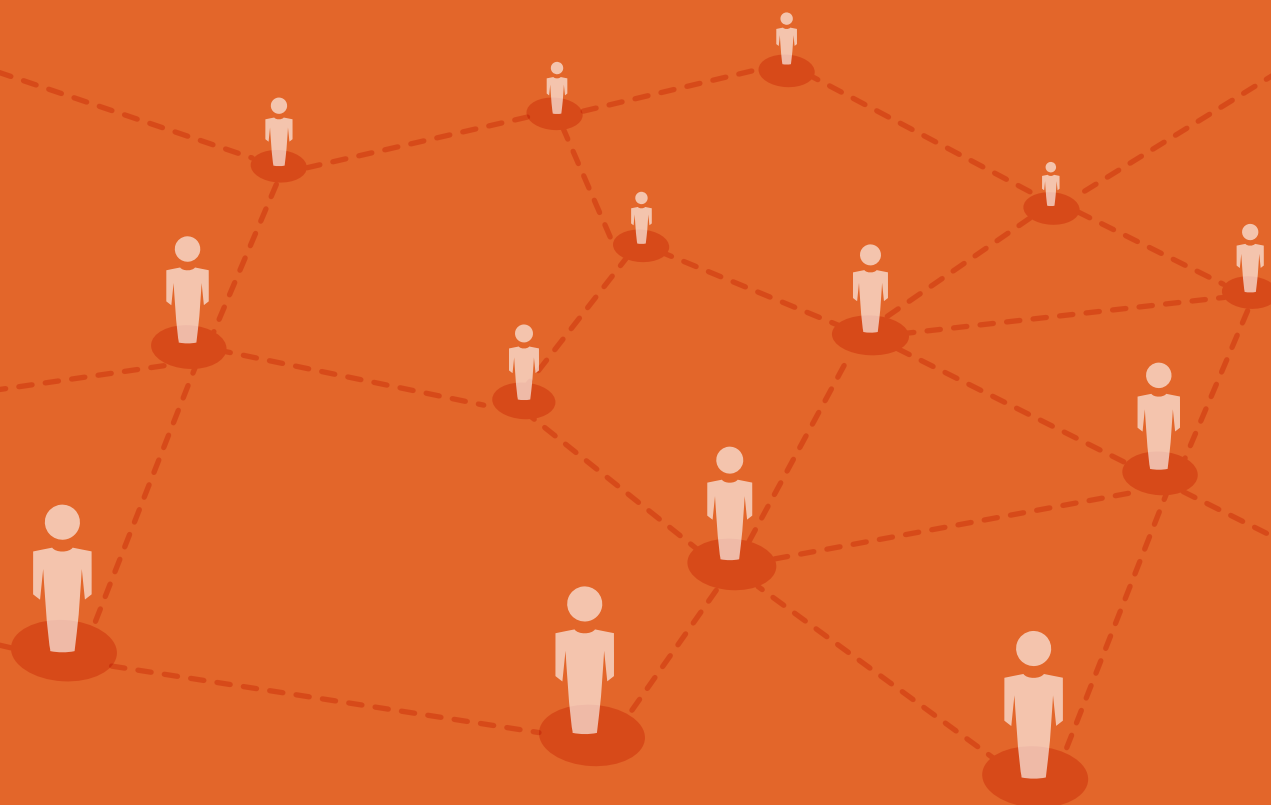


# STANDARDIZED INDICATORS FOR NATIONAL DRUG INFORMATION NETWORKS IN THE CARIBBEAN

AUGUST, 2017



Inter-American Drug Abuse Control Commission (CICAD)  
Secretariat for Multidimensional Security (SMS)  
Organization of American States (OAS)

### **OAS Cataloging-in-Publication Data**

Inter-American Drug Abuse Control Commission.

Standardized indicators for National Drug Information Networks in the Caribbean.

v.; cm. (OAS. Official records ; OEA/Ser.L/XIV.6.54).

ISBN 978-0-8270-6664-9

1. Drug abuse--Caribbean Area--Prevention--Handbooks, manuals, etc. 2. Drug abuse--Treatment--Caribbean Area--Handbooks, manuals, etc. 3. Information networks--Caribbean Area.

4. Drug control--Caribbean Area. I. Title. II. Organization of American States. Secretariat for Multidimensional Security. III. Inter-American Observatory on Drugs.

IV. Drug Information Networks. V. Series.

OEA/Ser.L/XIV.6.54

ISBN 978-0-8270-6664-9



# **STANDARDIZED INDICATORS FOR NATIONAL DRUG INFORMATION NETWORKS IN THE CARIBBEAN**

**Inter-American Observatory on Drugs (OID)**

**Inter-American Drug Abuse Control Commission (CICAD)**

**Secretariat for Multidimensional Security (SMS)**

**Organization of American States (OAS)**

*Washington, D.C.*



## ACKNOWLEDGEMENTS

Special thanks to Mr. Jean Alain Bernadel, of the Commission Nationale de Lutte Contre la Drogue (CONALD) in Haiti who, during his time as a CICAD Fellow in 2013, developed the paper that would eventually become this document.

Further, this document would not have been possible without the valuable contribution from: Dr. Ken-Garfield Douglas, Epidemiologist, Jamaica; Dr. Kyla Raynor, Senior Research Officer, Bermuda Department of National Drug Control; Mr. Dave Alexander, Head of the Grenada National Council on Drug Control; Mrs. Uki Atkinson, Research Analyst, Jamaica; Mr. Terrance Fountain, Epidemiologist, Bahamas; Mr. Clement Henry, Policy Analyst, Guyana; Mrs. Elizabeth Japal, Drug Avoidance Officer, Grenada; Ms. Tiffany Barry, Project Assistant, CICAD; and Mr. Pernel Clarke, Specialist, CICAD.

Thank you all for your invaluable contribution.



## FOREWORD

As countries develop anti-drug policies and strategies in response to the threats posed by illegal drugs, the need for specific and timely information that defines the situational context becomes extremely important. Policy makers and the practitioners who bring these policies to life need to ensure that the decisions that they make and the actions that they take are based on the best available information about the state of the drug problem in their country. One of the mechanisms that Inter-American Drug Abuse Control Commission (commonly known by its Spanish language acronym, CICAD) has been promoting through its Inter-American Observatory on Drugs Unit to OAS member states is the establishment of national Drug Information Networks (DINs). A DIN is a group of people who, representing either themselves or an agency, collect, analyze and disseminate information on drugs for the purpose of monitoring trends, developing policy, and implementing appropriate programs and responses. DINs usually form part of or are coordinated by national drug observatories or their equivalent.

This guide, developed by and for persons working in member states of the Caribbean, presents a model set of indicators to countries desirous of standardizing the way that they organize, collect, and report drug-related information for their DINs. This guide has a systematic layout and begins with an explanation of what a DIN is and provides some examples of DINs from various parts of the world. It then presents a framework of standard indicators that countries can use as a model that they can apply to their national networks. The three main groups of indicators are drug supply reduction, drug demand reduction, and other qualitative indicators. The guide takes the varying levels of capacity in the member states into account by proposing a tiered system of indicators that are ranked in order of difficulty by the regional experts who were consulted. The first level of indicators is described as standard, which means that most if not all countries should currently have the capacity to collect the information needed for these indicators. The second level of indicators is described as standard but challenging to collect, meaning that this information is important for countries to collect but it will be challenging for most of them to do so based on their current capacity and resources. The third level of indicators is described as optional, which means that even though these indicators are important, most countries do not have the capacity to collect or generate the required information and could consider these indicators as goals that they can work towards achieving as their information systems improve.

With the indicators presented in this way, countries should not feel overwhelmed nor believe that they are failing because they lack the information for certain indicators. Countries should strive to collect information for all of the standard indicators while they work to improve their ability to collect information for the remaining indicators. This guide is not a static document, and we will strive to update it as situations, priorities, technology and information needs change.

We hope that the national drug observatories in our member states will take full advantage of this guide and try to incorporate the indicators discussed into their networks. This is not a prescriptive document, but it helps for comparison purposes if all of the national observatories define indicators in the same way and homogenize their collection and reporting activities. Ultimately, we hope that national drug policies and actions improve over time as the information and evidence generated by your networks become more timely, reliable, and valid.

**Adam E. Namm**

*Executive Secretary*

CICAD





# CONTENTS

ACKNOWLEDGEMENTS.....	3
FOREWORD.....	5
INTRODUCTION .....	9
OAS/CICAD and OID.....	10
Drug Information Networks.....	10
Establishing and Developing a DIN .....	12
What Already Exists .....	13
Uniform Drug Supply Control Statistical System (CICDAT).....	14
Multilateral Evaluation Mechanism (MEM) .....	14
Annual Report Questionnaire (ARQ).....	14
Programa de Cooperación entre América Latina y la Unión Europea en Políticas sobre Drogas (COPOLAD) ....	15
FRAMEWORK OF STANDARDIZED INDICATORS.....	15
STANDARD INDICATORS RELATED TO DRUG SUPPLY .....	16
INDICATOR GROUP 1: Drug Seizures .....	16
INDICATOR GROUP 2: Arrests for Drug Offenses.....	17
INDICATOR GROUP 3: Prosecutions for Drug Offenses.....	18
INDICATOR GROUP 4: Drug Price .....	18
INDICATOR GROUP 5: Other Seizures Related to Drug Offenses.....	19
INDICATOR GROUP 6: Illicit Drug Production .....	20
OPTIONAL INDICATORS FOR SUPPLY SIDE OF THE DRUG PROBLEM .....	21
INDICATOR GROUP 7: Drug-Related Crime .....	21
INDICATOR GROUP 8: Purity of Drugs .....	23
INDICATOR GROUP 9: Number of Deportees Related to Drug Offenses .....	24
INDICATOR GROUP 10: Suspicious Activity Reports (From Financial Intelligence Units) .....	24
INDICATOR GROUP 11: Arrests for Money Laundering.....	25
STANDARD INDICATORS RELATED TO DRUG DEMAND .....	26
INDICATOR GROUP 12: Drug use Among Young People, Risk Factors, Anti-Social Behavior .....	27
INDICATOR GROUP 13: Treatment Utilization .....	28
INDICATOR GROUP 14: Prevalence, Incidence of Drug Use in the General Population .....	29
OPTIONAL INDICATORS FOR DEMAND SIDE OF THE DRUG PROBLEM .....	30
INDICATOR GROUP 15: Drug-Related Morbidity.....	30
INDICATOR GROUP 16: Drug-Related Mortality.....	31
INDICATOR GROUP 17: High-Risk Drug Abuse (Problematic Drug Use).....	32
INDICATOR GROUP 18: Economic Cost of Drugs .....	32
OTHER SOURCES OF INFORMATION RELATED TO DRUG SUPPLY AND DEMAND .....	35

Qualitative Data ..... **35**

    1.Key Informant Studies..... **36**

    2.Focus Groups ..... **36**

    3.Early Warning System ..... **37**

    4.Rapid Assessment Surveys ..... **37**

CONCLUSION..... **38**

REFERENCE ..... **41**

APPENDIX 1 ..... **i**

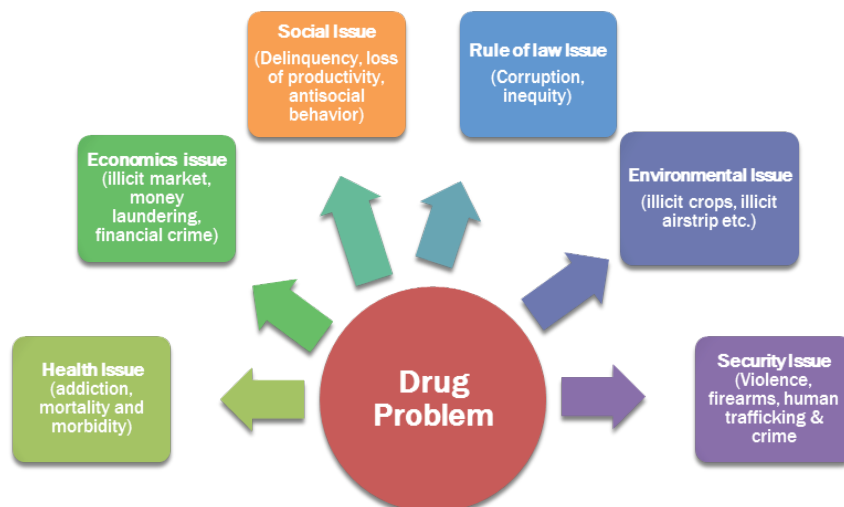
APPENDIX 2 ..... **xi**

# INTRODUCTION

When a country addresses the drug problem by ratifying international conventions, and by establishing appropriate laws on the matter, over time it is necessary to assess the *actual* situation. Policies and programs designed to deal with the drug issue have to take into account the magnitude, the impact and the patterns of the problem. As a matter of fact, key indicators capable of measuring the many aspects of the drug problem are needed. Moreover, these policies and programs must be based on evidence-based interventions in order to assure the *validity* of their actions, and guarantee that the best practices are utilized. This leads to greater reliability *and* ensures that the actions are accurately and effectively targeting the problem. In this regard, the CICAD/OAS Hemispheric Drug Strategy states in Article 11 that institutions addressing the drug problem, “shall develop and implement national drug policies that are evidence-based” (OAS, CICAD, 2009). It is for these reasons that, indicators were created mostly in the field of *Drug Abuse Epidemiology*, to collect analyze and disseminate data by different stakeholders working on the drug problem using a variety of methods for each aspect of the problem. However, it is important to note that because of the illegal nature of some drugs, it is often difficult to collect the required data. Throughout this paper we will present best practices for each indicators proposed, all of which were developed by countries and international organizations working in the field of drug abuse epidemiology.

Thus, knowing the importance of indicators in addressing the drug problem leads to another question: What is the drug problem? *The world drug problem* is defined in the *Political Declaration* of the twentieth special session of the United Nations General Assembly (1998) and in the United Nations Commission on Narcotic Drugs *Political Declaration on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem* (2009), and includes the illicit cultivation, production, manufacture, sale, demand, trafficking and distribution of narcotics drugs and psychotropic substances, including amphetamine-type stimulants, the diversion of precursors and related criminal activities (CICAD, 2013). Moreover, the drug problem has been described in the Declaration by OAS Secretary General José Miguel Insulza, on 20 January 2013 in Panama City, Panama as “one of the most important challenges facing the hemisphere, with its impact on public health and the cost incurred by States, and with the tremendous amount of violence that it brings” (OAS, 2013). From these statements, we can consider that the drug problem is related to health, economic issues, social issues, rule of law, and environmental issues. Knowing the definition and the areas taken into account by the drug problem will help to identify indicators capable of measuring related factors. Figure 1 provides a conceptual view of possible indicators.

**Figure 1. Aspects of the drug problem**



A key principle to note is that approaches have to be adapted to meet local needs and conditions. The main model used here comes from past experience in working with the Inter-American Observatory on Drugs (OID) of CICAD and with regional drug information networks (DINs).

### **The report presents:**

- A main narrative
- Appendix:
  - A summary of the indicators
  - Data gathering tools

## **OAS/CICAD and OID**

The Organization of American States (OAS) was founded in 1948<sup>1</sup> and is the world's oldest regional organization. It promotes and supports democracy, human rights, multidimensional security and integral development in the Americas while seeking to prevent conflicts and to bring about political stability, social inclusion and prosperity in the region through dialogue and collective action.

Within the OAS, the Inter-American Drug Abuse Control Commission (CICAD) fulfills the mission of building the human and institutional capacity of its members to reduce the production, trafficking and consumption of illicit drugs, and to manage the consequences on health, society and crime. CICAD was created in 1986 and serves the member states of the OAS. It monitors the implementation of the Hemispheric Drug Strategy that was adopted by the General Assembly of the OAS in 2010 by utilizing the Hemispheric Plan of Action on Drugs 2016-2020<sup>2</sup>.

Within CICAD, The Inter-American Observatory on Drugs (OID) is the unit that helps to promote and build a drug information network for the Americas that offers objective, reliable, up-to-date and comparable information so that member states can better understand, design and implement policies and programs to confront the drug phenomenon in all its dimensions. Created in 2000, the Observatory supports hemispheric policy and cooperation by examining the nexus of supply and demand, both within the hemisphere and vis-à-vis other regions of the world. It has the potential to serve as an early warning system on the appearance of new drugs, new methods of using and manufacturing drugs, and changing trafficking patterns<sup>3</sup>. The Observatory also helps to build drug information networks in countries to support data collection and dissemination.

## **Drug Information Networks**

Approaches to collecting drug-related information should consist not only of techniques and methods, but should also take into account the actual sources of data. In this case, international institutions such as the United Nations Office on Drugs and Crime (UNODC), European Monitoring Center for

---

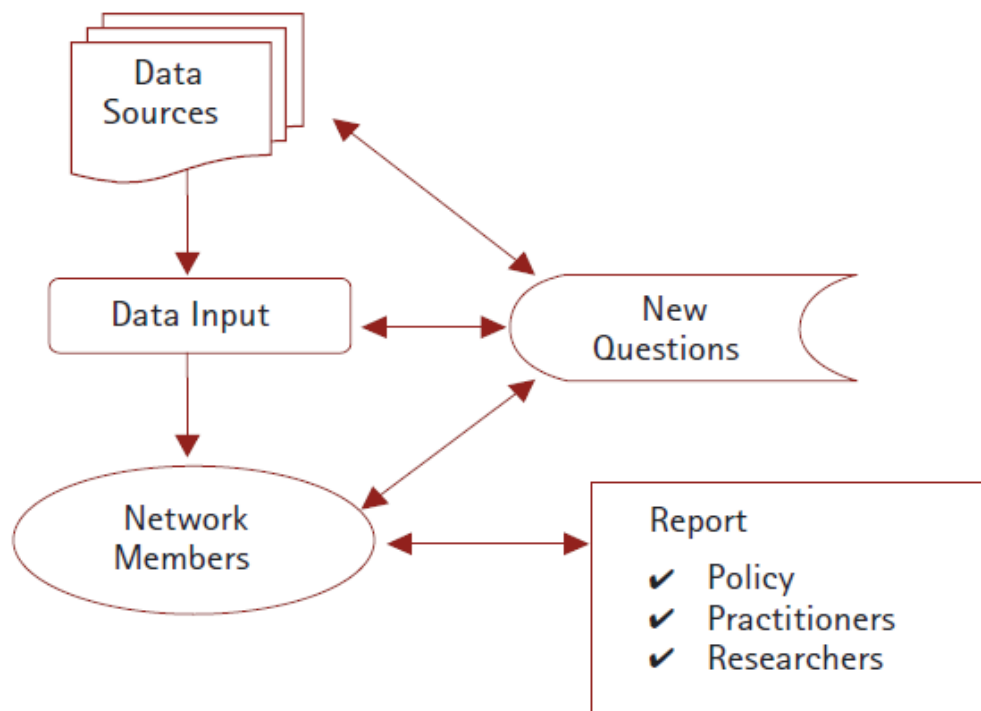
1 For more details see : [http://www.oas.org/en/about/who\\_we\\_are.asp](http://www.oas.org/en/about/who_we_are.asp)

2 For more details see: [http://www.cicad.oas.org/mem/Activities/PoA/PoA-Version\\_Final-ENG.pdf](http://www.cicad.oas.org/mem/Activities/PoA/PoA-Version_Final-ENG.pdf)

3 For more details about CICAD and the OID, visit: [www.cicad.oas.org](http://www.cicad.oas.org)

Drugs and Drug Addiction (EMCDDA) and CICAD have stressed the importance of building networks of people and agencies that work to address the drug problem, in order to develop a structure for regular information collection and sharing.

**Figure 2. Scheme which represents the path from data collection to dissemination of data**



Note: Retrieved from the publication: Developing an Integrated Drug Information System (UNODC, 2002).

For example, in the United States, there was a network of local drug abuse experts called the Community Epidemiology Work Group (CEWG), which from 1976 to 2014 met semiannually to discuss the current epidemiology of drug abuse. The primary mission of the work group was to provide ongoing community-level surveillance of drug abuse through analysis of quantitative and qualitative research data. Through this program, the CEWG provides current descriptive and analytical information regarding the nature and patterns of drug abuse, emerging trends, characteristics of vulnerable populations, and social and health consequences (NIH, 2013). The CEWG was succeeded by the National Drug Early Warning System (NDEWS) in August 2014.

In the publication, “Developing an Integrated Drug Information System, 2002”, a Drug Information Network (DIN) is said to consist of: data or input relative to measures of drug use within a population within a specified period of time; a review and interpretation of the data by local experts who know some aspect of the drug use problem; and a mechanism for reporting the findings of the reviews and interpretations to other researchers, prevention and treatment providers and policy makers (UNODC,

2002). In summary, a DIN must collect, analyze and produce “reliable, accurate and current data on drug use to guide action on demand reduction”. From the perspective of the OI, a DIN should also include data and information from law enforcement and other supply reduction agencies as well as from drug treatment and rehabilitation providers.

## Establishing and Developing a DIN

Building a sustainable Drug Information Network (DIN) requires three important stages: 1) Information needs and resources assessments; 2) Involvement of identified stakeholders; 3) Data collection, analysis and sharing.

Firstly, a country, region or a group of countries needs to assess the existence of information on drugs in their settings. This assessment will also evaluate the institutions and structures in place that could help to address the drug problem and generate information on their attributes. Authorities should then lead discussions with representatives from institutions working in the drug supply reduction and drug demand reduction areas to present and discuss the findings from the initial assessment. Finally, at the end of this first stage, a report of the Information Needs and Resources Analysis (INRA) will be prepared and shared with all stakeholders, national and international as appropriate. This report will assess the situation and the ability of the entities to manage and share drug information, as well as their strengths and weaknesses.

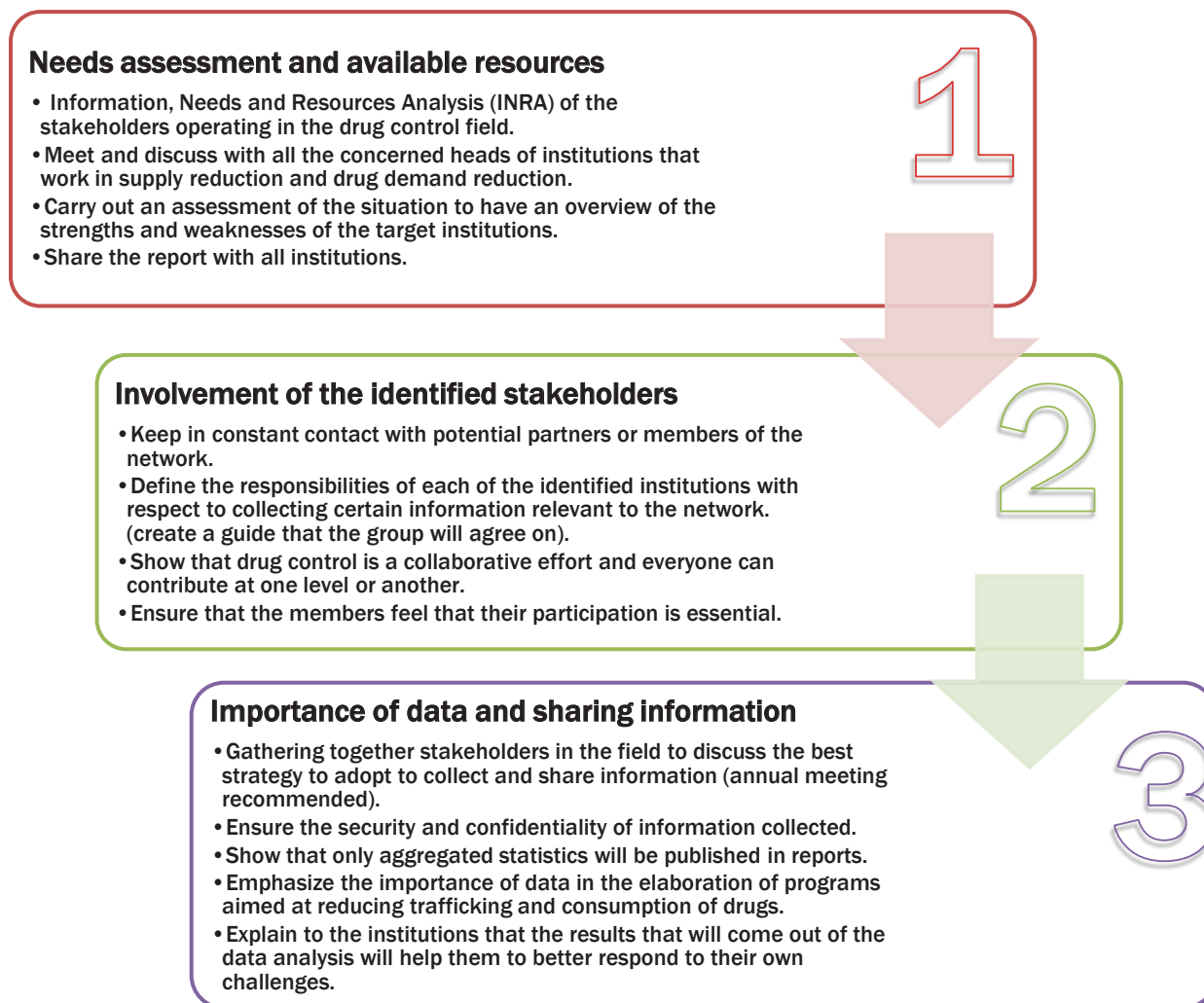
When the initial assessment is completed, the coordinating team assembling the DIN moves to the next stage, which is to keep identified stakeholders involved in the development of the network. Lessons of the past have taught us that building a network of stakeholders working in different areas of drugs and keeping this network active requires great leadership capacity on the part of the coordinator who is able to create a bond and a sense of cohesion among different actors. For instance, UNODC (2002) recommends when establishing a network that it should be led by a coordinator who will organize meetings, agendas and reporting. Leadership could be rotated among the network membership. Indeed, this person will assure that meetings and information sharing are done on a regular basis. Also, in initial meetings, responsibilities of each of the identified institutions must be clearly identified regarding information collection and sharing relevant to the network objectives. Finally, with repetition of regular activities, a sense of routine will develop among stakeholders leading to the practice of a multi-institutional approach to the drug problem.

DINs should aim to achieve specific outcomes such as the publication of an annual report. As recommended by CICAD and UNODC, a report showing the drug situation in the settings should be published regularly; in most cases, annual reports are recommended. Further, the coordinating entity should make a continuous effort to improve the quality of the data as it relates to reliability and coverage. Importantly, information analyzed has to be transformed in a way to create evidence-based programs or policies. Indeed, if the report does not show any possibility of creating genuine program or policies to address the problem, it will have no value. Therefore, communicating results and creating evidence-based policies and programs are the long-term outcomes of a DIN.

In conclusion, the key activities and outputs of a DIN are:

- Advocacy for creating cost-effective policies.
- Collection of reliable data for comparable needs and identification of emerging trends related to drug abuse or trafficking.
- Writing and dissemination of drug reports.

Figure 3. The 3 Steps for establishing a Drug Information Network



## What Already Exists

Lists of indicators are mostly found in already established Drug Information Networks (DINs). There are many examples of DINs in some Caribbean countries, United States and Europe. The Bermuda Drug Information Network (BERDIN) provides a great example of a very successful DIN that collects information on almost every aspect of the drug problem. Moreover, the Haitian Drug Information Network called “*Le SHID*” (*Le Système Haïtien d’Information sur les Drogues*) has also developed the practice of convening stakeholder meetings related to the drug problem. The 2012 annual report (in French) of SHID<sup>4</sup> and the reports of The Grenada Drug Epidemiology Network (GRENDEN) are other good examples of outputs from a DIN<sup>5</sup>.

In Europe, the DIN known as REITOX assures data collection and reporting in this region<sup>6</sup>. The United

4 An executive summary in English can be accessed on <http://conaldhaiti.blogspot.com/2013/08/report-of-drug-situation-in-haiti-2012.html>

5 GRENDEN: [http://www.gov.gd/egov/pdf/ncodc/docs/grenden\\_annual\\_report-2012.pdf](http://www.gov.gd/egov/pdf/ncodc/docs/grenden_annual_report-2012.pdf)

6 REITOX: <http://www.emcdda.europa.eu/about/partners/reitox-network>

States has the National Drug Early Warning System (NDEWS) which is an interstate network that assesses the drug situation<sup>7</sup>. Along with DINs, many projects from international institutions such as CICAD or UNODC, among others, have created lists of drug indicators. Examples include:

- Uniform Drug Supply Control Statistical System (CICDAT)
- Multilateral Evaluation Mechanism indicators (MEM)
- Annual Report Questionnaire indicators (ARQ)
- Programa de Cooperación entre América Latina y la Unión Europea en Políticas sobre Drogas (COPOLAD)

### ***Uniform Drug Supply Control Statistical System (CICDAT)<sup>8</sup>***

CICDAT was a statistical information system of the Inter-American Observatory on Drugs (OID), which allowed for the monitoring of the drug supply area. It was a system with a standardized set of indicators for collecting information on arrests, seizures and other law enforcement data along with information on drug purity, prices and other drug market statistics.

Its objectives were to help policy makers in the planning and execution of policies and the evaluation of drug strategies. CICDAT also helped to show the illicit drug trafficking situation in the hemisphere.

### ***Multilateral Evaluation Mechanism (MEM)<sup>9</sup>***

The Multilateral Evaluation Mechanism (MEM) is an instrument designed to measure the progress of actions taken by the 34 member states of the Inter-American Drug Abuse Control Commission (CICAD). This evaluation is carried out through the elaboration and publication of national and hemispheric reports on the progress in drug control. Acting on a mandate from the Second Summit of the Americas, the MEM was created in 1999 with the objective of increasing coordination, dialogue, and cooperation within the OAS member states in order to confront the drug problem more efficiently.

### ***Annual Report Questionnaire (ARQ)<sup>10</sup>***

The Annual Report Questionnaire is an instrument developed by the UNODC in order to assess the world drug problem. It is divided into four parts:

- Legislative and Institutional Framework
- Comprehensive Approach to Drug Demand Reduction and Supply
- Extent and Patterns of Drug Use
- Extent and Patterns of and Trends in Drug Crop Cultivation, Drug Manufacture and Trafficking

<sup>7</sup> NDEWS: <https://www.drugabuse.gov/about-nida/organization/workgroups-interest-groups-consortia/community-epidemiology-work-group-cewg>

<sup>8</sup> <http://www.cicad.oas.org/oid/caribbean/2007/CICDAT.pdf>

<sup>9</sup> [http://www.cicad.oas.org/Main/Template.asp?File=/mem/about/default\\_eng.asp](http://www.cicad.oas.org/Main/Template.asp?File=/mem/about/default_eng.asp)

<sup>10</sup> <http://www.unodc.org/unodc/en/commissions/CND/10-GlobalData.html>



## ***Programa de Cooperación entre América Latina y la Unión Europea en Políticas sobre Drogas (COPOLAD)<sup>11</sup>***

**COPOLAD** is a partnership cooperation program between the European Union (EU) and Latin American and Caribbean countries, aiming to improving the coherence, balance and impact of drugs policies, through the exchange of mutual experiences, bi-regional coordination and the promotion of multi-sectorial, comprehensive and coordinated responses. A component of this program seeks to build capacity among national drugs observatories and include the development of indicators for DINs.

The indicators that have been developed in this document are based on or include elements of the systems described above.

## **FRAMEWORK OF STANDARDIZED INDICATORS**

The development of indicators is an important step in the development of a DIN and they are used to guide the systematic collection of data on various aspects of the drug problem in a country. Building networks and creating appropriate institutional structures is necessary to have the required mechanism to support the collection of these indicators. Training, technical support, and sustained political support and investment will be needed to ensure the sustainability and success of data collection systems.

One characteristic of drug using populations is that they are hard-to-reach populations. They are populations that, as far as official institutions and their records are concerned, are hidden with respect to access. In addition, because of the potential effects of stigma and illegality, they are also hidden with respect to the accuracy of the responses that might be provided. As a result, indicators relating to the drug problem should be interpreted cautiously because they may contain some bias.

The term “indicator” is commonly used to refer to data which serves to indicate the nature and extent of substance abuse and related consequences (UNODC, 2002). Indicators should be:

1. specific regarding quantities, quality, time and situation;
2. verifiable by statistical data, observation, and registries;
3. relevant in the context of an intervention.

In short, they have to be SMART: Specific, Measurable, Appropriate, Realistic, and Time-Bound (EMCDDA, 2010).

As was mentioned previously, the drug problem is multidimensional. Therefore, the presentation of indicators should consider each aspect of the drug problem. Commonly, the drug problem is conceptually divided into two areas: demand and supply. However, new topics have been included and this leads to new ways of looking at the drug problem such as through the lens of money

---

<sup>11</sup> [www.copolad.eu](http://www.copolad.eu)

laundering, human, social and economic costs, harm related to drugs, and others. In this document, we will use the common terminology that captures drug problem in two dimensions: drug supply and drug demand. Also, we will first discuss the easiest and most relevant indicators to collect, and then discuss those that are more challenging even in developed countries.

All standard indicators listed below are adopted from DINs or projects that assess the world or regional drug problem.

## STANDARD INDICATORS RELATED TO DRUG SUPPLY

When assessing the drug situation in a country, it is common to collect primary data regarding security and law enforcement. There are many indicators that measure these domains, such as drug seizures, arrests for drug offenses, prosecutions, drug prices, other seizures related with drug offenses and illicit or licit drug production<sup>12</sup>. Other optional indicators could also be collected such as drug-related crime, purity of drugs, number of deportees related to drug offenses, suspicious activity reports (from financial intelligence units) and arrests for money laundering.

### INDICATOR GROUP 1: Drug Seizures

#### 1.1. Definition

This group of indicators gives the quantity of each type of drug seized, shows the police and customs' response to illicit trafficking of drugs, and also indicates the availability of certain drugs in the country. It cannot by itself measure the amount of drug trafficking in the country, but it gives an idea of supply side activities. In addition, this indicator helps to measure if there is change in the drug market. Nevertheless, these indicators must be interpreted with caution because an increase, for example of seizures, could mean an increase of police activity, an increase of the availability of drugs in the region, or a combination of these. Also, seizures could also help to define drug trafficking routes by knowing the origin of the drug and its destination.

#### 1.2. Source and Frequency of Collection

The possible sources of information for these indicators include police records, customs records, forensic laboratories and specialized drug enforcement agencies (WHO, 2000). In most countries, it is the police who provide drug seizure data.

The police usually record drug enforcement activities that produce an ample amount of information regarding indicators relating to drug supply. Numbers of drug enforcement activities also indicate the response of police to drug offenses. A drug enforcement activity<sup>13</sup> can be defined as any activity undertaken by an authority responsible for enforcing the law on drug trafficking that can lead to the arrest of persons, seizure of products identified as drugs, and the seizure of proceeds of crime, money and other property-related to drug offenses.

---

<sup>12</sup> Model forms for collecting information such as drug seizures, drug prices, arrests for drug offences, and prosecutions are available in the Appendix to this Report.

<sup>13</sup> This concept is used in the Haitian Drug Information Network [SHD](#) and the Bermuda Drug Information Network [BERDIN](#) annual reports.

**The recommended frequency of data collection: QUARTERLY.**

**The indicators in this group are:**

1. Quantity of each drug seized (Specify units used; Examples –grams, pounds, number of tablets)
2. Number of drug seizures
3. Settings where the operation(s) occurred
4. Country of origin
5. County of destination

### **1.3. Example**

*“On the supply reduction side of drugs ... In 2012 there was a seizure of 134,280 grams of marijuana and 305,952 grams of cocaine” (CONALD, 2012, pp. 8)*

## **INDICATOR GROUP 2: Arrests for Drug Offenses**

### **2.1. Definition**

This set of indicators tracks the number of persons arrested for drug possession, trafficking, and intent to supply or any other drug offenses as specified in domestic laws. Additional demographic information is also useful for targeting vulnerable populations. This indicator could also help to implement interventions such as violence prevention programs and other initiatives for the targeted population.

### **2.2. Source and Frequency of Collection**

The sources of these indicators are police records or special drug enforcement units.

**The recommended frequency of data collection: QUARTERLY.**

**The indicators in this group are:**

6. Number of persons arrested for drug possession, trafficking
7. Type of drug
8. Number of persons arrested for intent to supply
9. Other drug offenses as specified in domestic laws

### 2.3. Example

*“...A total of 8,456 arrests were made by the Narcotics Division and other divisions for the possession or trafficking of illegal drugs in 2009, with a male to female ratio of 7911 to 554. Of this number, 155 were foreign nationals, mainly from the United Kingdom, the United States and Canada...” (JADIN, 2009, pp.7)<sup>14</sup>*

## INDICATOR GROUP 3: Prosecutions for Drug Offenses

### 3.1 Definition

This set of indicators is useful for examining sentencing policies (WHO, 2000). It helps to monitor the application of the rule of law against drugs traffickers and others who commit drug offenses. It provides information of the number of persons tried or convicted for a drug offence.

### 3.2 Source and Frequency of Collection

The data for these indicators are usually found in Court statistics or the records of penal institutions and prisons. Data should be collected at regular intervals but note that data often becomes accessible only after a long delay (WHO, 2000).

**The recommended frequency of data collection: QUARTERLY.**

**The indicators in this group are:**

10. Number of persons tried for drug trafficking, possession
11. Number of persons convicted

### 3.3. Example

*“...Prosecutions for alcohol-related offenses have gradually decreased since 2006. Offenses included in this category are driving while impaired, drunkenness, and refusals. Not surprisingly, driving while impaired had a greater number of trials and convictions when compared to drunkenness. Overall, significantly more females have been tried for, and convicted of, alcohol-related offenses than their male counterparts.” (DNDC15, 2012, pp. 11)*

## INDICATOR GROUP 4: Drug Price<sup>16</sup>

### 4.1. Definition

The price of a drug is considered as an indirect indicator of its availability because it may impact on the perceived availability of illicit drugs and reflect supply side factors (OAS & EMCDDA, 2010). In

<sup>14</sup> Jamaica Drug Information Network (JADIN)

<sup>15</sup> Bermuda Department for National Drug Control (DNDC)

<sup>16</sup> Standard indicator but difficult to collect

addition, drug price is used to evaluate the size of the drug trafficking market. Prices should be in local currency and be expressed in dollars per unit (e.g. dollars per grams for cocaine or dollars per pound of marijuana).

#### 4.2. Source and Frequency of Collection

Possible sources include: Police records, Customs records, key informants and specialized law enforcement agency records.

In most cases, police information helps to identify drug prices. Usually, for each drug seizure, they could estimate the drug unit price (for example, price of one kilo of cocaine). However, it is useful to use multi source approaches and techniques such as *triangulation*<sup>17</sup> to have more robust estimates. For instance, welfare agencies working with street children could also provide information on street prices of drugs. In addition, qualitative methods such as *focus groups*<sup>18</sup> with street children and drug users could help to assess this indicator (see section regarding qualitative data). Information can also be extracted from surveys among prisoners upon entry to prison and patients in treatment facilities where they are asked to self-report the street names and prices of drugs.

**The recommended frequency of data collection: BIANNUALLY.**

**The indicators in this group are:**

12. Price in dollars (by drug and in local currency or US\$ equivalent)
13. Factors influencing changes in drug price

#### 4.3. Example

*“The average selling price of retail cannabis resin in 2010 ranged between 3 and 17 euros per gram in twenty-six countries providing information on this subject, fourteen reported prices between 7 and 10 euros.” (EMCDDA, 2012, pp. 45)*

## INDICATOR GROUP 5: Other Seizures Related to Drug Offenses<sup>19</sup>

### 5.1. Definition

This group of indicators consists of gun seizures, money seizures, building seizures and vehicles seizures. While the first two help as a proxy for gun possession related to drugs and money laundering or illicit financial activities respectively, the latter two refer to administrative data that could help manage information for institution that administers illicit goods seized from drug trafficking. CICDAT can be used to collect this information.

<sup>17</sup> In the [social sciences](http://en.wikipedia.org/wiki/Triangulation_(social_science)), **triangulation** is often used to indicate that two (or more) methods are used in a study in order to check the results. Reference : [http://en.wikipedia.org/wiki/Triangulation\\_\(social\\_science\)](http://en.wikipedia.org/wiki/Triangulation_(social_science))

<sup>18</sup> Focus groups and key informants studies are the two qualitative approaches most commonly used. They are usually open-ended approaches. (WHO, 2000, pp. 36)

<sup>19</sup> Standard indicator but difficult to collect

## 5.2. Source and Frequency of Collection

Police sources usually provide this information within drug enforcement activities.

**The recommended frequency of data collection: QUARTERLY.**

**The indicators in this group are:**

14. Firearm seizures
15. Money seizures
16. Building seizures
17. Vehicles seizures

## 5.3. Example

*"...4 firearms were seized by the Royal Grenada Police Force, in relation to drug trafficking, during the period 1 January to 30 June 2011..." (GRENDEN20, 2012, pp. 27)*

## INDICATOR GROUP 6: Illicit Drug Production<sup>21</sup>

### 6.1. Definition

This set of indicators measures the level of production of drugs in the country. It consists of indicators such as drug crop sizes and yields, seizures of precursors (controlled chemical substances) and numbers of illicit laboratories. These indicators help to measure, mostly in production countries, how much drugs are being produced, cultivated or created (in illicit laboratories) in the country.

### 6.2. Source And Frequency Of Collection

Data collection for these indicators is very difficult. Usually, police may have information on illicit crops of marijuana for example, but only rarely do they estimate the size of the crop. Moreover, special knowledge of geographical information systems is needed to estimate crop size. With regards to production such as the tons of coca (or cocaine) produced for example, usually very specific estimation methods are used. Seized precursors are another way for estimating synthetic drug production. Customs records usually have this information.

With regard to drug production, there is no frequency for collecting this data because of its nature. Regular assessment (mostly qualitative such as reviewing newspaper articles) could be made to determine if there is illicit production of drugs in transit countries (such as Caribbean and Central American countries).

---

<sup>20</sup> (GRENDEN): Grenada Drug Epidemiology Network

<sup>21</sup> Standard indicator but difficult to collect

The recommended frequency of data collection: **ANNUALLY**

The indicators in this group are:

18. Measure of the level of production of illegal drugs<sup>22</sup>
19. Drug crop areas discovered and destroyed
20. Quantity of seized precursors
21. Number of illicit laboratories discovered

### 6.3. Example

*“...According to U.S. sources, total global cocaine production, which fell between 2000 and 2008, has leveled off at about 800 metric tons per year...” (OAS, 2013, pp.39)*

## OPTIONAL INDICATORS FOR SUPPLY SIDE OF THE DRUG PROBLEM

### INDICATOR GROUP 7: Drug-Related Crime

#### 7.1. Definition

This set of indicators is very useful for seeing the link between drugs and criminal offenses. It is also a very challenging indicator to collect.

Based on the EMCDDA/ CICAD *“Building a National Drug Observatory: a joint handbook”*, the definition of drug-related crime encompasses four categories:

- **Psychopharmacological crimes:** *crimes committed under the influence of a psychoactive substance, as a result of its acute or chronic use.*
- **Economic-compulsive crimes:** *crimes committed in order to obtain money (or drugs) to support drug use.*
- **Systemic crimes:** *crimes committed within the functioning of illicit drug markets, as part of the business of drug supply, distribution and use.*
- **Drug law offenses:** *crimes committed in violation of drug (and other related) legislation. (OAS, EMCDDA, 2010, pp. 33)*

---

<sup>22</sup> Precursors: Chemicals used in the manufacture of illegal drugs.

The last category of drug-related crime is already measured by the second set of indicators (indicator group 2): Arrest for drug offence (mostly trafficking, but also, possession, distribution or production).

Moreover, according to the WHO, *in absence of scientific data, many myths and misconceptions arise regarding substance use* (WHO, 2000, p.15). Therefore, epidemiological studies are needed to examine the relationship between drugs and crime and define its characteristics.

## **7.2. Source and Frequency of Collection**

The drug-related crime indicator is assessed through conducting surveys of persons residing in juvenile facilities or prisons. This is a challenging undertaking because of the settings (prisons) and the sensitive nature of the information that is dealt with but in most cases, it can be done. Also, techniques such as urinalysis could be used to assure validity of the responses for recent substance use.

CICAD has developed a standardized methodology for conducting prison surveys on the relationship between drugs and crime known as the Uniform Drug Use Data System (SIDUC) and has applied it in several Caribbean/OAS member states which allows for the estimation of drug-related crime from a random sample of inmates.

Other methodologies are also used to assess the relationship between drugs and crime. Police records, with robust information, could show a link between drug trafficking and gang violence, kidnappings, murders, trans-national organized crime and arms trafficking. These methodologies need to be assessed for reliability purposes and more research could also help to strengthen or reinforce links shown from the mining of police records of drugs and crime. One disadvantage of police records is that they are often not available if a case is still open, and this will limit the amount of information that is made available.

**The recommended frequency of data collection: 3-5 YEARS.**

**The indicators in this group are:**

22. Characterization of the relationship between drugs and crime. The specific objectives of the SIDUC study are:

- To determine the socio-demographic profile of charged and convicted adult inmates in the prison system.
- To establish the pattern of psychoactive substance use in the personal background of each prisoner studied, specifying each substance used.
- To identify the types of crimes that are usually connected with psychoactive substance use based on the criminal records of the prison population under study.
- To determine the link between criminal behavior and drug use in the Americas based on the characteristics of the target population.



- To establish the impact of drug use on treatment needs in the various individual and family settings for the prison population studied.
- To develop strategies for better management of the psychoactive substance use problem in the prisons of the Americas and in the high-risk groups, from the perspective of crime and violence.

### 7.3 Example

*“...Offenders on remand (in Saint Vincent and the Grenadines) were asked if they had ever been convicted and imprisoned for any offense: 43.9% said ‘yes’. Those who responded in the affirmative were asked whether the crime for which they were previously convicted had some type of relationship with drugs: 18.9% said ‘yes’. Convicted offenders were also asked this question and 44.4% said “yes”” (CICAD, 2012, pp. 47)*

## INDICATOR GROUP 8: Purity of Drugs

### 8.1. Definition

Seized drugs could be shown to have different degrees of purity after appropriate analysis. It is necessary, in this case, to have the support of forensic laboratories that can provide the data from tests performed on seized drugs.

This indicator group helps us to understand the availability of drugs. For instance, decreasing street price without a decline in purity, in conjunction with an increase in the number and quantity seized is consistent with rising rather than falling availability of the drug concerned.

### 8.2. Source and Frequency of Collection

Possible sources include: Police records, Customs records, forensic laboratories and specialized enforcement agencies.

Data collection for this indicator group requires access to laboratories with the capacity to analyze drugs. Not many countries in the Caribbean or Central America have this capacity.

**The recommended frequency of data collection: ANNUALLY.**

**The indicator in this group is:**

23. Degree of purity of drugs seized

### 8.3 Example

*“...The purity of methamphetamine has varied in 2010 in twenty countries reporting data, with the degree of purity less than 15 percent in Belgium and Denmark and over 60% in the Czech Republic, Slovakia, the United Kingdom and Turkey...” (EMCDDA, 2012, pp. 57)*

## INDICATOR GROUP 9: Number of Deportees Related to Drug Offenses

### 9.1. Definition

This indicator group helps to obtain information on the number of people who are deported for illegal drug problems in foreign countries. Not every country is concerned with this indicator.

### 9.2. Source and Frequency of Collection

This indicator could be obtained from police records, immigration authorities, and ministries of foreign affairs.

Some people assume that deportees for drug problems from foreign countries are involved in domestic drug issues. Special studies on this matter should take place to confirm or refute this assumption. A method to verify this assumption would be to calculate from the deportees that were convicted for drug problems the percentage of them that have also been arrested in their domestic country for drug-related offenses.

**The recommended frequency of data collection: ANNUALLY.**

**The indicator in this group is:**

24. Number of persons who are deported for illegal drug problems in foreign countries

### 9.3. Example

*"... Another important drug indicator is represented by the deportees in Haiti, including those deported because of drug trafficking. The number of prisoners has more than doubled in 2011 compared in 2009, a total of 391 against 149 in 2009..."(CONALD, 2012, pp. 8)*

## INDICATOR GROUP 10: Suspicious Activity Reports (From Financial Intelligence Units)

### 10.1. Definition

There is a strong link between drug trafficking and money laundering. Thus, this indicator shows financial intelligence responses to money laundering. It tracks the number of suspicious activities related to money laundering.

### 10.2. Source and Frequency of Collection

**The recommended frequency of data collection: ANNUALLY.**

**The indicators in this group are:**

25. Number of suspicious activity reports

26. Number of suspicious activity reports related to drugs

### 10.3. Example

*"...In 2011, the Financial Intelligence Agency (FIA) recorded a total of 78.6% (257 of 327) of the Suspicious Activity Reports (SAR) involving the exchange of Bermuda currency to US dollar..." (DNDC, 2011, pp. 12).*

## INDICATOR GROUP 11: Arrests for Money Laundering

### 11.1 Definition

This indicator group relates to the number of people arrested for money laundering. Additional demographic information on the target population is also useful. These indicators also show financial intelligence responses to money laundering.

### 11.2. Source and Frequency of Collection

**The recommended frequency of data collection: ANNUALLY.**

**The indicators in this group are:**

27. Number of persons arrested for money laundering

28. Number of persons arrested for money laundering related to drugs

### 11.3. Example

*"One (1) person was arrested for laundering of money derived from illegal drugs." (GRENDEN, 2012, pp. 20)*

In summary, the eleven indicator groups previously listed could be considered as the ideal groups of indicators needed to assess the supply side of the drug problem. The first six indicator groups can be considered as the standard minimum that a DIN needs to collect. Although indicator groups 4, 5 and 6, related to drug price, licit and illicit production of drugs could be a challenge for some countries, they are necessary to assess the magnitude of the supply in the country. We must stress that, for some countries, data for some indicator groups may not be available. For example, a country that did not receive deportees would therefore not have this data. Also, it is important to note that 11 of the 12 indicator groups have data that could be routinely collected from police records, customs departments, and trade departments among others. It is only Indicator Group 7 on drug-related crime that requires a specific survey to assess it.

**Figure 4. Standard and Optional Indicators for Supply Side of the Drug Problem**

Standard Indicators	Standard Indicators (challenging to collect)	Optional Indicators
<ul style="list-style-type: none"> <li>• <b>Indicator Group 1: Drug Seizures</b></li> <li>• Ind 1: Quantity of each drug seized (kg, Lt, Un)</li> <li>• Ind 2: Number of seizures</li> <li>• Ind 3: Settings where the operation(s) occurred</li> <li>• Ind 4: Country of origin</li> <li>• Ind 5: Country of destination</li>   <li>• <b>Indicator Group 2: Arrest for Drug Offenses</b></li> <li>• Ind 6: Number of persons arrested for drug possession, trafficking</li> <li>• Ind 7: Type of drug</li> <li>• Ind 8: Number of persons arrested for intent to supply</li> <li>• Ind 9: Other offenses as specified in domestic laws</li>   <li>• <b>Indicator Group 3: Prosecutions for Drug Offenses</b></li> <li>• Ind 10: Number of persons tried for drug trafficking, possession</li> <li>• Ind 11: Number of persons convicted</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Indicator Group 4: Drug Price</b></li> <li>• Ind 12: Price in dollars (by drug, in local currency or US\$ equivalent )</li> <li>• Ind 13: Factors influencing changes in drug price</li>   <li>• <b>Indicator Group 5: Other Seizures Related to Drug Offenses</b></li> <li>• Ind 14: Firearm seizures</li> <li>• Ind 15: Money seizures</li> <li>• Ind 16: Building seizures</li> <li>• Ind 17: Vehicles seizures</li>   <li>• <b>Indicator Group 6: Illicit Drug Production</b></li> <li>• Ind 18: Measure of the level of production of drugs</li> <li>• Ind 19: Drug crop areas discovered and destroyed</li> <li>• Ind 20: Quantity of seized precursors</li> <li>• Ind 21: Number of illicit laboratories discovered</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Indicator Group 7: Drug-Related Crime</b></li> <li>• Ind 22: Characterization of the relationship between drugs and crime (surveys)</li>   <li>• <b>Indicator Group 8: Purity of Drugs</b></li> <li>• Ind 23: Degree of purity of drugs seized</li>   <li>• <b>Indicator Group 9: Number of Deportees Related to Drug Offenses</b></li> <li>• Ind 24: Number of persons who are deported for illegal drug problems in foreign countries</li>   <li>• <b>Indicator Group 10: Suspicious Activity Reports (from Financial Intelligence Units)</b></li> <li>• Ind 25: Number of suspicious activity reports</li> <li>• Ind 26: Number of suspicious activity reports related to drugs</li>   <li>• <b>Indicator Group 11: Arrests for Money Laundering</b></li> <li>• Ind 27: Number of persons arrested for money laundering</li> <li>• Ind 28: Number of persons arrested for money laundering related to drugs</li> </ul>

## STANDARD INDICATORS RELATED TO DRUG DEMAND

With regards to the demand side of the drug problem, many indicators are used to answer relevant questions such as: what is the level of consumption of substance use in the country? Which drugs are more prevalent? What are the risks that contribute to young people developing a drug problem? How does the community perceive the risks associated with drug use? What is the demand for treatment? What are the health consequences related to drug use? Are there many accidents related to drug use? How many deaths are associated with substance use?

All of these questions try to answer aspects of the drug abuse problem. Agencies and persons working toward demand reduction, therefore, should assess indicators that evaluate consumption of psychoactive substances.

Indicators for the demand side of the drug problem are presented. The more easily obtained indicators for the demand side will be reviewed as the standard minimum indicators that a DIN needs to collect. Then, indicators that are challenging to collect will be presented as optional indicators.

## INDICATOR GROUP 12: Drug use Among Young People, Risk Factors, Anti-Social Behavior

### 12.1. Definition

This indicator group provides estimates of the prevalence and incidence of drug use among young people through the use of probabilistic surveys among students in secondary schools. The prevalence and patterns of drug use among students in secondary schools are measured by probabilistic surveys. Data from these surveys provide basic information to understand patterns of use, risk perceptions, social and health correlates, and consequences of the use of illicit drugs and other psychoactive substances. These surveys also help to estimate the onset age of drug use. In addition, statistics such as lifetime and current prevalence or incidence for drug use, drug-related harm or risky behaviors, and binge drinking are estimated by these surveys.

The core benefits of these surveys are that they have relatively low implementation costs and they help to build evidence-based prevention programs or interventions. In addition to school surveys which generally target students at the secondary level, there are also university surveys which generate data about students at university.

### 12.2. Source and Frequency of Collection

Drug patterns evolve over time, so in order to track trends and sudden changes, school surveys are recommended to be done on a regular basis. However, due to a lack of financial resources, not all countries are able to do so. To have an idea of the frequency of school surveys here are some examples: The European School Survey Project on Alcohol and Other Drugs (ESPAD) collects data every four years in a large number of European countries; the Monitoring the Future Study has collected data annually since 1975 among North American students; and the Inter-American Drug Use Data System (SIDUC) is designed to collect data biennially, mainly in Central America and the Dominican Republic (UNODC, 2003).

A survey which uses a self-administered questionnaire for students constitutes the source for this indicator.

**The recommended frequency of data collection: 3-5 YEARS.**

**The indicators in this group are:**

29. Lifetime, past year and past month prevalence
30. Past year and past month incidence
31. Risk and protective factors
32. Onset age of use
33. Harmful behavior

34. Problematic drug use

35. Perception of risk

### 12.3. Example

*“...In St. Lucia for example, the probability that a student consumed alcohol for the first time during the one-year period before the survey was estimated to be 67.41%, while in Dominica and Trinidad and Tobago the corresponding rates were relatively high at 59.95% and 57.89%, respectively. Estimated incidence rates for all other countries were below 50% and ranged from 37.41% in Suriname to 49.73% in Barbados. The average past year incidence rate for the entire group of countries was 48.84%...” (CICAD, 2010, pp. 15)*

## INDICATOR GROUP 13: Treatment Utilization

### 13.1. Definition

This indicator group reports on the number and characteristics of people seeking treatment for problematic drug use. Treatment records, when properly configured, can be used as an indicator of demand for treatment, use of services, and trends in the prevalence and patterns of problematic drug use.

### 13.2. Source and Frequency of Collection

CICAD, through the OID has developed a standard admission form for collecting data from treatment centers. Also, some countries use this form to collect data from psychiatric hospitals or other medical centers (hospitals for example) to which addicts frequently go for help. However the target population is persons seeking treatment for problematic substance use.

**The recommended frequency of data collection: BIANNUALLY.**

**The indicators in this group are:**

36. Number of people seeking treatment for problematic drug use

37. Drug use trends among persons seeking help for problematic drug use

38. Demographic and other characteristics of persons seeking help for problematic drug use

### 13.3. Example

*Since 2012, Guyana has been gathering data on persons seeking treatment for drug use utilizing a standardized intake form designed by CICAD. At one center in Guyana for the period June 2014 to September 2014, it was reported that 17 persons sought treatment for problematic drug use. The data revealed that:*

- *Average age of clients was 34 years old. The youngest was 15 years and the oldest 57 years old. Most clients were in their 20s to early 30s.*
- *The average age of first use of the main substance impacting treatment was 21 years old. The lowest age of first use was 12 years old and the oldest was 48 years. Most clients indicated that they began using the substance impacting treatment at 14 years old.*
- *The main substance impacting treatment was:*
  - *Marijuana (7 persons (41.18%))*
  - *Alcohol (6 persons (35.29%))*
  - *Cocaine (4 (23.53%))*
- *7 clients had a history of arrest and of those arrested 2 of them were arrested in 2014.*
- *7 clients were deported.*
- *7 clients were previously diagnosed with a psychiatric condition.*
- *All 17 patients were recommended to receive residential treatment.*

## **INDICATOR GROUP 14: Prevalence, Incidence of Drug Use in the General Population<sup>23</sup>**

### **14.1. Definition**

This indicator group provides estimates of the prevalence and incidence of drug use in the general population (ages 12-65). Knowledge of the level of drug use in a population is often used as a starting point for planning a response. Estimates of the prevalence and incidence in the general population are an essential task for most drug information systems. Attention is often focused on the prevalence estimates; however, the incidence (new cases) may be equally important to inform decision makers. Collecting this information requires general population (household) surveys.

### **14.2. Source and Frequency of Collection**

Conducting a general population (household) survey is challenging and it often has a high cost. However, it is an essential set of indicators, (prevalence, incidence, perception of risks, etc.) that help assess the drug situation in a country.

<sup>23</sup> Standard indicator but challenging to collect

**Surveys should be conducted every 3-5 YEARS.**

**The indicators in this group are:**

- 39. Lifetime, past year and past month prevalence
- 40. Past year and past month incidence
- 41. Risk and protective factors
- 42. Age of first use
- 43. Risky behavior (driving under the influence, etc.)
- 44. Problematic drug use
- 45. Perception of risk

### **14.3. Example**

*“...The consumption patterns of the 2009 Household Survey reflect the level of substance use as reported by a representative sample of Bermuda residents. Prevalence data are included for lifetime use (ever used) and current use (use in the 30 days prior to the survey also referred to as recent use). In the case of marijuana, 37% of respondents reported using it at least once in their lifetime...” (DNDC, 2012, pp72)*

## **OPTIONAL INDICATORS FOR DEMAND SIDE OF THE DRUG PROBLEM**

### **INDICATOR GROUP 15: Drug-Related Morbidity**

#### **15.1. Definition**

Morbidity refers to drug-related cases of illness attributable directly or to some extent to the drug. In this case, this indicator is reflected mainly in the rates of infection with Human Immunodeficiency Virus (HIV), Hepatitis B (HBV) and Hepatitis C (HCV) among drug injecting consumers.

#### **15.2. Source and Frequency of Collection**

This key indicator group collects data on the extent (incidence and prevalence) of drug-related infectious diseases — primarily HIV, Hepatitis C and Hepatitis B infection — in particular among people who inject drugs (injecting drug users or IDUs). This data is collected using two main methods. These are: (a) surveys of IDUs that include serological testing and (b) the monitoring of routine diagnostic testing for new cases of HIV, Hepatitis C and Hepatitis B infection among IDUs (OAS, EMCDDA,



2010, pp. 33). Thus, it shows the link between drug injecting and transmission of infectious agents. Therefore it is necessary to collect information on the frequency of injecting and high risk (needle sharing) practices.

**The recommended frequency of data collection: ANNUALLY**

**The indicator in this group is:**

46. Prevalence of drug-related infectious diseases primarily HIV, Hepatitis B and Hepatitis C among intravenous drug users: Commercial Sex Workers (CSW), homeless, Most-at-risk-populations (MARPS).

**15.3. Example**

*“...The EMCDDA monitors systematically the prevalence of HIV and Hepatitis B and C among users of intravenous drugs... Data on new cases reported related to injecting drug use for 2010 suggest that, overall, the infection rates continue to fall in the European Union after the peak recorded in 2001-2002... between 2008 and 2010 increases were observed in Estonia, which has increased from 26.8 to 46.3 cases per million population, and Lithuania, which rose from 12.5 to 31.8 cases per million people (incidence of new HIV reported among users of intravenous drugs)...” (EMCDDA, 2012, pp. 88-89)*

## **INDICATOR GROUP 16: Drug-Related Mortality**

**16.1. Definition**

This indicator group includes data on deaths directly attributable to drug use. Although they can be useful and are relevant when they are reliable, these data in general are not widely available.

**16.2. Source and Frequency of Collection**

Possible sources include: mortality statistics; police records (drug-related deaths, road traffic deaths involving alcohol, criminal offenses involving drug or alcohol-related fatalities); forensic and toxicology departments; coroners or medical examiners; death certificates; emergency room and hospital records.

Number of accidents caused by use of psychoactive substances obtained from medical records of death help to evaluate drug-related deaths. However, collection of this data requires special procedures in the country (breathalyzer testing of drivers, for example).

**The recommended frequency of data collection: ANNUALLY.**

**The indicators in this group are:**

47. Drug-related mortality

48. Drug-related traffic deaths, criminal offenses involving drug and alcohol related fatalities

### 16.3. Example

*“...An analysis of data from more than thirty studies of patients followed until 2010 estimated between 10,000 and 20,000 deaths from opiate use each year in Europe ...”(EMCDDA, 2012, pp.94).*

## INDICATOR GROUP 17: High-Risk Drug Abuse (Problematic Drug Use)

### 17.1. Definition

This indicator corresponds to estimates of drug injecting and the proportion of those who engage in high-risk behaviors<sup>24</sup> and estimates of the number of daily users, regular or dependent. Some addictive behaviors are closely linked to serious problems and therefore deserve special attention.

Also, this indicator group collects data on the prevalence and incidence of problem drug use (PDU) at the national and local level. Problem drug use is defined as ‘injecting drug use or long-duration/regular use of opioids, cocaine and/or amphetamines’. Since this population is hidden and difficult to access, this indicator builds on a range of indirect methods that use different existing data sets to extrapolate and produce an estimate of the number of problematic drug users. (OAS, EMCDDA, 2010, pp. 32)

### 17.2. Source and Frequency of Collection

The data sources employed to calculate the estimates differ in each country and are dependent on the routine information systems used in the country (OAS, EMCDDA, 2010, pp. 32). Possible sources of data on drug-related emergencies can include: hospital emergency rooms, ambulance service, crisis centers, health centers, and poison centers (WHO, 2000, pp. 57).

**The recommended frequency of data collection: BIANNUALLY.**

**The indicator in this group is:**

49. Prevalence and incidence of problem drug use (injecting drug use, regular use of opioids, cocaine and/or amphetamines)

### 17.3. Example

*“...The average prevalence of problem opioid use in the European Union and Norway, calculated on the basis of national studies, is estimated at 4.2% (3.9 to 4.4) in 1000 aged 15 to 64 individuals. This is approximately 1.4 million problem opioid users in the European Union and Norway in 2010...” (EMCDDA, 2012, pp.80)*

## INDICATOR GROUP 18: Economic Cost of Drugs

### 18.1. Definition

The economic cost of drugs refers to a number of methods that can be used to estimate and quantify the economic value of the consequences of drugs. One such method is the cost-of-illness (COI) study

<sup>24</sup> These behaviors include violence, having multiple sexual partners and having unprotected sex among others.

which is a specific type of economic impact study. These studies are aimed at increasing the degree of understanding about the nature and environment of a given disease, as well as its foreseeable consequences for society as a whole.

## **18.2. Source and Frequency of Collection**

To make the necessary estimates, COI studies should combine epidemiological data that make it possible to learn about the characteristics of the problem, with financial information about the costs involved in its treatment and prevention, as well as the repair of the social damage coming from the same illness.

COI estimates provide insights to help answer questions such as the following<sup>25</sup>:

- What types of health care services - and in what amounts - are required to treat alcohol and drug abuse and related health consequences? How much do these services cost?
- How many people die as a result of alcohol and drug abuse, and what is the economic impact of these premature deaths?
- What effects do alcohol and drug abuse have on individual productivity in the home and workplace?
- How much crime is due to alcohol and drug abuse, either by definition (e.g., drug trafficking), requirements for money (e.g., robbery), or physiological effects (e.g., assaults)? What does it cost to protect against these crimes, adjudicate cases, and deal with offenders in prison or with alternative sentences?
- How much reliance on the social welfare system is caused by alcohol and drug abuse, and at what cost?
- What are the economic dimensions of other effects of alcohol and drug abuse, such as motor vehicle crashes and fire destruction?

**The recommended frequency of data collection: 3-5 YEARS.**

**The indicators in this group are:**

- 50. Economic impact of drug use to the health care system
- 51. Economic impact of premature deaths to society
- 52. Economic cost of criminal activities due to drug use and to protect against it
- 53. Economic cost of lost productivity due to drug use

---

<sup>25</sup> NIDA <http://archives.drugabuse.gov/EconomicCosts/Chapter3.html>

54. Economic cost to the welfare system

55. Economic cost of vehicular accidents and fire destruction due to drug use

### **18.3. Example**

*In a study conducted in Peru, it was estimated that the cost of the drug problem was about US \$444.7 million annually or US\$ 16 per capita. The magnitude of the problem represents .2% of the GDP. Of this annual cost, alcohol accounts for USD \$245.4 million or 55.2% of the national cost and tobacco accounts for US\$ 7,010 million or 1.6% of the national cost, while all illegal drugs accounts for US\$ 192.3 million or 43.2% of the national cost (DEVIDA, 2010, pp.31).*

*Conducting a COI study can be resource intensive (time, money and human capital), therefore, other proxies such as analyzing annual national budgets for the total amounts expended on drug demand reduction (all areas of prevention and treatment) and supply reduction (interdiction and enforcement) might be more readily available for the monitoring of this type of information. Bermuda with a very robust drug epidemiology department has been employing this method in lieu of conducting a COI study and has been able to obtain data on the economic cost of drug.*

*While employing either of the two options should result in reliable data on the economic cost of the drug problem to any country, the success of any depends on the strength of the DIN conducting the study. Thus, this study is optional and recommended for countries with an established drug epidemiology department.*

In summary, there are three surveys that provide key information to a Drug Information Network (DIN) in any country to assess the demand side of the drug problem. These are: drug use among young people, risk factors, and anti-social behaviors (Indicator Group 12), treatment utilization (Indicator Group 13) and general population (household) survey (Indicator Group 14). Additionally, there are four other surveys that can provide more in-depth information about drug demand; however, these surveys can be very costly to execute as they require countries to have a strong DIN with the requisite epidemiological capacity, thus they are considered optional indicators. These are: drug-related morbidity (Indicator Group 15), drug-related mortality (Indicator Group 16), problematic drug use (Indicator Group 17) and economic cost of drugs (Indicator Group 18).

**Figure 5. Standard and Optional Indicators for Demand Side of the Drug Problem**

Standard Indicators	Standard Indicators (challenging to collect)	Optional Indicators
<ul style="list-style-type: none"> <li>• <b>Indicator Group 12: Drug Use Among Young People, Risk Factors, Anti-Social Behavior</b> <ul style="list-style-type: none"> <li>• Ind 29: Lifetime, past year and past month prevalence</li> <li>• Ind 30: Past year and past month incidence</li> <li>• Ind 31: Risk and protective factors</li> <li>• Ind 32: Onset age of use</li> <li>• Ind 33: Harmful behavior</li> <li>• Ind 34: Problematic drug use</li> <li>• Ind 35: Perception of risk</li> </ul> </li> <li>• <b>Indicator Group 13: Treatment Utilization</b> <ul style="list-style-type: none"> <li>• Ind 36: Number of people seeking treatment for problematic drug use</li> <li>• Ind 37: Drug use trends among persons seeking help for problematic drug use</li> <li>• Ind 38: Demographic and other characteristics of persons seeking help for problematic drug use</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Indicator Group 14: Prevalence, Incidence of Drug use in the General Population</b> <ul style="list-style-type: none"> <li>• Ind 39: Lifetime, past year and past month prevalence</li> <li>• Ind 40: Past year and past month incidence</li> <li>• Ind 41: Risk and protective factors</li> <li>• Ind 42: Age of first use</li> <li>• Ind 43: Risky behavior (driving under the influence, etc.)</li> <li>• Ind 44: Problematic drug use</li> <li>• Ind 45: Perception of risk</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Indicator Group 15: Drug-Related Morbidity</b> <ul style="list-style-type: none"> <li>• Ind 46: Prevalence and incidence of drug-related infectious diseases primarily HIV, Hepatitis B and Hepatitis C among intravenous drug users: commercial sex workers (CSW), homeless, most-at-risk-populations (MARPS)</li> </ul> </li> <li>• <b>Indicator Group 16: Drug-Related Mortality (Deaths)</b> <ul style="list-style-type: none"> <li>• Ind 47: Drug-related mortality</li> <li>• Ind 48: Drug-related traffic deaths, criminal offenses involving drug and alcohol related fatalities</li> </ul> </li> <li>• <b>Indicator Group 17: High-Risk Drug Abuse (Problematic Drug Use)</b> <ul style="list-style-type: none"> <li>• Ind 49: Prevalence and incidence of problem drug use (injecting drug use, regular use of opioids, cocaine and/or amphetamines)</li> </ul> </li> <li>• <b>Indicator Group 18: Economic Cost of Drugs</b> <ul style="list-style-type: none"> <li>• Ind 50: Economic impact of drug use to the health care system</li> <li>• Ind 51: Economic impact of premature deaths to society</li> <li>• Ind 52: Economic cost of criminal activities due to drug use and to protect against it</li> <li>• Ind 53: Economic cost of lost productivity due to drug use</li> <li>• Ind 54: Economic cost to the welfare system</li> <li>• Ind 55: Economic cost of vehicular accidents and fire destruction due to drug use</li> </ul> </li> </ul>

## OTHER SOURCES OF INFORMATION RELATED TO DRUG SUPPLY AND DEMAND

### Qualitative Data

What if a country does not have sufficient resources to implement a population survey on drugs? Can it still collect some information on patterns of drug use?

Qualitative methods are sometimes used in drug epidemiology and they help to gather information on the drug situation in a country when some key indicators are missing. For example, exploring the literature could help to discover if the country has already undertaken scientific research on drug abuse. Also, a review of the legislation on drugs helps to understand the context on which the country is addressing the drug problem. The legislation helps also in building adequate drug policy.

We will not develop all of the available techniques on qualitative methodology here, but will stress

on the following commonly used methods:

- Key informant studies
- Focus groups
- Early Warning Systems
- Rapid Assessment Surveys

### **1. Key Informant Studies**

The opinion of experts provides general qualitative information on drug patterns. It is not a requirement to provide actual figures, if a country does not have survey data records or official estimation methods. A country can collect information by relying on expert opinion. (UNODC, 2002 <sup>[1]</sup>)

Key informants may be interviewed informally or with specially developed interview guides or questionnaires. In New Delhi, India, for example, key informant interviews were conducted with community leaders to identify geographical areas where the prevalence of drug use was high. Other types of informants are drug users themselves. They may be interviewed informally in treatment centers or at social agencies, or at the time when they are appearing in court, provided it is clear that there is no police involvement or influence on the study. (WHO, 2000, pp. 36)

### **2. Focus Groups**

Focus groups are an excellent method to ascertain more qualitative information about a topic, particularly on a topic for which there is very little available information. For instance, focus groups are helpful in providing information on issues such as street names of drugs and in reviewing the content or format of a standardized data collection instrument. They are also helpful in reviewing data that has been collected. However, the usefulness of information coming from focus group discussions depends greatly on the expertise of the researcher to create groups with appropriate characteristics and to stimulate, without influencing, open conversation among the group members focusing on a particular topic or topics. (WHO, 2000, pp. 36)

With those definitions, stakeholders from a DIN could use either key informant studies or focus groups for collecting data that is otherwise unavailable. Another example of the usefulness of qualitative data occurred in Haiti, when the head of a non-governmental organization (NGO) working in prevention against drug use indicates that he had relevant information on drug use in the country during the meeting. Aware of the lack of information, the head of the DIN requested an interview in order to gather more information on the drug problem. The interview (which technically was a key informant study) revealed useful information. First, the head of the NGO explained that he worked closely with the community, and in areas where gangs are present and drug use (including amphetamines) occurs. Based on all of the information obtained, the coordinator of the DIN invited the new institution to become a member of the national drug information network.

The above example does not mean that expert opinion is always true or substitutes for official records or well-designed surveys. This information needs to be verified; this can be accomplished by holding

focus group discussions with other key informants on the same topic. Nevertheless, qualitative information gives a good “lead” to what is happening in the country. However, if a country wants to use qualitative information, it has to be careful when choosing the key informants. It has to assure that the key informant is motivated to give true information based on his knowledge in the subject area. Second, even if the key informant gives sincere information on the subjects, it is always good to have data from many sources. For example, if the police do not give information on drug prices, NGO and special welfare institutions that are helping street children that are known to be drug users may also have this information. In summary, qualitative information must be *triangulated* with other data sources.

### 3. Early Warning System

Another source of information on new drug trends is based on the implementation of an early warning system (EWS) designed specifically to identify and monitor new and emerging drugs as well as changes in drug consumption patterns at the early stages.<sup>26</sup> EWS enables authorities to obtain information on new drugs entering the market such as new psychoactive substances (NPS), the misuse of licit drugs such as prescription medication, as well as changes in the consumption patterns of traditional drugs such as alcohol, marijuana, and cocaine in a timelier manner than traditional survey methodologies. This enables authorities to design early legislative tools and develop early demand reduction and supply reduction mechanisms. These systems utilize mixed methodologies and several data sources to validate data through triangulation.

Information on new drug trends is obtained via a combination of key informant interviews, focus groups, reviewing administrative data, media monitoring, rapid assessments, drug seizures, chemical characterization exercises, and other sources.

### 4. Rapid Assessment Surveys<sup>27</sup>

These surveys are deployed to gather key information about a new and emerging drug trend or drug consumption pattern within a very specific population. It should not take more than six months to execute -- from questionnaire development to final report. The information derived from this exercise can then be verified through triangulation with data from other sources, which enables authorities to have a better understanding of the problem and to determine the scale and type of response need.

#### Example

*A rapid assessment and response survey was conducted in an area in Jamaica to collect information on the drug use patterns of the residents there. The findings from the survey were used to strengthen interventions by the National Council on Drug Abuse (NCDA) in that area and was used to inform longer term studies and formed a baseline on which to measure interventions in that area<sup>28</sup>.*

---

<sup>26</sup> Methods for providing an earlier warning of emerging drug trends. [https://bora.uib.no/bitstream/handle/1956/3775/Dr.thesis\\_Jane%20Mounteney.pdf;jsessionid=486153FBE8BB922505FFA9241BEF898.bora-uib\\_worker?sequence=2](https://bora.uib.no/bitstream/handle/1956/3775/Dr.thesis_Jane%20Mounteney.pdf;jsessionid=486153FBE8BB922505FFA9241BEF898.bora-uib_worker?sequence=2)

<sup>27</sup> RAS in India by UNODC [https://www.unodc.org/pdf/india/publications/national\\_Survey/09\\_the-national-survey-objectivemethodology.pdf](https://www.unodc.org/pdf/india/publications/national_Survey/09_the-national-survey-objectivemethodology.pdf)

<sup>28</sup> <http://ncda.org.jm/index.php/publications/surveys/106-survey-rapid-assessment-an-response-survey-westmoreland>

## CONCLUSION

It has been shown that due to the multiple aspects of the drug problem, it is necessary to have several indicators to adequately define and measure the drug problem. Through the work of CICAD and other institutions, many information systems have been created for data collection on the drug problem. In addition, epidemiological studies on drug abuse have helped in measuring substance use and have supported the development of interventions such as prevention, treatment and rehabilitation. Nevertheless, many countries today do not have a model for a surveillance system on drug programs. Consequently, building a sustainable Drug Information Network (DIN) that supports the monitoring of constant trends on the drug situation and helps policymakers has been a challenge. This paper presents such a model.

The establishment of a DIN is a necessary tool for addressing the drug problem in the country and efforts should be made to make the system effective and sustainable. Its success depends, among other things, on the support of each partner institution. Each institution that is a part of a DIN should be working to gather information or to share experiences so that the DIN can have a continuously updated database. It is one of the most effective means by which policymakers can know what is happening at the national, regional and transnational level regarding the supply and demand for drugs.

A list of indicators has been proposed based on some existing DIN models that have been listed previously along with existing information systems that assess the drug problem. For the demand and supply side of the drug problem, nine indicator groups can be considered to be the standard minimum indicators that a DIN should use as the basis for collecting data. These are:

### **Standard Indicator Groups for Drug Supply and Demand**

#### **Drug Supply:**

- Drug Seizures
- Arrests for Drug Offenses
- Prosecutions for Drug Offenses
- Drug Price
- Other Seizures Related to Drug Offenses
- Illicit Drug Production

#### **Drug Demand:**

- Drug Use among Young People, Risk Factors and Anti-Social Behavior Survey
- Treatment Utilization Survey
- Prevalence, Incidence of Drug Use in the General Population Survey



On the other hand, for countries with the will, capacity, competency, and resources, the following nine indicator groups can be included and are thus considered as optional indicators:

### **Optional Indicator Groups for Drug Supply and Demand**

#### **Drug Supply:**

Drug-Related Crime

Purity of Drugs

Number of Deportees Related to Drug Offenses

Suspicious Activity Reports (from Financial Intelligence Units)

Arrests for Money Laundering

#### **Drug Demand**

Drug-Related Morbidity

Drug-Related Mortality

High-Risk Drug Abuse (Problematic Drug Use)

Economic Cost of Drugs

The following are some key recommendations for implementing this system of indicators:

- The optional indicators described in this document should be implemented only when the standard ones have been collected.
- Countries must develop a database. Excel can satisfy the basics, but they should eventually aim for more powerful software.
- There must always be a corresponding date for each event. It will help to identify and properly record time period statistics.
- The DIN must review its statistics with the source in order to correct errors and understand the data.
- Focus must also be on innovative ways of disseminating information. When a lack of quantitative data for assessing the drug problem is encountered in a country, qualitative studies could be useful for providing some “leads” on what is happening.

- Countries must be careful when interpreting data. They must do triangulation for assuring validity and reliability of data, especially with qualitative studies. Countries must also provide opportunities for their DIN coordinators to be trained in drug epidemiology and other relevant topics.
- Finally, it is highly recommended that constant feedback should be given to stakeholders and members of the DINs.

## REFERENCE

1. **CICAD, 2005**, “*methodological guidelines for economic impact studies on illicit psychoactive substance abuse a research manual for the CICAD program to estimate the social and economic impact of drugs in the Americas*”, <http://www.cicad.oas.org/oid/new/research/Costs/Research-Manual%20Eng-Oct06.pdf>. Accessed September 6, 2013
2. **CICAD, 2010**, “*Comparative Analysis of Student Drug Use in Caribbean Countries*”, pp. 15 <http://www.cicad.oas.org/Main/pubs/StudentDrugUse-Caribbean2011.pdf>. Accessed September 5, 2013
3. **CICAD, 2012**, “*Exploring the Relationship between Drugs and Crime: A Comparative Analysis of Survey Data from Prisoners in Four Caribbean Countries: Dominica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines*”, OAS Official Records Series, OEA/ Ser. L/XIV.6.16 <http://www.cicad.oas.org/oid/pubs/CaribbeanPrisons2012.pdf>. Accessed August 21, 2013
4. **CICAD, 2013**, “*Hemispheric Drug Strategy, Definition*”, Multidimensional Security, OAS. [http://www.cicad.oas.org/Main/Template.asp?File=/main/aboutcicad/basicdocuments/strategy\\_2010\\_eng.asp#definition](http://www.cicad.oas.org/Main/Template.asp?File=/main/aboutcicad/basicdocuments/strategy_2010_eng.asp#definition). Accessed August 29, 2013
5. **CICAD, OAS, 2013**, “*Multilateral Evaluation Mechanism (MEM), Background*”, [http://www.cicad.oas.org/Main/Template.asp?File=/mem/about/default\\_eng.asp](http://www.cicad.oas.org/Main/Template.asp?File=/mem/about/default_eng.asp). Accessed August 15, 2013
6. **CICAD, OAS, 2007**, “*Uniform Drug Supply Control statistical System, CICDAT*”, Inter-American Observatory on Drugs (OID). <http://www.cicad.oas.org/oid/caribbean/2007/CICDAT.pdf>. Accessed 30 July 2013
7. **CONALD, 2013**, “*Rapport Annuel du système Haïtien d’Information sur les Drogues, 2012*”, pp. 8 [http://www.conald-haiti.org/Rapport\\_annuel\\_SHID\\_2011\\_REV.pdf](http://www.conald-haiti.org/Rapport_annuel_SHID_2011_REV.pdf). Accessed August 13, 2013
8. **CONALD, 2013**, “*Report of the drug Situation in Haiti 2012, Executive summary*”, <http://conaldhaiti.blogspot.com/2013/08/report-of-drug-situation-in-haiti-2012.html> Accessed July 23, 2013
9. **COPOLAD, 2013**, “*What is COPOLAD?*” [www.copolad.eu](http://www.copolad.eu). COPOLAD (Cooperation Program on Drugs Policies between Latin America and the European Union). Accessed August 28, 2013
10. **DEVIDA, 2010**, “*impacto social y económico del consumo de drogas en Perú*”, <http://www.cicad.oas.org/oid/research/Costs/Estudio%20Impacto%20Social%20Economico%20Peru%202010.pdf>. Accessed September 6, 2013
11. **DNDC, 2012**, “*2012 Annual Report of the Bermuda Drug Information Network (BERDIN)*”, Government of Bermuda, Ministry of Justice, Department for National Drug Control.
12. **EMCDDA, 2010**, “*Prevention and Evaluation Resources Kit (PERK), A manual for Prevention professionals*”, European Monitoring Centre for Drugs and Drug Addiction, 2010, Printed in

Luxembourg. [http://www.emcdda.europa.eu/attachements.cfm/att\\_105843\\_EN\\_Manual4PERK.pdf](http://www.emcdda.europa.eu/attachements.cfm/att_105843_EN_Manual4PERK.pdf). Accessed August 29, 2013

13. **EMCDDA, 2012**, “*État du phénomène de la drogue en Europe*” Luxembourg: Office des publications de l’Union européenne, 2012 [http://www.emcdda.europa.eu/attachements.cfm/att\\_190854\\_FR\\_TDAC12001FRC\\_.pdf](http://www.emcdda.europa.eu/attachements.cfm/att_190854_FR_TDAC12001FRC_.pdf). Accessed August 20, 2013
14. **EMCDDA, 2013**, “*REITOX Network*”, <http://www.emcdda.europa.eu/about/partners/reitox-network>. Accessed August 14, 2013
15. **GRENDEN, 2012**, “*Grenada Drug Epidemiology Network (GRENDEN) Annual Report, 2012*”, Drug Control secretariat [http://www.gov.gd/egov/pdf/ncodc/docs/grenden\\_annual\\_report-2012.pdf](http://www.gov.gd/egov/pdf/ncodc/docs/grenden_annual_report-2012.pdf). Accessed August 13, 2013
16. **JADIN, 2009**, “*Jamaica Drug Information Network (JADIN), Annual Report (2009)*”, Prepared for the Inter-American Drug Use Data System (SIDUC), Drug Information Project. CICAD/ OAS. <http://www.cicad.oas.org/apps/Document.aspx?Id=1606>. Accessed August 14, 2013
17. **NIDA, 1992**, <http://archives.drugabuse.gov/EconomicCosts/Chapter3.html>
18. **NIH, 2013**, “*Community Epidemiology Work Group*”, National Institute on Drug Abuse, Science of Drug Abuse. <http://www.drugabuse.gov/about-nida/organization/workgroups-interest-groups-consortia/community-epidemiology-work-group-cewg>. Accessed September 3, 2013
19. **OAS, CICAD, 2009**, “*Hemispheric Drug Strategy*”, Secretariat for Multidimensional Security, Washington, DC. Accessed May 3 2009.
20. **OAS, CICAD, 2013**, “*OAS Report on the Drug Problems in the Americas*”, OAS official records.
21. **OAS, EMCDDA, 2010**, “*Building a national drugs observatory: a joint handbook*”, publication of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) and the Inter-American Drug Abuse Control Commission of the Organization of American States (CICAD–OAS)
22. **UNODC, 2002**, “*Annual Reports Questionnaire (ARQ) for 2012*”, <http://www.unodc.org/unodc/en/commissions/CND/10-GlobalData.html>. Accessed August 15, 2013
23. **UNODC, 2002**, “*Developing an Integrated Drug Information System*”, Global Assessment Program on Drug Abuse (GAP). United Nations International Drug Control Program Vienna, Toolkit Module I. [https://www.unodc.org/documents/GAP/GAP%20toolkit%20module%201%20final%20ENGLISH\\_E-book.pdf](https://www.unodc.org/documents/GAP/GAP%20toolkit%20module%201%20final%20ENGLISH_E-book.pdf). Accessed August 5, 2013
24. **UNODC, 2003**, “*Conducting School Surveys on Drug Abuse*”, Global Assessment Program on Drug Abuse (GAP). United Nations International Drug Control Program Vienna, Toolkit Module III.

25. **UNODC, DAINAP, 2011**, “*Drug Abuse Information Network for Asia and the Pacific Form*”, [http://www.unodc.org/documents/southeastasiaandpacific//2012/07/smart-workshop/07\\_DAINAP\\_Data\\_Submission\\_Review\\_and\\_observations.pdf](http://www.unodc.org/documents/southeastasiaandpacific//2012/07/smart-workshop/07_DAINAP_Data_Submission_Review_and_observations.pdf). Accessed August 7, 2013
26. **WHO, 2000**, “*Guide to Drug Abuse Epidemiology*”, Mental Health and Substance Dependence Department, Non-communicable Disease and Mental Health Cluster, World Health Organization, WHO/MSD/MSB 00.3
27. **Wikipedia, 2013**, “*Triangulation social science*”, [http://en.wikipedia.org/wiki/Triangulation\\_\(social\\_science\)](http://en.wikipedia.org/wiki/Triangulation_(social_science)). Accessed September 6, 2013



## APPENDIX 1

### CORE SUPPLY AND DEMAND INDICATORS FOR NATIONAL DRUG INFORMATION NETWORKS IN THE CARIBBEAN





## Drug Supply

### Standard Indicators

INDICATOR GROUP	Indicator	Unit of Measure	Collection method (please see forms attached)	Source	Collection Interval
1. Drug Seizures	1. Quantity of each drug seized	Please specify unit of measure used (Examples —grams, kilograms, ounces, pounds, number of tablets)	FORM 1	I. Police records,  II. Customs records,  III. forensic laboratories  IV. specialized law enforcement agencies	Quarterly
	2. Number of drug seizures				
	3. Settings where the operation(s) occurred				
	4. Country of origin				
	5. Country of destination				
2. Arrests for Drug Offenses	6. Number of persons arrested for drug possession, trafficking.		FORM 2	I. police records  II. special drug enforcement units	Quarterly
	7. Type of drug				
	8. Number of persons arrested for intent to supply				
	9. Other drug offenses as specified in domestic laws				
3. Prosecutions for Drug Offenses	10. Number of persons tried for drug trafficking, possession		FORM 3, FORM 4	I. Court statistics  II. Penal Institutions	Quarterly
	11. Number of persons convicted				

## Standard Indicators- Challenging to Collect

INDICATOR GROUP	Indicator	Unit of Measure	Collection method (please see forms attached)	Source	Collection Interval
4. Drug Price <sup>29</sup>	12. Price in dollars (by drug) (Local currency or US\$ equivalent) 13. Factors influencing changes in drug prices	Dollar per gram, kilo, lb.	FORM 1	I. Police records, II. Customs records and specialized law enforcement agency III. Focus groups	Biannually
5. Other Seizures Related to Drug Offenses <sup>30</sup>	14. Firearm seizures 15. Money seizures 16. Building seizures 17. Vehicles seizures	Absolute number of items	FORM 5	I. Police sources	Quarterly
6. Illicit Drug Production <sup>31</sup>	18. Measures of the level of production of drugs 19. Drug crop areas discovered and destroyed 20. Quantity of Seized precursors 21. Number of illicit laboratories discovered	Refers to the production capacity per unit of time (e.g. Plants per year, Pounds per year) Example: acres, hectares Use local units reported	FORM 6 FORM 7 FORM 8 FORM 9 FORM 10 FORM 11	I. Police records II. Customs records	Annually

<sup>29</sup> Can be challenging to collect in most countries but still important

<sup>30</sup> Can be challenging to collect in most countries but still important

<sup>31</sup> Can be challenging to collect in most countries but still important

## Optional Indicators

INDICATOR GROUP	Indicator	Unit of Measure	Collection method (please see forms attached)	Source	Collection Interval
7. Drug-Related Crime	22. Characterization of the relationship between drugs and crime (Survey).		Epidemiological studies  Case studies of closed cases	I. Epidemiological studies (Survey)  II. Police Records of closed cases  III. Drug testing on prisoners (e.g. Arrestee Drug Abuse Monitoring (ADAM))	Every 3-5 years
8. Purity of Drugs	23. Degree of purity of drugs seized	Percentage (%)	FORM 1	I. Police records, Customs records, forensic laboratories and specialized enforcement agencies	Annually
9. Number of Deportees Related to Drug Offenses	24. Number of people who are deported for illegal drug problems in foreign countries	Number of deportees per year	FORM 12	I. Police records, immigration departments, and ministries of foreign affairs	Annually
10. Suspicious Activity Reports (from Financial Intelligence Units)	25. Number of suspicious activity reports  26. Number of suspicious activity reports related to drugs			I. Financial Intelligence Agency	Annually
11. Arrests for Money Laundering	27. Number of persons arrested for money laundering  28. Number of persons arrested for money laundering related to drugs		FORM 13	I. Police records	Annually

## Drug Demand

### Standard Indicators

INDICATOR GROUP	Indicator	Unit of Measure	Collection method (please see forms attached)	Source	Collection Interval
12. Drug Use among Young People, Risk Factors, Anti-Social Behavior	29. Lifetime, past year and past month prevalence	Percentage (%)	SIDUC Surveys about drug use among school children or equivalent survey	I. SIDUC School Surveys	Every 3-5 years
	30. Past year and past month incidence	Percentage (%)		II. Nationally founded school surveys	
	31. Risk and protective factors			III. International agencies surveys among the youth of a specific country	
	32. Onset age of use				
	33. Harmful behavior				
	34. Problematic drug use				
	35. Perception of risk				
13. Treatment Utilization	36. Number of people seeking treatment for problematic drug use		I. CICAD standardized admission form for treatment centers	I. Drug treatment centers	Biannually
	37. Drug use trends among persons seeking help for problematic drug use		II. Data collection from other treatment center intake forms	II. Psychiatric hospitals	
	38. Demographic and other characteristics of persons seeking help for problematic drug use				

## Standard Indicators- Challenging to Collect

INDICATOR GROUP	Indicator	Unit of Measure	Collection method (please see forms attached)	Source	Collection Interval
14. Prevalence, Incidence of Drug Use in the General Population <sup>32</sup>	39. Lifetime, past year and past month prevalence	Percentage (%)	I. SIDUC General Population Surveys	I. SIDUC General	Every 3-5 years
	40. Past year and past month incidence		II. Other general population surveys	II. population survey	
	41. Risk and protective factors		III. Or equivalent survey	III. Other general population survey methods	
	42. Age of first use				
	43. Risky behavior (driving under the influence, etc.)				
	44. Problematic drug use				
	45. Perception of risk				

<sup>32</sup> Can be challenging/costly to collect in most countries but still important

## Optional Indicators

INDICATOR GROUP	Indicator	Unit of Measure	Collection method (please see forms attached)	Source	Collection Interval
15. Drug-Related Morbidity	46. Prevalence of drug-related infectious diseases primarily HIV, Hepatitis B, and Hepatitis C among intravenous drug users, commercial sex workers (CSW), homeless, most-at-risk populations (MARPS)	Percentage (%)	I. Surveys including serological testing II. Data from Local health departments III. Data from medical testing laboratories IV. Self-report surveys	I. Data from surveys among IDU population II. Ministry of Health III. Forensic departments	Annually
16. Drug-Related <sup>33</sup> Mortality	47. Drug-related mortality 48. Drug-related traffic deaths, criminal offenses involving drug and alcohol related fatalities		I. Surveys of forensics, medical examiners and hospital records II. Surveys of police records	I. Forensics and toxicology departments II. Coroners or medical examiner's office III. Death registry IV. Hospitals V. Police departments	Annually

<sup>33</sup> Collecting this information usually requires changes in laws to enable law enforcement officers to conduct breathalyzer and other tests for drug use at the site of an accident

<sup>34</sup> Very challenging to collect in a uniform manner as each county has its own routine information system

<p>17. High-risk Drug Abuse (problematic Drug use)<sup>34</sup></p>	<p>49. Prevalence and incidence of problem drug use (injecting drug use, regular use of opioids, cocaine and/or amphetamines)</p>		<ul style="list-style-type: none"> <li>i. Epidemiological Surveys</li> <li>ii. Administrative Data</li> <li>iii. Prison Survey</li> <li>iv. CICAD Treatment Assessment Form</li> </ul>	<ul style="list-style-type: none"> <li>i. Hospital, emergency rooms</li> <li>ii. Crisis centers, health centers and poison centers</li> </ul>	<p>Biannually</p>
<p>18. Economic Cost of Drugs</p>	<ul style="list-style-type: none"> <li>50. Economic impact of drug use to the health care system</li> <li>51. Economic impact of premature deaths to society</li> <li>52. Economic cost of criminal activities due to drug use and to protect against it</li> <li>53. Economic cost of lost productivity due to drug use</li> <li>54. Economic cost to the welfare system</li> <li>55. Economic cost of vehicular accidents and fire destruction due to drug use</li> </ul>		<ul style="list-style-type: none"> <li>i. Studies on the economic cost of drugs</li> </ul>	<ul style="list-style-type: none"> <li>I. Inter-agency study</li> </ul>	<p>Every 3-5 years</p>

Other Sources of Information					
Qualitative/Quantitative Data					
INDICATOR GROUP	Indicator	Unit of Measure	Collection method (please see forms attached)	Source	Collection Interval
1. Key Informant Studies	<ul style="list-style-type: none"> <li>Information about areas (communities etc.) where drug use is high</li> </ul>			I. Community leaders II. Drug users in treatment or at court III. Treatment center IV. NGOs focusing on drug prevention V. Specific population group	As needed
2. Focus Groups	<ul style="list-style-type: none"> <li>Types of drugs being used</li> <li>Drug-related gang activity</li> <li>Street price of drugs</li> <li>Street names of drugs</li> </ul>				
3. Early Warning Systems	<ul style="list-style-type: none"> <li>New and emerging drug trends</li> </ul>				
4. Rapid Assessment					



## APPENDIX 2

### DATA COLLECTION FORMS

#### CORE INDICATORS FOR NATIONAL DRUG INFORMATION NETWORKS IN THE CARIBBEAN



<b>FORM 1</b>	<b>INDICATOR GROUPS 1, 4 &amp; 8</b>
<b>DRUG SEIZED: QUANTITY, NUMBER OF UNITS AND NUMBER OF SEIZURES</b>	

Country:

Quarter:  Year:

Institution Reporting:

Drug	Indicator 1 Quantity Seized (Measure Unit: Kg, Lt, lbs.,) <sup>35</sup>	Indicator 2 Number of Seizures	Indicator 3 Settings where operation occurred	Indicator 4 Country of Origin & Destination Country	Indicator 12 Price Per Kg, Lt, lb.	Indicator 23 Degree of Purity	Indicator 23 Observations
Opium (raw or prepared)				Origin: Destination:			
Liquid Opium				Origin: Destination:			
Poppy Plants				Origin: Destination:			

<sup>35</sup> Please specify unit of measure used (Examples –grams, kilograms, ounces, pounds, number of tablets )

Drug	Quantity Seized (Measure Unit: Kg, Lt, lbs.) <sup>36</sup>	Number of Seizures	Settings where operation occurred	Country of Origin & Destination Country	Price Per Kg, Lt, lb.	Purity	Observations
Poppy Seeds				Origin: Destination:			
Morphine				Origin: Destination:			
Heroin				Origin: Destination:			
Other opiates				Origin: Destination:			
Synthetic Narcotics				Origin: Destination:			

<sup>36</sup> Use comma (,) as a thousands separator and use dot (.) as a decimal separator. (i.e. 1,234.56)

Drug	Quantity Seized (Measure Unit: Kg, Lt, lbs.,)	Number of Seizures	Settings where operation occurred	Country of Origin & Destination Country		Price Per Kg, Lt, lb.	Purity	Observations
Coca Leaf				Origin:	Destination:			
Coca Paste				Origin:	Destination:			
Cocaine Base				Origin:	Destination:			
Cocaine Salts				Origin:	Destination:			
Crack				Origin:	Destination:			

Basuco (residues or impurities)							Origin:					
							Destination:					
Cannabis Plants							Origin:					
							Destination:					
Cannabis Leaf (herb)							Origin:					
							Destination:					
Cannabis Resin (hashish)							Origin:					
							Destination:					
Hashish Oil (liquid cannabis)							Origin:					
							Destination:					

Drug	Quantity Seized (Measure Unit: Kg, Lt, lbs.,)	Number of Seizures	Settings where operation occurred	Country of Origin & Destination Country		Price Per Kg, Lt, lb.	Purity	Observations
Cannabis Seeds				Origin:	Destination:			
Other:				Origin:	Destination:			
Stimulants				Origin:	Destination:			
Depressants				Origin:	Destination:			
LSD				Origin:	Destination:			

Amphetamines								Origin:			
								Destination:			
Methamphetamines								Origin:			
								Destination:			



Drug	Quantity Seized (Measure Unit: Kg, Lt, lbs.,)	Number of Seizures	Settings where operation occurred	Country of Origin & Destination Country	Price Per Kg, Lt, Lb	Purity	Observations
Other:				Origin: _____ _____ _____ Destination: _____ _____ _____			
				Origin: _____ _____ _____ Destination _____ _____ _____			

Total number of operations:				
-----------------------------	--	--	--	--

<b>FORM 2</b>	<b>PERSONS ARRESTED BY TYPE OF OFFENSE, AGE GROUP, OCCUPATION AND NATIONALITY</b>
---------------	---

**INDICATOR  
GROUP  
2**

Country:  Quarter:  Year:

Institution Reporting:

Type of Drug:

# of Persons Arrested and Charged for All Drug-Related Offenses by Age Group and Gender			
Age Group	Male	Female	Total
<15			
15-19			
20-24			
25-30			
30-34			
35-40			
40+			
Unknown Age			
Total			



Drug-related Offenses Committed by All Persons Arrested and Charged for Drug-Related Offenses by Gender <sup>37</sup>			
Drug-Related Offenses Committed by All Persons Arrested and Charged	Male	Female	Total
Possession of Marijuana			
Cultivation of Marijuana			
Possession of Cocaine			
Trafficking			
Possession with Intent to Supply			
Possession of Apparatus			
Possession within 100 yards of a school			
Handling a controlled Drug			
Doing an act preparatory to Drug trafficking			
Misuse of a controlled Drug			
Conspiracy to traffic a controlled Drug			
Money laundering			
Total			

<sup>37</sup> These categories are dependent on the country's laws

FORM 3

**INDICATOR GROUP  
3**

*Indicator 10: PERSONS TRIED BY TYPE OF OFFENSE, AGE GROUP AND NATIONALITY*

Country:  Quarter:  Year:

Institution Reporting:

Type of Drug:

<i>Indicator 10: PERSONS TRIED FOR DRUG OFFENSE BY GENDER AND AGE GROUP</i>			
Age Group	Male	Female	Total
<15			
15-19			
20-24			
25-30			
30-34			
35-40			
40+			
Unknown Age			
Total			

<b>FORM 4</b>	<b>INDICATOR GROUP 3</b>
<i>Indicator 11: PERSONS CONVICTED BY TYPE OF OFFENSE, AGE GROUP, OCCUPATION AND NATIONALITY</i>	

Country:

Quarter:

Year:

Institution Reporting:

Type of Drug:

<i>Indicator 11: PERSONS CONVICTED FOR DRUG OFFENSE BY GENDER AND AGE GROUP</i>			
Age Group	Male	Female	Total
<15			
15-19			
20-24			
25-30			
30-34			
35-40			
40+			
Unknown Age			
Total			

<b>FORM 5</b>	<b>INDICATOR GROUP 5 (Indicators 14, 15, 16, 17)</b>	<b>SEIZURES OF FIREARMS, VEHICLES, REAL ESTATE, MONEY AND OTHER EQUIPMENT</b>
---------------	--	---

Country:

Quarter:

Year:

Institution Reporting:

Indicator	Type of Equipment	Quantity Seized	Number of Seizures	Total	Observations
Indicator 14	Firearms:				
	Other weapons				
	Cartridges, projectiles				
	Explosives, grenades				
Total					
Indicator 15	Money				
Total					

Indicator	Type of Equipment	Quantity Seized	Number of Seizures	Total	Observations
Indicator 16	Buildings (Real Estate):				
Total					
Indicator 17	Vehicles:				
	- Terrestrial				
	- Maritime				
	- Aerial				
	- Other				
Total					
	Other specify				
Total					



<b>FORM 6</b>	<b>INDICATOR GROUP 6</b>	<i>Level of Production of Drugs</i>
---------------	------------------------------	-------------------------------------

Country:

Quarter:

Year:

Country:

Quarter:

Year:

Institution Reporting:

Institution Reporting:

Type of Precursor		Unit of Measure	Quantity Seized	Number of Seizures	Observations
Name	Synonyms				
Benzyl Chloride					
1-Phenyl-2-propanone					
3,4 Methylene-dioxiphenyl-2-propanone					
Phenylacetic acid and its salts	Anthranilic acid and its salts				

Type of Precursor		Unit of Measure	Quantity Seized	Number of Seizures	Observations
Name <sup>38</sup>	Synonyms <sup>39</sup>				
O-aminobenzoic acid and its salts					
N-acetylanthranilic acid and its salts					
Phenylpropanolamine and its salts					
Benzyl cyanide					
Bromobenzyl cyanide	Bromo-benzyl-aceto-nitrile				
Piperidine					
Lysergic acid					
Ephedrine, its salts, optical isomers and salts of its optical isomers					
Ergometrine and its salts	Ergonovine and its salts				
Pseudoephedrine, its salts, optical isomers and salts of its optical isomers <sup>3</sup>					

<sup>38</sup> N.C.C.A.: Customs Cooperation Council Nomenclature.

<sup>39</sup> H.S.: Harmonized Commodity Description and Coding System.

<b>FORM 7</b>	<b>INDICATOR GROUP 6</b>	<b>SEIZURES OF CHEMICAL PRODUCTS</b>
---------------	------------------------------	--------------------------------------

Country:

Quarter:

Year:

Institution Reporting:

Type of Chemical Product		Unit of Measure	Quantity Seized	Number of Seizures	Observations
Ethyl alcohol	Alcohol, ethanol				
Hydrochloric acid	Muriatic acid Hydrogen Chloride				
Sulfuric acids	Vitriol, fuming				
Carbon sulfide	Carbon disulphide				
Ammonia (anhydrous or in aqueous solution)					
Potassium hydroxide	Caustic potash				
Sodium hydroxide	Caustic soda				

Sodium sulfate	Disodium sulfate				
Potassium Carbonate	Potash				
Sodium carbonate	Soda Ash, Washing Soda				
Potassium permanganate					
Benzene					
Toluene	Methylbenzene				
Methylene Chloride	Dichloro-methane				
Chloroform	Trichlo-methane				
Trichloro-ethylene					
Ethyl ether	Sulfuric ether				
	Ethyl oxide				
	Diethyl ether				
Acetone	Propanone				
Methyl ethyl Ketone	Butanone				
Acetic anhydride					

**FORM 8**

**INDICATOR GROUP  
6**

**SEIZURES OF RAW MATERIALS OR CONSUMABLES**

Country:

Quarter:

Year:

Institution Reporting:

Type of raw material or consumable	Unit of Measure	Quantity Seized	Number of Seizures	Observations
Lime				
Cement				
Dynamite				
Gasoline				
Kerosene				
Lye				
Urea				

<b>FORM 9</b>	<b>INDICATOR GROUP 6</b>
<b>NUMBER OF LABORATORIES DISCOVERED AND POTENTIAL PRODUCTION CAPACITY, BY TYPE OF DRUG AND GEOGRAPHIC LOCATION</b>	

Country:  Quarter:  Year:

Institution Reporting:

Geographic Location (State or Dept.)	Type of Drug	Annual Potential Production Capacity		Observations
		Unit of measure <sup>40</sup>	Quantity	

**Total of laboratories discovered**

<sup>40</sup> This refers to the production capacity over time, expressed in the Technical Units of Measure of the country.

FORM 10

INDICATOR GROUP  
6

AREAS CULTIVATED, BY TYPE OF PLANT AND GEOGRAPHIC LOCATION,  
AND NEW AREAS OF ILLICIT CULTIVATION

Country:

Quarter:

Year:

Country:

Quarter:

Year:

Institution Reporting:

AREAS CULTIVATED					
State, Department or Region	Type of Plant	Hectares cultivated			Potential Production TM/Ha
		Licit Area	Illicit Area	Total	





<b>FORM 12</b>	<b>INDICATOR GROUP 9</b>	<b>PERSONS Deported for Drug-Related Offenses</b>
----------------	------------------------------	---

Year:

Quarter:

Country:

Institution Reporting:

Type of Drug:

<i>Number of Criminal Deportees by Age and Sex</i>			
Age Group	Male	Female	Total
<15			
15-19			
20-24			
25-30			
30-34			
35-39			
40+			
Unknown Age			
Total			



<b>FORM 13</b>	<b>INDICATOR GROUP 11</b>	<b>ACTIONS BY THE JUDICIAL SYSTEM IN CASES RELATING TO MONEY LAUNDERING</b>
----------------	---------------------------	---

Country:  Quarter:  Year:

Institution Reporting:

	Number of persons arrested	Number of criminal procedures initiated	Number of persons tried	Number of persons sentenced	Value of confiscated property	Remarks
Investigations undertaken based on reports of suspicious transactions						
Other investigations of cases relating to money laundering						
<b>TOTAL</b>						
Investigations of cases of laundering of money derived from drug trafficking <sup>41</sup>						

<sup>41</sup> Based on the totals detailed in the preceding row, an approximation of the quantities or values associated with cases of laundering of money derived from drug trafficking and associated crimes.







**Inter-American Drug Abuse Control Commission (CICAD)**  
**Secretariat for Multidimensional Security (SMS)**  
**Organization of American States (OAS)**