Illicit drug markets

8. There is a clear association between drug availability (supply) and drug consumption (demand) in illicit drug markets. In its simplest form, this means that drug supply satisfies and creates demand and that drug demand supports the existing drug supply or creates a new one. That association is illustrated by the availability of alcohol and nicotine and the problems related to their use, despite attempts to change attitudes and use through education and prevention efforts. The

same rationale may be applied to controlled substances. Although that association is not direct, within certain limitations, as an addictive drug becomes more available, a larger number of vulnerable individuals will be exposed to it, the likelihood of drug experimentation will increase and the problems associated with drug abuse will become more prominent.

9. This one-dimensional view, however, hides the complexities inherent in the interaction between the supply of and demand for illicit drugs. In reality, this continuum is affected by factors such as alternative substances and sources, new markets and users, relapse and social, ideological and economic challenges. While individual supply and demand reduction efforts have had a positive impact, most have been limited in duration, location or substance. Demand, particularly among chronic users and those attempting to profit from the demand, has led traffickers to seek alternative sources or substances. Drug traffickers may attempt to establish new drug markets and to expand existing ones by recruiting new users and marketing new substances. How supply can create demand is illustrated by the crack cocaine epidemic in the United States of America in the 1980s, during which a new and cheaper form of a traditional drug became widely available.

10. Recent evidence suggests that illicit drug demand can vary inversely with price.⁷ Supply reduction efforts have increased the prices of illicit drugs to levels far above those which would have otherwise prevailed. Studies also indicate that this inverse relationship also applies to measures of morbidity from drug use (for example, emergency department episodes). The extent to which higher prices affect the extent of demand for and abuse of illicit drugs is dependent on the specific substance, the age and social status of the individuals, the type of market and prevailing social, cultural and economic conditions. There is strong evidence that, at least for cannabis, price and easy availability, along with peer pressure, influence naïve adolescents in their decision to begin experimenting with drugs. For older and chronic drug abusers, price might have less of an influence on the decision to continue drug abuse.⁸ Furthermore, experience has shown that vigorous law enforcement efforts do not always result in price increases.⁹

11. Drug policy makers often analyse the availability of illicit drugs and illicit drug markets as both major determinants and major consequences of drug abuse, particularly in terms of where and how they interact with the demand for drugs and with responses to the drug problem. Illicit drug markets may be considered as new or emerging or as well established or mature. Such markets vary by, inter alia, the type of substances involved, the number and type of abusers. Mature markets are composed of a small proportion of heavy drug abusers who consume large volumes of illicit drugs (for example, heroin addicts) or a large number of abusers who each consumes a smaller volume of illicit drugs (for example, abusers of methylenedioxymethamphetamine (MDMA, commonly known as Ecstasy)). Those markets may exist side by side in local communities, individual countries or different regions.

12. The determination and understanding of the type of illicit drug markets in a given area enable policy makers to establish focused strategies regarding the supply of and demand for illicit drugs in those markets. There are substantive differences in the dynamics of supply and demand in well-established (mature) and new illicit drug markets. Interdiction efforts are most effective when aimed at disrupting mature illicit drug markets, whether at the local, national or international level. Arresting and imprisoning a large number of drug users or street-level dealers may not be as valuable in a mature illicit drug market; arresting a smaller number of larger distributors or more violent and disruptive offenders may be more effective in situations where heavy drug abusers account for the bulk of illicit drug demand and consumption.

13. When a relatively small proportion of drug abusers consume most of the volume of the illicit drugs in a mature market, supply and demand are primarily influenced by what happens to that group. Demand for illicit drugs in that population is not significantly affected by prevention based on education or information-based programmes. Drug abuse treatment intervention may be more effective in reducing demand in that population. Treatment often begins with referral of the individual for an addiction-related problem, such as a criminal act, a workplace safety issue or an infectious disease. The availability of and access to quality treatment facilities and associated programmes

may reduce the number of illicit drug users, the quantity of illicit drugs used and, consequently, illicit drug trafficking and supply.

14. Reducing the availability of illicit drugs in a mature market may also lead chronic drug abusers to seek treatment and may reduce demand. For example, a reduction of the heroin supply in the Australian Capital Territory between 1999 and 2002 was accompanied by a large decline in ambulance call-outs and an increase in methadone treatment admissions. During the same period, there was also a decrease in heroin purity and property crime.¹⁰ Such a situation is possible if law enforcement activities are sustained and complemented by demand reduction efforts; however, if those activities are not sustained and complemented by demand reduction efforts, the situation may go back to the way it was.

15. In emerging illicit drug markets, both supply and demand are particularly sensitive to early efforts to reduce availability. Law enforcement has the potential to focus its efforts, to respond quickly and to be drug-specific. Early intervention in these areas may have a significant deterrent effect and prevent demand from developing. It is important to react in a timely manner, as authorities may be hesitant to reallocate resources to an emerging drug problem until it is well recognized. The arrest of illicit laboratory operators and the dismantling of laboratories producing new synthetic substances (controlled substance analogues), coupled with drug control efforts and public health warnings, have prevented the development or spread of significant illicit drug markets and problems.

16. Prevention and education efforts, if started early in a new illicit drug market, may reduce demand, even though they often lag behind in raising awareness of the dangers of a newly emerging drug. Individuals with significant risk factors, including those associated with family, peer group, social, environmental and psychological difficulties, are more likely to become new drug users in emerging illicit drug markets. Early intervention aimed at minimizing the influence of such risk factors and reducing drug abuse by developing life skills can be effective in reducing illicit drug demand. Reducing the number of vulnerable individuals and the level of vulnerability will make it less likely that emerging drug markets will become established, thus reducing the need for and ultimately the supply of illicit drugs.

17. Established attitudes against drug abuse will influence whether or not new illicit drugs will take hold on the market and even whether or not illicit drugs in general will be available. If successful programmes to reduce drug abuse are not maintained, complacency and tolerance for illicit drug use may develop, creating a fertile environment for drug dealers. The drug epidemic that began in the 1960s has been attributed, in part, to a lack of protective knowledge about the dangers of drug abuse.¹¹ Ongoing education and prevention programmes that form part of regular health education programmes protect the population against seductive claims about certain drugs of abuse.

18. Social and economic factors also affect the relationship between the supply of and demand for illicit drugs in establishing new markets. Some areas in which illicit drugs are produced are prime targets for such expansion. The drugs are readily available, and there are often poor economic and social conditions and political unrest. Drug trafficking may be one of the few sources of income. The supply of illicit drugs in areas in which the drug crops are cultivated or the illicit drugs are processed or transported, together with the above-mentioned factors, has also created demand for the drugs in those areas. For reasons that have not yet been determined, that demand has been increasing more rapidly in some areas and slower in others. The number of drug abusers has been increasing in some countries that were once considered source or transit countries. In some areas in Asia, particularly in countries where the problems associated with amphetamine-type stimulants mainly involved the manufacture of and transit traffic in such stimulants, the abuse of such stimulants has spread to other countries and has occurred among broader population groups.¹² Reducing supply in those areas would have a positive impact on the demand for illicit drugs.

19. The increasing availability of high-speed technology has also complicated actions by authorities in addressing the dynamics of supply and demand. The Internet is a significant source of information about all types of drugs, health problems and treatments. Drug education and prevention programmes reach more people more quickly by using Internet technology. At the same time, however, unregulated Internet web sites advertise and sell controlled pharmaceuticals, contrary to laws in the importing countries and elsewhere. They provide forums for the free exchange of information on

illicit drugs (such as how to make them and administer them), including new illicit drugs and their effects, and on other related illicit drug activity, leading to increased experimentation with and demand for such drugs. This problem particularly affects young people, who frequently rely on the Internet for information and are prone to experimentation.

20. Making effective use of scientific and technological advances is critical to international drug control efforts. Communication and other technology now enable law enforcement authorities to collect and exchange information in real time in a secure environment, to conduct surveillance more effectively, to search for and identify contraband more rapidly and to conduct controlled delivery operations.

Licily manufactured controlled drugs

21. The supply of and demand for drugs manufactured for medical purposes can also affect the illicit drug problem. International drug control treaties and national controls attempt to limit the cultivation, production, manufacture and use of drugs to an adequate amount required for medical and scientific purposes and to ensure that these drugs are available to meet legitimate needs. Weak or inappropriate controls and some commercial promotional activities contribute to increased drug availability, and people will have greater access to more drugs than are required to meet their legitimate needs. That, in turn, may increase the potential for new drug abusers and illicit demand. For example, the abuse of psychotropic substances in some countries is associated with a lack of enforcement of prescription requirements resulting in such drugs being available over-the-counter.

22. This increased demand may be satisfied through the diversion of existing products or through trafficking in pharmacologically similar illicit substances. When illicit drugs are in short supply, chronic drug abusers may turn to drugs manufactured for medical purposes as alternatives or reinforcing drugs, contributing to increased and often sustained demand for them. The oversupply and inappropriate prescription of drugs manufactured for medical purposes also contribute to increased demand. The international drug control treaties have been successful in reducing the availability of those drugs on the illicit market. However, criminal organizations have partly counteracted that by supplying sophisticated look-alike

medicines that are particularly in demand by addicted persons and, at the same time, financially profitable for such organizations.

23. Reducing demand through responsible and adequate prescribing by the medical profession, as well as concerted action to eliminate the supply of such illicitly manufactured medicines, should influence the demand for and, ultimately, the supply of illicit drugs. At the same time, however, adequate availability and appropriate prescribing of drugs for the treatment of medical disorders may also reduce the demand for and rate of abuse of controlled substances. This, in turn, may also affect the supply of illicit drugs.

24. For example, when methadone and buprenorphine, used in the treatment of opiate dependence, are diverted and sold to purchase heroin, that also contributes to increased demand for and supply of illicit drugs. Furthermore, many drug abusers use benzodiazepines or amphetamines to enhance the effects of opioids, to alleviate withdrawal or abstinence syndromes, to temper the effects of cocaine or to modulate withdrawal states.

25. The repercussions of unbalanced government controls and law enforcement may adversely affect the availability of drugs for medical purposes and may unduly limit access to medicines required for medical and scientific purposes. The international drug control treaties require Governments to establish data collection systems to assess the legitimate demand for and supply of those substances. Coordination of drug supply and demand activities among health, regulatory and law enforcement agencies, the medical community and the pharmaceutical industry can ensure that controlled substances are available to meet legitimate needs while preventing their oversupply.

B. Goals of supply and demand reduction strategies

26. Supply reduction efforts support demand reduction efforts because, for some drugs, in times of short supply, illicit drug prices may increase, illicit drug purity may decrease, and it is more likely that chronic drug abusers will seek treatment and new drug abusers have less opportunity to obtain drugs. Similarly, demand reduction activities can make supply reduction activities more effective: decreased demand

leads to fewer addicts and new drug abusers; and when there are fewer drug abusers, criminal networks may be weakened and there is less economic incentive for traffickers to manufacture illicit drugs. Demand reduction activities also minimize the likelihood that drug abusers will switch to other drugs of abuse when their drug of choice is not available; instead, they may be motivated to seek treatment for their addiction.

27. Drug abusers are often coerced into criminal activities such as drug trafficking, prostitution, fraud and theft in exchange for a steady supply of drugs. They are frequently made responsible for distributing illicit drugs to younger drug users or persons who experiment with drugs. Drug prevention efforts, coupled with accessible treatment programmes offering psychosocial support and pharmacological therapy, supported by local law enforcement efforts that target the drug trafficking activities of addicts, may have a synergistic effect: reducing both the supply of and the demand for illicit drugs. Programmes that offer alternatives to prison and combine both law enforcement and individual recovery components have proved to be effective both in treating health conditions associated with drug abuse and in reducing crime; they may also prevent young drug abusers from coming into contact with the criminal culture in prison. Consequently, demand reduction activities such as treatment alternatives that provide choices for drug abusers outside drug distribution networks may affect drug trafficking organizations and reduce their ability to supply illicit drugs.

28. Supply reduction programmes attempt to reduce the quantity of illicit drugs available for abuse. To maximize their efficiency and effectiveness, most of those efforts focus on the drug sources, including illicit crop cultivation sites, illicit drug laboratories, drug trafficking organizations at the regional, national or local level and street-level dealers. Supply reduction measures vary depending on the source of the drug. Crop eradication, chemical control and the dismantling of illicit drug laboratories are effective in addressing problems of illicit drug production. Interdiction efforts are important at all levels of the distribution system, including areas in which smuggling is significant, as well as in local communities. Measures such as penal sanctions and alternative development programmes are an integral part of both supply and demand reduction programmes and illustrate the need for law

enforcement, health and social authorities to work together.

29. Both supply reduction programmes and demand reduction programmes generally have measurable outcomes. Most Governments monitor drug, chemical and clandestine laboratory seizures, arrests, prosecutions and convictions, the diversion of substances to the illicit market and the price, purity and availability of various illicit drugs. Reporting and sharing such information in a timely manner, in compliance with international treaty obligations, help to ensure that the most effective programmes are implemented. For demand reduction programmes, there are measurable outcomes such as participation; the number of persons reached in the target population; the number of persons trained; the rates of recidivism; the involvement of the family, the community and non-governmental organizations; improvement in educational performance; and the development of best practices. Successful outcomes are enhanced by long-term commitment and funding; the involvement of target populations (families, schools and communities) in the design and implementation of programmes; improved life skills; and consideration of gender, culture, age, risk and socio-economic factors.

30. The objectives of demand reduction programmes are to prevent and reduce the use of illicit drugs, to treat the addicted and to reduce the adverse consequences of illicit drug use. Demand reduction programmes provide for and encourage the active participation of the general public and target those at particular risk, regardless of the location or economic conditions. Community-, school- and family-based prevention programmes promote proper attitudes about the availability and use of illicit drugs and the perception of their risks. They may also increase awareness of vulnerability, risk and factors that are closely associated with a disposition to use illicit drugs, with a society's tolerance for drug dealers, with the likelihood of adolescent drug experimentation and with the public's attitude towards illicit drug availability.

31. In areas where illicit drugs are constantly present and there is little or no awareness of the consequences of substance abuse, society may have developed a tolerance for illicit drug use, regarding it as an inevitable part of everyday life. Demand reduction programmes involving all segments and levels of

society can raise the awareness of a society and sensitize it to the adverse consequences of illicit drug use. They can also reduce tolerance for such activity and prevent children and adolescents from being exposed to illicit drugs. Unified programmes working against drug abuse and drug trafficking organizations can result in society adopting the proper attitudes towards drug abuse and ultimately reduce illicit drug availability. Furthermore, citizens involved in such programmes are more likely to support police in counteracting drug trafficking, to support the use of resources for supply and demand reduction efforts and to reinforce social networks that increase resilience factors that reduce the likelihood that individuals abuse drugs. Drug abuse prevention programmes that use media professionals to spread messages about the dangers of drug abuse help to establish a cultural mindset that enables youth to be against drug abuse and to resist the entreaties of drug dealers. Drug abuse prevention activities can succeed in changing attitudes and influencing drug-using behaviour, and that, in turn, may lead to reduced drug abuse and, subsequently, reduced supply of illicit drugs.

32. The benefits of the prevention and treatment of drug abuse and the rehabilitation of drug abusers are well documented.^{13, 14} The effectiveness of demand reduction programmes and their interaction with supply reduction programmes can be enhanced through the use of evidence-based strategies embodied in national and international guidelines. Governments are increasingly recognizing the importance of efforts to make demand reduction an integral part of their drug control strategies. The Board is encouraged that the Executive Director of the United Nations Office on Drugs and Crime, in his second biennial report on the outcome of the twentieth special session of the General Assembly,¹⁵ noted that 89 per cent of reporting States indicated that they had a national strategy for demand reduction during the period 2000-2002; moreover, 82 per cent of the States with a national strategy reported that the strategy incorporated the Guiding Principles of Drug Demand Reduction.

33. Best practices, which have been published by many organizations, differ from region to region and from community to community. Some treatment paradigms, including methadone maintenance and other drug substitution therapies, are not accepted by the authorities in some countries. However, research clearly indicates that, for persons with severe forms of

drug dependence, ongoing pharmacotherapy similar to that for other chronic illnesses has had positive effects, such as improved personal health and social functioning and reduced public health and safety threats.¹⁶ Those programmes have an effect on the supply of illicit substances, since addicts successfully participating in treatment programmes have less need for illicit drugs and have reduced contact with criminal organizations. Targeted demand reduction programmes, such as personalized therapeutic programmes, early contact with adolescent experimenters and psychiatric comorbidity treatment, may all increase the number of drug abusers who seek treatment and remove themselves from the influence of criminal organizations; that, in turn, has clear implications for the illicit drug supply.

C. Global relationship between supply and demand

34. Supply and demand forces interact within and between communities, countries and regions. Local demand reduction and interdiction efforts have an impact both on the local situation and on illicit drug manufacturing and trafficking at the international level. The global continuum of supply and demand is manifested in several ways. Drug traffickers attempt to find new production areas or trafficking routes in response to successful supply reduction efforts in a particular area, country or region. As long as there is demand for an illicit drug, sources will be found to satisfy that demand and vice versa. Sustained successful supply reduction programmes depend on demand reduction programmes in those countries which are major consumers of illicit drugs. Successful national programmes, although not sufficient to address worldwide problems, form the basis of cooperative and complementary strategies.

35. The integration of diplomacy, drug control policies, international cooperation and law enforcement intervention in the 1970s resulted in a significant disruption of the heroin markets in certain regions. Turkey was a traditional supplier of opium for legitimate pharmaceutical products. Opium poppy cultivated in Turkey was also the source material for the heroin sold on illicit markets. The Government of Turkey imposed a ban on all opium production in 1972 that, in conjunction with law enforcement efforts,

succeeded in significantly reducing heroin supplies in Europe and the United States. With the support of the international community and substantial and sustained funding of alternative development programmes, Turkey did not resume production of opium but switched to the production of concentrate of poppy straw to meet legitimate medical demand. Those efforts were successful in eliminating the diversion and availability of opium in Turkey for heroin manufacture. However, the reduction in the supply of and demand for heroin was short-lived, as demand reduction efforts were not sufficient to ensure long-lasting proper attitudes towards illicit drugs in those countries where heroin was most widely abused. Consequently, other sources of supply emerged to meet the existing demand. Programmes targeting the supply of illicit drugs must be regional or global in nature and must be complemented by demand reduction initiatives in all areas where demand exists.

36. Shortly after its introduction as a sleep aid, methaqualone became a popular street drug in many countries. National drug control and law enforcement efforts quickly reduced its availability on the illicit market in several countries. However, continued availability of the drug in some areas and established demand led to trafficking and the development of counterfeit products. Bilateral drug control measures in those countries where methaqualone was being manufactured and those where the drug was being abused were followed by significant seizures and ultimately by strict international trade controls and a rescheduling action. Continued education programmes and other forms of intervention, supported by law enforcement activities, eliminated both the supply of and the demand for methaqualone in many countries. Currently, the abuse of methaqualone continues to be significant in only one regional market (Eastern and Southern Africa). The case of methaqualone demonstrates that coordinated and integrated efforts by Governments, guided by the Board, can result in a dramatic global reduction in the supply of a particular illicit drug and, consequently, significantly reduce the demand for that drug.

37. Bolivia instituted a comprehensive supply reduction strategy that reduced coca production by 70 per cent between 1995 and 2001. Sustained eradication, alternative development, strict drug laws, precursor control and interdiction programmes, together with attempts to address social and economic

needs, were supported by strong government commitment, focused budget and resource allocation and the financial and political backing of a number of Governments. Those combined actions resulted in a significant disruption in the traffic (including the transit traffic) in cocaine and precursor chemicals and in the dismantling of key criminal organizations and the seizure of their assets. As cocaine manufacture decreased, cocaine purity dropped (to 47 per cent in 2001) and demand for Bolivian cocaine base decreased. However, that development was not accompanied by similar changes elsewhere in the region, and coca bush cultivation increased in other areas.

38. Political, economic and social issues also prevented the successful developments in Bolivia from being sustained. While strong political commitment is critical to sustained successful drug control programmes, unsuccessful programmes resulting from a lack of commitment or implementation efforts may reduce the likelihood of positive social and economic development and even lead to more political instability. Although expansion of alternative development opportunities with the involvement of local authorities (which will improve social and economic conditions) are important to future success, an increased level of coca bush cultivation, if not reversed, may lead to more political instability and make it extremely difficult to develop social and economic programmes. Similarly, increased levels of illicit opium poppy cultivation and opiate trafficking in Afghanistan are likely to lead to further political instability and difficulties in the reconstruction efforts in that country.

39. Monitoring the drug situation in those areas where programmes are being implemented, as well as where illicit drugs are being consumed, and sharing that information with others are important to ensuring flexible responses to the changing dynamics of supply and demand. In the United States, indicators of demand for cocaine show that the number of cocaine abusers has stabilized in recent years. The annual prevalence figure is approximately 60 per cent lower than in 1985, the peak of the crack cocaine epidemic. Traffickers continue to try to establish new markets: demand appears to be growing in South America and new market outlets are being established in Asia and Europe, thus indicating a shifting cocaine market. International organizations and Governments monitor the illicit cultivation of opium poppy and coca bush.

Reporting and sharing information on such developments facilitates the evaluation of the effectiveness of various programmes for development and drug crop eradication and the identification of areas that require increased efforts and resources. There are indications that programmes in Peru and, most recently, in Brazil and Colombia to deal with problems involving illicit drugs and diverted chemicals have refocused their efforts, making use of the lessons learned from the integrated approach applied in other countries. Integrated and balanced programmes such as the Plan of Action on Drug Control in Africa: 2002-2006, which is being implemented by the African Union, have incorporated economic, social and health-related activities into a regional drug control strategy. Coordinated government commitment to drug control policies within and between regions prevents drug trafficking organizations from moving to areas with less control in order to conduct their illegal activities, creating new demand or meeting existing demand.

D. National and local perspectives

40. An understanding of the nature and extent of each drug problem, its origin, effects and ramifications will help national and local authorities to take advantage of the knowledge of the dynamics of supply and demand and to establish meaningful goals, outcome measures and priorities. Surveys, questionnaires and epidemiological studies are useful in characterizing the relationship between the supply of and the demand for illicit drugs. They can be coupled with measures of availability, consumption, morbidity and mortality. Although a long-term goal is to develop scientifically tested data collection systems, such systems are expensive and often not timely. There is a need for short-term practical analyses, based on real-time information from law enforcement and health authorities.

41. Programmes aimed at changing or maintaining general attitudes towards drug abuse are not usually subject to substance or population variables. Nevertheless, the public's perception of drugs and drug policy varies from country to country and from region to region. Attempting to change attitudes requires concerted action. Key components include strong commitment at the national level, a coordinated effort involving all relevant institutions and involvement of

the community in building consensus against the acceptance of drug abuse. The most effective programmes are early education interventions that are part of a broad-based curriculum, emphasize the risks involved in all forms of drug abuse, have political and societal support and are accompanied by strong supply reduction efforts

42. The dissemination of information, in particular information regarding the harmful effects of drugs, has traditionally been a common component of drug abuse prevention. Evaluations have shown that such efforts can increase the target group's knowledge of the adverse consequences of drug abuse and can contribute to the development of more appropriate attitudes towards drugs. Recent studies have shown a positive correlation between (a) exposure to messages about the dangers of drug abuse and the development of an appropriate attitude towards drugs and (b) the decisions that adolescents make regarding the abuse of a wide range of substances.

43. Attitudes are used to predict future trends in drug use, particularly for new users. In member States of the European Union, disapproval and the perception of great risks attached to experimenting with cocaine, heroin and MDMA (Ecstasy) have increased among adolescents; that is especially true for Ecstasy. Media coverage, together with an increasing awareness that it is possible that damage to the brain may result from prolonged use of Ecstasy in high doses, appears to have contributed to a downward trend in the abuse of that drug.

44. The lessons learned and the experience of several decades of drug abuse prevention suggest that three general elements should be included in prevention programmes: (a) addressing the values, perceptions, expectations and beliefs that the community associates with drugs and drug abuse; (b) developing the personal and social skills of people, especially children and young people, to increase their capacity to make informed and healthy choices; and (c) creating an environment where people have the possibility to develop and lead healthy lifestyles.

45. Properly focused leadership and the firm commitment of Governments at the highest political level to disrupt the illicit drug trade and to reduce the demand for illicit drugs constitute the foundation for addressing the relationship between illicit drug supply and demand. Such leadership is critical to the

coordination of drug control efforts at all levels—by regional, national and local authorities, as well as by non-governmental organizations. Unified government commitment to strong drug control policies facilitates the appropriate allocation of financial and human resources and ensures that all relevant institutions work together.

E. Criminal justice, health and social agencies working together

46. Since illicit drug supply and demand are inseparable parts of a single problem, the success of efforts to reduce the one is related to a commitment to simultaneously reduce the other. Programmes involving partnerships between law enforcement and health and social authorities can generate synergy and can be cost-effective. In order to achieve that objective, a number of obstacles must be overcome. For example, in many cases, demand reduction and supply reduction agencies have conflicting agendas and approaches.

47. A successful multidisciplinary approach requires mutual respect between the personnel and agencies involved. If one group does not trust or respect another, that may hinder communication, the coordination of activities or their acceptance by the community. Although each discipline and agency maintains professional independence, continuing interdisciplinary training and education promote the development of an effective workforce with common goals, resulting in more effective planning and implementation of the programmes. Sustained, dedicated and balanced funding is necessary and justified because of the significant reduction in costs to criminal justice, law enforcement, health and social programmes.¹⁷

48. The deterrent effect of law enforcement efforts influences the demand for illicit drugs. The risk of penal sanctions may act as a deterrent to members of the general population who have never abused drugs. Though the risk of such sanctions does not, in all cases, deter addicts who require drugs regardless of the consequences, the impact of law enforcement efforts on supply may force addicts to take advantage of treatment and psychosocial intervention. Collaboration between the criminal justice system and the treatment or health-care system in the form of drug courts and similar programmes is found in a number of countries.

Such programmes utilize the coercive powers of the courts to mandate treatment and to promote abstinence and appropriate social behaviour. The goals are to reduce drug abuse and associated criminal behaviour by maintaining drug offenders in treatment services to address their addiction and other needs; recovering addicts who are trying to reintegrate into society are particularly prone to relapsing and to reinitiating risky social behaviour. Cross-training among the various professional disciplines involved is critical to the success of such joint programmes. Police authorities can then contribute to mitigating some of the environmental risk factors for drug abuse, such as deviant peer groups, criminal groups or abusing families, while simultaneously disrupting illicit drug markets. Reviews of drug courts and similar programmes in several countries indicate that drug use and criminal behaviour are substantially reduced while offenders are participating in drug courts and that recidivism appears to be reduced. Drug courts generate cost savings, at least in the short term, from reduced incarceration time, reduced criminality and lower criminal justice costs, and drug courts are able to reach individuals who have abused substances for many years.¹⁸

49. In many countries, there are proportionately more drug abusers in the prison population than in the general population. That indicates that there is a need to provide treatment for drug abusers who are in prison and to keep illicit drugs out of prison; studies have shown that such treatment can be highly effective. Alternatives to incarceration have been used for first-time drug possession offenders, probation being dependent on the requirement that the offender remain drug-free; in some cases, this is verified by periodic drug-testing. Mandatory treatment for recidivist users has also been used in place of, or in addition to, incarceration. Budgetary implications abound here since, for such alternatives to work, adequate treatment facilities are necessary. It does no good to mandate treatment or other services for offenders if such services are not available. Nevertheless, criminal justice systems are important in reaching drug addicts who are not covered by traditional drug treatment or other services. In addition, there is a need to provide treatment and other services for drug abusers who are not criminals instead of reserving such services only for those who have been brought in through the criminal justice system.

F. Recommendations

50. Supply reduction programmes or demand reduction programmes individually have had limited success. The supply of and demand for illicit drugs are inextricably linked to form a continuum and should be treated as such. Balanced strategies continue to treat supply and demand as separate issues. Integrated strategies at all levels, which combine components of supply and demand reduction in multidisciplinary programmes, have a synergistic effect.

51. In order to assist Governments in meeting the goals set for 2008 in the Political Declaration adopted by the General Assembly at its twentieth special session (Assembly resolution S-20/2, annex), the Board makes the following recommendations:

(a) Supply reduction activities should be integrated into and coordinated with demand reduction activities. Efforts among government ministries and agencies responsible for law enforcement, health, education, social issues and economic development activities should be integrated into a complementary strategy. Efforts at various levels of government should also be coordinated to ensure both a unified approach and singular commitment;

(b) A central national authority, with a balanced representation of supply and demand reduction agencies, to coordinate efforts and to prioritize the distribution of financial and other resources among those responsible for providing health, law enforcement, criminal justice, education and social services should be considered;

(c) Training programmes for criminal justice and public health, education and social service officials on the interaction of both dimensions of the problem and strategies should be developed and implemented; combined training activities will contribute to mutual understanding between these groups;

(d) Research and analysis of existing programmes to obtain scientific evidence should be conducted and the results used to develop evidence-based integrated supply and demand programmes and to update them as appropriate;

(e) Governments should be encouraged to compile practical and effective experiences of supply

and demand strategies and to exchange them with local, national, regional and international authorities;

(f) Interdiction efforts are most effective if they focus on disrupting illicit drug markets and sources of supply. Efforts to restrict the cultivation of illicit crops and the manufacture of illicit substances at the source are critical and require international cooperation and sustained support in the form of economic, political, financial and technical aid. Eradication of illicit crop cultivation and interdiction in source areas should be accompanied by parallel social and alternative development programmes. Alternative sources of work and education programmes targeting at-risk populations are essential;

(g) Supply reduction through street-level law enforcement activities are most effective when integrated with other programmes aimed at reducing demand. Targeted education programmes can complement law enforcement activities. Consideration should be given to providing alternatives to incarceration for some non-violent drug users and to increasing services to drug abusers in prisons. The convergence of criminal justice pressure and public health services that can encourage drug abusers and hard-to-reach addicts to obtain the necessary treatment has been effective in some areas;

(h) Sustained education programmes are important in eliminating tolerance for and creating and maintaining appropriate attitudes against illicit drug availability and use. Such programmes address the perceptions of drug abuse; develop personal and social skills to help individuals make informed and healthy choices; create an environment where people can develop and lead healthy lifestyles; and are integrated into the public health curriculum in school-, community- and family-based prevention programmes;

(i) In order to protect drug abusers from the influence of criminal networks, consideration should be given to providing combined demand and supply reduction programmes that increase access to treatment, provide alternatives to incarceration and offer greater opportunities for rehabilitation and social integration. People- and service-oriented policing integrated into community-level demand reduction initiatives has been effective.