



Consultancy: To Conduct an Assessment of the Economic Costs of Substance Abuse in CARICOM Member States: Jamaica, Suriname and Trinidad and Tobago

Jamaica Report

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ACRONYMS

CARICOM Caribbean Community

CBSI Caribbean Basin Security Initiative

COI Cost of Illness

CICAD Inter-American Drug Abuse Control Commission

DYPLL Discounted Year of Productive Life Lost

GDP Gross Domestic Product

ICD International Classification of Disease

JCF Jamaica Constabulary Force

JDF Jamaica Defense Force

MEM Multilateral Evaluation Mechanism

NCDA National Council on Drug Abuse (Jamaica)

NGO Non-Governmental Organization

SWOT Strengths, Weaknesses, Opportunities and Threats

UNODC United Nations Office on Drugs and Crime

UHWI University Hospital of the West Indies

UWI University of the West Indies

WHO World Health Organization

YPLL Years of Productive Life Lost

EXECUTIVE SUMMARY

For decades, successive governments of Jamaica have been grappling with issues related to drug demand and supply reduction in the country. Many strategies and attempts have been made to eradicate this blight or at least lessen this phenomenon within the Jamaican society efforts which have increased Jamaica's economic cost burden. The added economic burden on Jamaica attributed to illicit drug consumption and alcohol abuse results not only from the cost incurred to implement and maintain strategies to reduce the demand of illegal drugs, but also includes loss of productivity through illnesses, injuries, death and incarceration associated with drug and alcohol misuse. There is, however, a dearth of information regarding the actual value of the economic burden attributed to drug demand activities in Jamaica.

This Study purposed to breach this gap in availability of cost information, using a quantitative research methodology which utilized both primary and secondary data from key sectors/stakeholders to estimate the economic cost of substance abuse in the country. A questionnaire was designed to capture relevant information from the health, law enforcement and justice sectors, and administered to stakeholders in these sectors. The Cost of Illness (COI) approach was applied to data collected to arrive at an estimate of the economic cost.

The economic cost arrived at in relation to Jamaica's substance abuse problem and efforts at drug demand reduction may be said to be quite conservative. This is so described as pertinent information from key stakeholders such as private drug abuse rehabilitation/treatment facilities and the Jamaica Drug Courts were not had.

The findings reveal that in total, the economic cost of substance abuse to Jamaica in 2010 was approximately J\$3,632,139,180 or US\$41,748,726. This includes costs of activities geared at illicit drug demand reduction as well as medical expenses and the value of lost productivity and lives as a result of substance abuse.

INTRODUCTION

Jamaica is the third largest Caribbean island. It lies west of Haiti and to the south of Cuba; with a width of 82 km and a length of 235 km. The Island has a surface coverage of 11,242 sq. km. (NCDA Master Drug Prevention and Control Plan, 1997-2002).

The population of Jamaica is currently estimated to be 2.7 million people. The population is fairly young, with one-third said to be fifteen years and younger and another third between fifteen and twenty nine years old. In 2009, 8.4% of Jamaica's male population was unemployed; 67.5% of that figure was between ages 14-44 years of age (NCDA Master Drug prevention and control plan-1997-2002).

For decades, illicit drug trade and drug misuse have been of major concern to Jamaica. UNODC (2005) reported that the majority of illicit drug users are between the ages of 18 and 25 years, with 70% to 80% of them being males, implying that substance abuse/illicit drug use is occurring in the country during the most productive years of individuals' lives. With a young population and high unemployment rate, particularly among the youth, such a phenomenon may not be totally unexpected and this nagging problem has seen many measures implemented over the years in an attempt to address it. In as much as substance abuse constitutes a major social ill in Jamaica with implications for health, law enforcement and general economic wellbeing, very little empirical studies have been done to understand the full extent of the problem in terms of the economic cost to the country, even though the cost of illicit drug use and alcohol misuse, socially and economically, to Jamaica can be substantial.

In recognition of this challenge, the CARICOM Secretariat invited proposals to conduct an assessment of the economic costs of substance abuse (the Cost Study) in three CARICOM Member States, namely; Jamaica, Suriname and Trinidad and Tobago. UWI Consulting Inc., a subsidiary of The University of the West Indies, was contracted to undertake the Cost Study with the objective of improving regional capacities to manage drug demand and to contribute to supply reduction capabilities through training and research. More specifically, the study involved analysis of the following:

 Economic and financial cost associated with/related to substance use and abuse (law enforcement and Justice System with a focus on: arrests, prosecution and incarceration of offenders in prisons or juvenile remand homes 2. Cost of substance abuse related to visits/treatment administered in emergency rooms/casualty departments at general and psychiatric hospitals.

The Cost Study was conducted between February 2011 and January 2012. The study included conducting a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis of the national data system of Jamaica to identify areas of strength in the national statistical system and gaps that existed in available databases in relation to the health, law enforcement and justice sectors. The findings of the SWOT Analysis lead to the development of a data and statistical system inventory protocol that was designed to capture information on certain indicators that are essential for conducting a cost study on substance abuse at the national level. The protocol was distributed among country stakeholders made up of representatives of government ministries, agencies, and (non-governmental organizations) NGOs. The completed protocols provided information on specific source(s) of data for the required indicators. These data sources were accessed by UWI Consulting and the required data retrieved for analysis. This process enabled UWI Consulting to determine data gaps in Jamaica's reporting system as it relates to substance abuse cost estimation and led to the development of a plan to fill the data gap.

The study findings on the status of the data and statistical inventory system informed the design of a questionnaire for collecting data from the relevant ministries, agencies and NGOs. The questionnaire was custom-made for each stakeholder for conciseness and only for the purpose of supplementing data already collected from published sources. An estimate of the economic costs of substance abuse in Jamaica was then computed from available data following the Cost of Illness (COI) methodology.

This Study is crucial not only for accountability and control of resources purposes; it will help to provide justification for how the government prioritizes drug demand reduction programme allocation in its budget. In addition, it will help to identify and improve upon information gaps that now exist in the national data system in relation to substance abuse and drug demand reduction programming, thereby providing a better understanding of the severity of the illicit drug demand problems facing the country.

REVIEW OF LITERATURE ON COSTS OF SUBSTANCE ABUSE

In general, the economic costs to the society caused by illicit drug activities are usually subsumed by the health consequences and burden on the health care system; criminality, violence, financial paucity, loss of production, all associated with substance misuse related problems (UNODC, 1998). The Jamaican society is no different in this regard, as it faces similar problems attributed to illicit drug misuse and the illicit drug trade.

The cost of substance misuse borne by the society includes loss of legitimate earnings and household productivity due to impaired functioning, time spent in incarceration, and time used in pursuing crime careers, all of which translate into lost tax revenue for governments (Harwood, Reuter, Kleinman, Mark et.al., 1999). Few studies have been undertaken to measure the cost of illicit drug use to societies globally and regionally (UNODC, 1998). Anguilar-Gaxiola et. al. (1993) quoted Canino et. Al. (1987) as declaring that "in the Caribbean, until recently, drug use literature has been virtually non-existent." For Jamaica in particular, this is especially true. To our knowledge, no empirical study analyzing the economic and/or social costs associated with illicit drug activities is available, and if available, they seem not to be readily accessible.

For those countries that have conducted cost analyses associated with illicit drug misuse and trade activities, it is clear that there is tremendous pressure exerted on those countries' socioeconomic structures. For example, in the United States of America in 1992, approximately US\$ 18.8 billion dollars were spent for healthcare services related to substance abuse. For specialized services related to alcohol misuse consequences, US\$ 9.9 billion was spent. This was made up of US\$ 5.5 billion in prevention costs and US\$ 4.4 billion in treatment costs, respectively. An estimated US\$ 82 billion was lost in potential productivity and motor vehicle crashes associated with substance misuse accounted for US\$ 24.7 billion (Harwood, Reuter, Kleinman, Mark et.al., 1999).

Closer home in the Caribbean, Barbados is noted to have spent an estimated BDS\$1,386, 293.69 to maintain prisoners with drug-related offenses for a period of approximate eight years. The loss of production for this same population was calculated at BDS\$273,190 and total loss to the economy totaling BDS\$1,659, 483.69. (J. M. Yearwood, 2002).

In the Bahamas, it costs the government \$9.7 million per year and \$500 million worth of military equipment to combat the illicit drug trade (Booth, C. and Drummond, T. 1996).

No such data existed for Jamaica. What is known about Jamaica, however, is that it has notoriety as a transshipment route between South and North America. Its position in the Caribbean belt makes it perfectly suited for illicit drug trafficking. Its coastline has many berths and illegal landing strips which have been constructed on its coastal plains to aid in illegal drug trafficking activities. "It has been estimated that 30% of cocaine imported into the United States and over 50% of the cocaine available on the streets of Britain have been in transit through Jamaica" (Cawich, S.O., Valentine, C., Evans, N.R., Harding, H.E., Crandon, I.W., 2009).

Graham (2006) quoted Matty Maher (former head of the U.S. Drug Enforcement Administration) as saying "it is estimated that between 70-100 tonnes of cocaine are transshipped trough Jamaica each year..." (pg.114). He went on to declare that "in 1997 55% of the total U.K. (United Kingdom) cocaine seizures were made at London Airport; 56% of which were couriers from Jamaica on direct British Airways and Air Jamaica flights...Of the drug couriers held, 39% (162) were aged 21-30 years and 28% (116) were aged 31-40 years" (pg. 117).

There were couriers who were informally labeled 'drug mules' or 'body packers' (persons who ingest and insert illicit drugs in their body cavities to be transported and eventually excreted then distributed overseas).

"The packers ingest several small pellets that contain an average of 3-12 grams of cocaine. The cocaine is encapsulated with a variety of materials including condoms, plastic films and even aluminum foil. The packers transport several packages with an average total weight of one kilogram, often by commercial flights to the delivery points. Upon arrival at their destination, packers are usually given laxatives, cathartics or enemas in an attempt to expedite delivery of their cargo" (Cawich, S.O., Valentine, C., Evans, N.R., Harding, H.E., Crandon, I.W., 2009).

In an attempt to curtail these practices, the Jamaican government has invested significant resources into the detection of these 'body packers'. These include the installation of ion scanners and EMIT® Screening Machines in 2002 to detect trace amounts of Cocaine, and the 1999 inception of the Airport Counter Narcotic Interdiction Task Force, a specialized anti-drug task force aimed at drug couriers before they board commercial airlines (Cawich, S.O., Valentine, C., Evans, N.R., Harding, H.E., Crandon, I.W., 2009).

Attempts to transport illegal drugs in luggage on legitimate airlines and hiding illegal drugs for transport in containerized sea vessels, have also cost the country financially because of the fines imposed by international regulatory bodies, when illegal cargo are found on these

vessels. Such fines have contributed to Air Jamaica (national airline) "losses between 1988 - 1989 of US\$ 14 million, 10% more losses than for the previous year...between 1989 and 1991, Jamaica's Air Jamaica was also fined about U.S. \$37 million for illegal drugs found on its planes entering the United States..." (Graham, 2006: pg.122). These are added burden on the Jamaica's national coffer, when attempts have to be made to implement and maintain stringent security details at the Country's points of entry and exit.

Another way in which the economic security of the country (Jamaica) is in jeopardy, is the adverse effect that the drug trade has on the economy when multinational corporations either refuse to do business or have withdrawn their businesses from the country; because their businesses have been prone to manipulations (especially narcotics transshipment) by individuals in the drug trade. One such sector which had been hit hard by narcotics hidden in legitimate shipments was the garment industry. The net effect of refusal or withdrawal of business is according to Colonel L. Graham, "a diversion in investment, a decline in export revenues and loss of legitimate jobs" (p.121). He continued by making reference to "one Jamaican situation, Hanes, one of the Country's largest manufacturers, suspended shipments of good assembled in Jamaica, following the discovery in June 1994, in a Florida warehouse, of 200 pounds of marijuana in a shipment of clothing from Jamaica...Hanes produced about US\$200 million worth of clothing locally" (pg.122).

In trying to fulfill its obligations to ratified conventions and signed treaties to fight the illegal supply and demand of the drug trade in Jamaica, a number of agencies were established. Some of these agencies are:

The National Council on Drug Abuse

The National Council on Drug Abuse (NCDA) in Jamaica was established in 1983. Its main aim was to "educate the general public about the dangers of drug abuse and to prevent the indiscriminate use of drugs". The mission statement of the NCDA is: "To effectively reduce the abuse of illicit drugs, the supply and demand of illicit drugs and to promote healthy lifestyles". One year after the establishment of NCDA, the Drug Abuse Secretariat was established to assist the NCDA in carrying out its mandate.

During the 1980s when the Council and Secretariat were formed, the main drug misuse problem faced by the country was the cultivation of marijuana. Since then, the country's drug trade has not only ballooned to involve cocaine, but has been associated with major crimes. In addition, Jamaican drug dealers have recently been partnering with international

drug cartels such as those from Columbia, forcing the NCDA to conclude that to stem this epidemic "demand and interdiction strategies are profoundly interwoven, as one cannot be effective without the other" (NCDA Master Plan: 1997-2002).

Custom Excise and Duty Department

This Department is involved in two main types of drug control. (1) Illicit drug supply/import control carried out by personnel at airports and sea ports and (2) Investigations by special officers assigned to the contraband enforcement team. These specialist officers collect information locally and internationally in an attempt to detect and intercept illegal drug activities.

Port Security

There is also the Port Security Corp, established in 1989 to help combat illegal drug trafficking in Jamaica. The Corp consists of specially trained paramilitary personnel who report to the Ministry of Justice. A sub-section of this Corp is responsible for preventing the trans-shipment of drugs from the island, especially via "legitimate garment shipments", in addition to recruiting and deploying staff to patrol tourist resorts, with a view to reduce sales of illegal drugs to tourists.

Jamaica Constabulary Force (JCF) and the Jamaica Defense Force (JDF)

Even though the mandates for these agencies are basically to keep law and order and defend the country respectively, they also factor significantly in the fight against the supply and demand of illegal drugs.

The JCF has the power to investigate offenses of illegal production, trafficking and consumption. The Narcotics Division of the JCF was established in 1973 and has personnel placed at airports and seaports, in addition to carrying out searches of properties, motor vehicles, anywhere and anything suspected of being involved in illegal drug activities.

Another sub-division of the JCF (the Canine Division), assists in the detection and control of illegal drug activities in the country. Personnel in this Division are assisted by dogs, trained to detect marijuana and cocaine. These dogs are used mainly at the country's airports, to detect luggage that may contain marijuana and cocaine.

There is an orchestrated effort by the JCF, Airport Authority and the Port Authority in Jamaica (all of which fall under the auspices of the Ministry of National Security in the country), to eliminate the illegal drug trade in Jamaica. This effort resulted in the formation

of the Police Ports Division in 1988; designed to prevent and detect illegal import and export of narcotic drugs.

The Marine Division of the JCF plays a significant role in illicit drug control. Its general area of responsibility is to patrol the 492 miles of Jamaica's coastline, to ensure no illegal drug passes to and from the country. This Division works closely with the JDF and often partner in joint narcotic operations.

The JDF, established in 1962, also plays a crucial role in the fight against supply and demand of illegal drugs. It provides invaluable support to the JCF and is the main agent conducting demolition of illegal airstrip used by light aircrafts to traffic illegal drugs in and out of the country. Hence, the Air Wing and Coast Guard Divisions of the JDF are important to drug interdiction.

Despite its efforts, Jamaica continues to struggle with the problem of drug trafficking and substance abuse. Due to circumstances related to economic deprivation and instability, "the growth of the informal economy have been stimulated...all (of which) make the engagement in illegal activities more palatable for some and justifiable for others...in other words, it makes the region hospitable to the conduct of (illegal) drug operations" (Graham, 2006).

With all the resources expended by the Jamaican government on these agencies in their fight against drugs, there seem to be no empirical study conducted to calculate the cost impact on the Jamaican economy. The present study seeks to fill this gap in knowledge and to inform policy.

METHODOLOGY

The Cost of Illness (COI) approach to estimating economic costs of substance abuse (Single et al., 2003) was adopted in conducting the cost analysis for this study. This approach involves estimating the direct and indirect costs of substance abuse and provides for the flexibility of accounting for social costs in the estimation of costs. A societal perspective that includes all types of costs — whether private or public — and a prevalence-based approach to estimating the burden of substance abuse (affected population) was used. In calculating direct costs of substance abuse, focus was placed on cost items specific to the health, law enforcement, and justice systems. Costs related to arrests, prosecution and incarceration of

offenders in prisons and juvenile remand homes were examined in relation to the administration of law and the Justice systems. Also, costs related to visits and treatment administered at the Detoxification Unit of The University Hospital of the West Indies, Mona, as a consequence of substance abuse as well as costs of treatment and rehabilitation at substance abuse treatment centres run by NGOs were analysed. In calculating indirect costs, the human capital approach was followed. This approach used for valuing mortality and morbidity provides estimates for the costs associated with loss of lives and productivity for individuals involved in substance abuse or who have been victims of substance abuse. Future costs were discounted using 3% discount rates as suggested by the Panel on Cost-Effectiveness in Health and Medicine (Gold et al, 1996) and as implemented by W.H.O in its Global Burden of Diseases project.

A SWOT analysis of the data and statistical system of Jamaica was carried out to assess the availability and quality of data for the cost study. The SWOT Analysis was used to inform the creation of a 'Data and Statistical System Inventory Protocol' (please see Appendix 1 for a copy of Inventory Protocol).

The 'Data and Statistical System Inventory Protocol' was designed to capture information on indicators that are essential for conducting a cost study on the illicit drug trade at a national level. It consisted of questions which provided information on data sources for: the National Anti-Drug Plan or Strategy; Substance Abuse Data Collection Capacity; Drug Treatment, Rehabilitation and Prevention; and Drug Demand and Supply Reduction. The information elicited by the protocol helped in the development of a self-administered questionnaire, used in the final data collection process.

The self-directed questionnaire (Please see Appendix 2) consisted of close-ended questions, but allowed respondents the opportunity to provide additional information where necessary. Questionnaires were administered to target populations in the health, justice and legal sectors in Jamaica. The questionnaire was constructed using some questions from existing instruments such as those developed by the Multi-lateral Evaluation Mechanism (MEM) and the International Guidelines for Estimating the Costs of Substance Abuse-2001.

DATA ANALYSIS

The Study employed the Cost of Illness (COI) approach in analyzing data, with a view at estimating both direct and indirect costs of illicit drug and alcohol misuse to the society and not just the costs to the government of Jamaica. As such, direct costs consisted of expenditures made as a direct consequence of substance abuse either for treatment, rehabilitation, or prevention regardless of who incurred the cost as well as expenditures on drug demand reduction activities. Indirect costs, on the other hand, consisted of expenditures made as secondary consequence of substance misuse and included the economic value of resources lost as a repercussion of substance misuse and potential contribution to the economy that remained unrealized due to such activities.

The aim of the study was to estimate costs for 2010 but data gaps necessitated the use of some data for 2009 as proxies for 2010. Whenever proxies were used, the results have been clearly identified as such in the report. Data were collected on public health expenditure, law enforcement spending, and expenditure in judicial system attributable to the problem of drug and alcohol misuse in the country. In the private sector, attempts were made at collecting data on private health care expenditure due to drug and alcohol misuse and other illicit drug activities, comprising of health care expenditure by individuals and cost of providing health care by private substance abuse treatment and rehabilitation centres.

The costs of lost productivity due to illicit drug misuse and alcohol abuse related morbidity (absenteeism and disability) and mortality (premature death as a result of substance abuse) were estimated from data collected as part of the Study in combination with secondary data from the World Health Organization's (WHO) Global Health Observatory Data Repository (www.http://apps.who.int/ghodata).

The typology 'direct costs' was categorized into costs incurred by public entities and non-governmental organizations (NGOs) whose mandates (or part thereof) were to ameliorate or at best make obsolete illicit drug activities in the country and cost of care paid by individuals. The costs to public agencies and NGOs were represented by budgetary allocations to public hospitals and specialized substance abuse treatment centers/units for substance misuse-related health care. In addition, the National Council on Drug Abuse (NCDA) programming expenditure, police and specialized law enforcement units for narcotics control-related activities, and operating expenditures for private and quasi-public drug abuse treatment

centers were all factored into the calculations under 'direct costs.' These cost estimates were disaggregated, to the extent possible, in to capital expenditure (to include the purchase of equipment and other supplies) and recurring expenditure (such as payment of utility bills, personnel cost – including travel). In estimating the cost of care paid by individuals, data on hospitalization for alcohol- and drug-related admissions and discharges at hospitals and data for admissions and discharges at a specialized substance abuse treatment center (UHWI, The Detoxification Unit) were used. Cost of care was determined by multiplying the average length of stay on admission for substance misuse treatment/ rehabilitation by the per day cost of a bed space.

Indirect costs were subdivided into morbidity and mortality costs, along with cost attributable to length of incarceration.

In estimating morbidity cost, time spent by patients for substance misuse related office visits and admissions were accounted for as time lost, which could have been used for other productive activities. Hence, morbidity cost was calculated by multiplying the total number of days spent on admission by the average daily Gross Domestic Product (GDP) per capita. Data on hospital discharges were supplied by the Ministry of Health whereas information regarding average length of stay in health facilities was retrieved from the 2010 edition of the Economic and Social Survey of Jamaica (ESSJ).

The WHO's International Classification of Disease (ICD10) 2010 version was used to identify morbidities related to illicit drug and alcohol misuse. 'F10' represents mental and behavioural disorders due to alcohol misuse; 'F11-19' represents mental and behavioural disorders due to psychoactive substances (including narcotics) and 'K70' represents alcoholic liver disease.

In calculating mortality cost, the World Health Organization's (WHO) data on death rates for alcohol abuse, drug abuse and traffic accidents and the country's population data were used to estimate the number of deaths due to illicit drug and alcohol abuse. Death rates for alcohol and drug abuse were multiplied by the corresponding age- and gender-specific population for adult population active in the labour force (18 - 65 years). An estimation for the number of deaths in the economically-active population as a direct result of alcohol and drug abuse was consequently arrived at.

The attributable fraction of traffic accident deaths involving illicit drug and alcohol misuse was sourced from Francis, Eldemire and Clifford (1995)'s study of road fatalities in two parishes of Jamaica in which blood samples of 77.5% of the fatalities tested positive for alcohol, 22.5% for marijuana, 3.2 % for cocaine, and 22.5% for both alcohol and marijuana. Since the presence of these substances were not necessarily mutually exclusive, only the highest figure of 77.5% for alcohol was used as the attributable fraction of traffic accident fatalities due to illicit drug and alcohol misuse to avoid duplication (double counting). The death rate from traffic accidents was multiplied by 0.775 and the product multiplied by the age- and gender-specific population to arrive at an estimate of total mortalities from traffic accident as a result of substance abuse.

The number of deaths which might have been related to illicit drug and alcohol misuse, in addition to traffic accidents resulting from illicit drug and alcohol abuse were summed up for each age category to arrive at a single count of number of deaths for each age group. Using WHO's life table for Jamaica, the number of years of productive life lost (YPLL) in each age group for both sexes was calculated. The total YPLL was then multiplied by the average annual GDP per capita to arrive at an estimate of the economic cost of premature death as a result of substance abuse. Since YPLL extend in to the future, a 3 % discount rate was applied to get the discounted YPLL and the discounted mortality cost estimated by multiplying the discounted YPLL by the average annual GDP per capita. Both the undiscounted and the discounted mortality costs are reported in the Results Section of this report.

A separate category of indirect cost was created for the cost of incarceration. This represents the loss to the economy of not having people who are incarceration due to drug-related offences/breach of the "Dangerous Drug Act" in Jamaica contribute to productive activities in the society. Data related to incarcerations at the Island's penal institutions were sourced from the 2010 Economic and Social Survey of Jamaica's (ESSJ) Annual Report. A minimal length of sentencing time (12 months) was multiplied by the total number of adult prisoners who were serving times for drug offences to arrive at an estimate of YPLL due to incarceration. The same procedure used to calculate morbidity cost due to hospitalization and mortality cost due to substance misuse was applied in calculating cost of incarceration. The YPLL due to incarceration was multiplied by the average GDP per capita to arrive at an estimate for the

cost of incarceration. When appropriate, discounting was applied to get the discounted cost of incarceration.

The total economic cost of illicit drug and alcohol misuse in Jamaica was, therefore, calculated by summing up the direct costs, consisting of the cost of care borne by individuals and expenditures of government agencies and NGOs with drug demand reduction mandates, with indirect costs, which comprised of the cost of morbidity due to health consequences of illicit drug and alcohol misuse, the cost of incarceration as a result of drug-related offences, and the value of lives lost as a direct or indirect result of illicit drug and alcohol misuse. This total economic cost incurred by Jamaica because of drug demand reduction activities and illicit drug and alcohol misuse is presented as both undiscounted and discounted cost and in the local Jamaican currency as well as in US dollars. The breakdown of the costs is given under the results section.

RESULTS

Direct Cost

The estimated direct cost of substance abuse to Jamaica in 2010 for five agencies spanning health, legal and justice sectors amounted to **JA\$903,159,456**. As is seen in Table 1, administrative cost accounted for the bulk of expenditure, whereas purchase of equipment and other capital costs accounted for the least amount.

Table 1: Estimated Direct Cost for Government Agencies and NGOs in Jamaica for 2010

2010	Public Hospitals	National Council on Drug Abuse	Hibiscus (Jamaica)	Policing	Caribbean Regional Drug Training Center (REDTRAC)	Total (JA\$)
Equipment and other capital costs		74,223.00	310,000.00		1,500,000.00	\$ 1, 884, 223
Utilities		4,150,533.00	500,000.00	14,890,000	4,224,000.00	\$ 23,764, 533
Personnel Costs		42,741,794.00	5,184,000.00	579,340,000	25,105,000.00	\$652, 370, 794
Medications						-
Lab/Diagnost ics						-
Travels		13,597,524.00		57,000,000	4,035,000.00	\$ 74, 632, 524
Supplies		7,847,382.00	360,000.00	4,420,000	20,430,000.00	\$ 33, 057, 382
Total	88,050,000.00	68,411,456.00	6,354,000.00	685,050,000	55,294,000.00	\$903, 159, 456

Direct cost to the health sector was garnered from the Ministry of Finance's Budgetary Estimate of Expenditure, which gave details of financial allocation by government to the sector and, in particular, allocations to programmes or divisions in the sector which deal directly with illegal drug demand reduction. Illicit drug demand reduction efforts in this context refers to programmed activities geared at primary, secondary and tertiary care services (carried out by treatment /rehabilitation agencies and hospitals) in relation to illicit drug use and alcohol misuse.

It must be noted that the figure quoted by Jamaica's Ministry of Finance's Estimates of Expenditure budgetary allocation to the Ministry of Health, may not be the exact amount disbursed. At the time of data collection for this Study, however, that source of data was the most current. In addition, the figure for the Ministry of Health includes estimated budgetary allocation to the NCDA of J\$79,532,000. and a Rehabilitation Agency (Richmond Fellowship) of J\$9,600,000.

The NCDA gave a breakdown of its budgetary allocation, which totaled **JA\$68,411,456**. Accounting for a difference of **JA\$11,120,544**. in actual allocation to the NCDA, for 2010.

Hibiscus (Jamaica), a private agency which seeks to help reintegrate in society women who were incarcerated in the United Kingdom on drug-related charges, incurred for 2010 expenses amounting to **JA\$6,354,000**.

Health care expenditure by persons admitted to UHWI, a quasi-governmental hospital constituted 'cost of care' and was factored into the direct cost calculation. Since Jamaica has a *no user fee* policy at public hospitals, health care is "free" at these facilities, consequently, we were unable to put a direct cost to 'cost of care' at public hospitals.

At the quasi-government hospital (UHWI) however, patients accessing the services of that facility had to pay. Therefore, cost of care for individuals who presented at the Detoxification Unit of UHWI with substance abuse related medical conditions was calculated by multiplying the current daily per bed rate of JA\$1500 by the length of hospitalization.

Table 2 gives a summary of the estimated 'cost of care' at the Detoxification Unit –UHWI for 2010. The 'cost of care' for treatment amounted to **JA\$15,023,760**, with alcohol and marijuana-induced health conditions constituting the main reasons why persons were admitted for treatment.

Table 2: Cost of Health Care for Substance Abuse at Detoxification Unit-UHWI (2010)

	Alcohol	Cocaine/crack	Marijuana	Total
Males	219	34	279	532
Females	16	0	13	31
Total for Both	235	34	292	563
Average admission days	17.22	15.65	18.62	
Total admission days	4047	532	5437	10,016
Cost per bed (J\$)	1500	1500	1500	
Total Costs (J\$)	6,070,050	798,150	8,155,560	15,023,760

Indirect Cost

Table 3 shows the findings of the estimated total morbidity days for substance abuse related treatment/stay at public hospitals island-wide to be about 2475 while it was 10,016 at the

Detoxification Unit of the UHWI. These resulted in morbidity costs, due to productivity loss, of J\$ 2,944,790 and J\$11,916,023, respectively.

Table 3: Morbidity Cost of Admissions for Substance Abuse at Public Hospitals and UHWI in Jamaica, 2010

		Public	Hospitals		Detox Unit, UHWI	Total Cost
Both (Male and female) ages	F10	F11- 19	K 70	Total	Total	
10-14	0	9	0	9		
15-19	7	56	1	57		
20-34	23	220	0	220		
35-44	29	53	0	53		
45-64	4	28	6	34		
65+	7	6	2	8		
Total morbid days		24	75.2*		10,016	
Morbidity cost of economically active patients (J\$)		2,9	44,790		11,916,023	14,860,813

¹ 'F 10' represents mental and behavioural disorders due to alcohol misuse; 'F11-19' represents mental and behavioural disorders due to psychoactive substances (including narcotics) and 'K 70' represents alcoholic liver disease.

Table 4 indicates the morbidity cost for the Psychiatric Ward at the UHWI to be J\$2,322,282.

Table 4: Admissions to UHWI's Psychiatric Ward for period March to September 2010

Substances	Sample (N) both gender	Average days of admission
Alcohol	65	17.22
Marijuana	37	18.62
Crack/cocaine	6	15.62
Poly-substance	4	12.50
Total	112	1952
Morbidity cost (J\$)	2,3	322,282

A total of 112 individuals abusing/using alcohol, marijuana, crack/cocaine or a combination of two or more of the substances, in addition to having a mental problem were admitted to the UHWI's Psychiatric Ward. The total length of stay for this sample was 1952 days. When this

^{*}Calculated using 2009 data as proxies.

total was added to the figures for public hospitals and the Detoxification unit, a total morbidity cost of J\$ 17,183,094 is arrived at.

Table 5 gives a summary of prison admissions disaggregated in terms of age, average sentencing time (days) and estimated cost for years of productive life lost (YPLL) to the country.

Table 5: Costs of Incarceration for breach of the Dangerous Drug Act Jamaica (2009)

Ages	Both (males and females)		
17-20	23		
21-25	77		
25-30	99		
31-35	79		
36-40	65		
41-45	50		
46+	73		
Total	466		
Average sentence	365 days		
YPLL	466		
Cost of Incarceration (J\$)	202,359,102		

The results show that with an average of 365 days sentencing for breaches of the Dangerous Drug Act in Jamaica, an estimated 466 years of production were being lost costing the economy about J\$ 202,359,102 in lost revenues.

Mortality

As shown in Table 6, the estimated years of production life lost (YPLL) due to drug related road accident fatalities for males in Jamaica totaled 2808.46 and for females 2935.77; the sum total of which amounted to 5744.23 years. When discounted, the total years of life lost reduced to about 3717. These YPLL were as a result of two deaths from alcohol abuse, one death from drug abuse and 293 deaths from traffic accidents caused by substance abuse. The total value of the YPLL was estimated at J\$2,494,413,768 without discounting. Similarly, the total value of DYPPL was estimated to be J\$1,614,006.692.

Table 6: Mortality Cost of Substance Abuse in Jamaica, 2010

Cause of Death	Estimated Number of Deaths	YPLL (Years)	DYPLL (Years)
Alcohol abuse	2		
Drug-abuse	1		
Substance-induced Traffic Accident	293		
Total Deaths	296	5744.23	3716.79
Mortality Costs (J\$)		2,494,413,768	1,614,006,692

Table 7: Overall Estimated Cost to the Country

Cost Category	J\$	US\$
Cost to Agencies/NGOs	903,159,456	10,381,143
Cost of care - individuals	15,023,760	\$172,687
Morbidity costs	17,183,094	197,507
Cost of incarceration	202,359,102	2,325,967
Mortality costs	2,494,413,768	28,671,423
Total (\$)	3,632,139,180	41,748,726
Total discounted (\$)	2,751,732,104	31,629,105

The overall economic cost to Jamaica in relation to substance abuse for the year 2010 totaled J\$3,632,139,180 or US\$41,748,726. Table 7 provides the breakdown of the economic cost by cost category. As show on the table, when future cost are discounted, the economic cost reduces to J\$2,751,732,104 or US\$31,629,105.

DISCUSSION

According to the U.S. Department of State (2011), Jamaica's Gross Domestic Product (GDP) was J\$13 Billion for the year 2010. The results of this study show that the economic cost of substance abuse to Jamaica for 2010 was approximately J\$3,632,139,180. Mortality cost of J\$2,494,413,768 was responsible for a substantial proportion of this figure and accounted for 69% of the total costs. The results of this Study clearly bring to the fore how costly illicit

drug demand activities and alcohol misuse are for Jamaica, especially in terms of the indirect costs.

This Study also revealed that the sectors which were studied contain rich bodies of data relevant to cost study on drug demand reduction initiatives. For the most part, however, each agency acts autonomously of each other in regards to data collection, compilation and dissemination of information. This made it challenging at times to access relevant information for the Study, as each agency has its own protocol and limitations regarding availability of and accessibility to the required information.

It is evident also that Jamaica had expended much time and effort (both publicly and privately) to stem illicit drug demand while dealing with the many and varied attendant issues resulting from drug and alcohol misuse. This effort is exemplified by the many studies conducted on this phenomenon, the programmes implemented and plans that have been crafted to continue combating illicit drug demand in the Country.

With direct reference to the results of this Study, it must be noted that the cost arrived at can be at best described as conservative. This is so described as data which would have made the study more robust were not available. This missing information includes direct and indirect costs incurred by some private substance abuse treatment centres and the six private hospitals in the country. No data regarding cost incurred by the Drug Court was had. Budgetary allocation to the Drug Courts is subsumed under the Registrar Magistrate (R.M) Courts and data were not received from this entity before the end of the Study's data collection period.

Another important piece of information which was not included in the final cost arrived at in this Study is the direct cost incurred by the departments at the University Hospital of the West Indies (UHWI). Even though it was ascertained that the specific department (Department of Psychiatry, under whose auspices the Detoxification Unit and the Psychiatry Ward fall), had a budgetary allocation of **J\$ 33.9M**, the disaggregation of this amount in terms of how much was allocated to the Detoxification Unit and Ward 21; how much was spent for administrative and / or treatment purposes and equipment were not available.

Important to this cost study, but missing from the final cost arrived at, is funding from international agencies. The Caribbean Basin Security Initiative (CBSI), whose objectives include to "increase the Government of Jamaica's regional capacity to reduce cultivation, production and trafficking of illicit drugs in Jamaica and which is benefactor to three private

substance abuse rehabilitation/treatment facilities in the country is one example. This Initiative is funded by the British Foreign and Commonwealth Office at a cost of US\$80,000 with the project period being April 2011 to March 2012 (Ministry of Finance and Planning, Estimates of Expenditure, 2010). This figure was not included, because it was outside the inclusion criterion of the years 2009/2010, which the Study was focusing on.

External funding is, however, an important element of direct cost of drug demand reduction activities in the nation, as the non-existence of these financial aids would force the government to find monies from the national coffer to address the problems or otherwise, the drug demand countermeasures employed by Jamaica would probably not be as far-reaching as they are now.

In relation to indirect cost to the country, information regarding injuries and/or deaths related to substance misuse was almost non-existent. It appears, routine drug and alcohol testing in hospital trauma units in Jamaica, of persons presenting with injuries is rarely done. This suggests that this very important information, which is crucial to drug and alcohol abuse policies and treatment forecasts and direction, is being overlooked. The fact also that Jamaica now has a "free healthcare system," means that the cost to the national budget in this area is rarely, if at all fully, enumerated.

Crime and violence is said to have a positive correlation with illicit drug activities in Jamaica. According to Graham (2006),

"Local reports indicate that drug addicts commit most of the crimes in Jamaica... drug organizations and drug gangs to protect their territories in specific narcotic markets use violence... in drug-related transactions, firearms are used as currency, both to launder money in the international black market and to pay for drug loads" (p.124).

This Study was unable to ascertain how much it costs Jamaica indirectly, in terms of interpersonal injuries/violence; gun violence and /or crimes associated with illicit drug demand activities. For example, a drug addict who is injured or killed, or who injures or kills someone while under the influence of illegal drug(s), may get medical treatment and/or may be arrested by the police for felonious wounding, occasioning grievous bodily harm or murder, without mention of the influence of illegal drug or alcohol. As a result, valuable cost information with implications for budgetary allocation and national drug demand strategies are lost.

In relation to incarceration for Breaches of the Dangerous Drug Act, reported data did not differentiate the kinds or categories of drugs involved or drug activities for which sentencing was given; neither was the length of incarceration associated with the sentencing noted in the Economic and Social Survey of Jamaica (2010). As such, the maximum sentence term of 12 months (365 days) stipulated by Jamaica's Dangerous Drugs Act (1948) for marijuana use, was used to calculate cost of incarceration. The Dangerous Drugs Acts (1948) declares in part that: ...

"anyone who smokes or otherwise uses ganja (Marijuana) shall be guilty of an offence and shall be liable on summary conviction before a Registrar Magistrate Court for first conviction ... of a fine not exceeding J\$5,000 or to imprisonment for a term not exceeding twelve months..." (30/1994, S.3 (b).

The YPLL was calculated using the age range from 18 years to 65 years. The rationale for this age range is because in Jamaica the legal age to commence fulltime work is 18 years, whereas, retirement is at age 65 years.

Of note, the YPLL was discounted by 3% as a general rule recommended by the Panel on Cost Effectiveness in Health and Medicine. According to WHO's National Burden of Disease Studies Manual (2001)

"A discount rate of 5% per annum has been standard in much health economic and other social policy analyses for many years. Environmentalists and renewable energy analysts have argued in recent decades for lower discount rates for social decisions. The World Bank Disease Control Priorities Study and the Global Burden of Disease project both used a 3% discount rate. The US Panel on Cost-Effectiveness in Health and Medicine recently recommended that a 3% real discount rate be used in health economic analyses to adjust both costs and health outcomes (Gold et al. 1996)."

On another matter of note, if a comparison of the length of stay for persons with substance abuse related problems who have been admitted on the Psychiatric Ward - UHWI and those admitted to the Detoxification Unit were to be done, a vast difference would be evident. It must be noted however, that the Detoxification Unit serves substance abusers specifically, whereas the Psychiatric Unit serves patients with mental problem, but who also misuse illicit drugs and alcohol; this is what accounts for this "vast difference" in length of stay. In most cases also, the Psychiatric Unit will transfer patients to the Detoxification Unit for their drug

and alcohol problems to be dealt with, after they have been stabilized for their mental health problems.

LIMITATIONS

As alluded to earlier in this report, there were missing data (such as direct costs to private health facilities which may have served individual with substance abuse related medical conditions) in addition to the non-availability of Drug Court data that have limited the cost estimation done in this Study. These are information that would have further enriched the study, and as such has limited to some extent its findings.

In addition, the time period for which data were gathered for this Study was not uniform, as it will be noticed that some information pertained to 2009 and others to 2010. This is due to inconsistencies in data archiving in the databases accessed for this Study. This lack of uniformity may be deemed a limitation, as even though activities of this nature remain fairly stable, it may be equally dynamic and so the cost calculations for each year have to be taken on their own merit for that particular year and not be generalized. It also makes it difficult to compare data, if one wanted to identify trends in expenditure and/or the dynamics inherent in illicit drug demand activities.

One other limitation to this Study is that findings from data gathered at the UHWI's Psychiatric Ward and Detoxification Unit, may not be generalized as the findings may not necessarily depict a true reflection of similar hospital units in Jamaica.

RECOMMENDATIONS

Based on the findings of the Cost Study, the following policy recommendations are made towards improving Jamaica's capacities to manage drug demand and contribute to supply reduction capabilities.

1. Strengthening of the research capacity of the National Council on Drug Abuse Secretariat (NCDA -Jamaica) would auger well for the country as this entity already

is actively involved in research among other drug demand related activities. In this regard, the NCDA could be extended to become the base for drug demand reduction research wherein all agencies (private and public) within Jamaica would be mandated to send relevant data at stipulated intervals to this central repository.

- 2. For the NCDA to be bolstered in performing the recommended role of a data repository, an evaluation of its database, data collection methodologies, data analysis procedures and information dissemination protocol would have to be conducted, with a view at improving its capabilities to a level where it would be able to handle the bulk of information that would be channeled through its database.
- 3. Jamaica through the NCDA conducts prevalence based research on drug demand measures. One way in which the NCDA could garner rich prevalence data using less funds could be to partner with the Planning Institute of Jamaica (PIOJ) which conducts the annual "Economic and Social Survey of Jamaica" (ESSJ). The PIOJ is established and highly respected in social and economic data collection and so with an already established data collection mechanism, the NCDA could only benefit from such a partnership.
- 4. Through the Ministry of Health, it could be mandated that blood specimens from persons accessing services in Accident and Emergency (Trauma) Units of healthcare facilities islandwide be routinely tested for illicit drugs and alcohol. This means there would be need for standardization of the information to be collected. In this regard, through the Ministry of Health, standard data collection forms would be produced and distributed via hard or soft copy. This information would then be forwarded to the NCDA for inclusion in the database.

In doing these routine testing, each healthcare facility would be better able to understand some underlying causes associated with persons accessing services at their trauma units. In addition, the NCDA could use this evidence-based information to help lobby for additional funding to target public health education goals. In addition, if all information pertaining to drug demand reduction were to be channeled through the NCDA's database, this would be beneficial to the National Master Plan, as it would provide more wholesome assessment and more comprehensive strategies in its illicit drug demand reduction planning mechanisms.

- 5. Given Jamaica's current economic status, continued partnership with international agencies such as the Mutual Legal Assistance Treaties (MLATS) and the local private sectors in combating drug demand is a must; more so in this age of advanced technology when individuals involved in the illicit drug trade are utilizing these technologies to enhance their activities. These partnerships through financial aid, joint interdiction, material and technical support, help to ease the financial burden on Jamaica's already fragile economy.
- 6. All personnel (especially healthcare providers and law officers) involved in primary or secondary prevention of illicit drug demand reduction activities, should be afforded

the opportunity to receive training through the Government of Jamaica/Organization of American State (OAS)/ Inter-American Drug Abuse Control (CICAD) university level certificate programme in drug addiction and intervention, to better prepare them to deal with the challenges inherent in their job functions.

The utilization of the Regional Training Centre for Drug Law Enforcement and the Caribbean Search Centre, should also be made available to personnel in the judiciary and legal sectors (regionally), whose jobs description includes dealing with illicit drug demand.

7. In conducting this Study, it was inevitable that some amount of social cost be factored into cost calculations. It must be noted, however, that much focus was on the external economic cost to Jamaica. To calculate social cost to the Country would have seen the Study calculating 'private' cost to those illegally involved in drug activities, in addition to cost borne by families of drug and alcohol abusers and communities in which they live. This Study, to some extent, however, looked at private cost only in terms of years of production life lost, which not only affect the illegal drug actors and alcohol abusers, but by extension affects the whole nation.

To get an in-depth analysis of how much it costs Jamaica socially in relation to drug demand reduction, a study looking at the "social cost" to the country should be conducted.

- 8. The Government of Jamaica should revisit the proposal made at a presentation to the Caribbean Drug Coordination Mechanism, Barbados, (May 2002) to implement formal drug treatment and rehabilitation programs in prisons in Jamaica. This would augur well for rehabilitation effort of the incarcerated, who are also dependent on substances.
- 9. Although there are two drug courts in Jamaica's two cities (Kingston and Montego Bay), it appears they are not as vibrant as they can be with regards to treatment services provided. The fact too, that they seem not to have their own 'sub-budget' aside from that of the Registrar Magistrate Courts, suggests the lack of vibrancy may be as a result of financial constraints. It is therefore recommended that the Jamaican Drug Courts be facilitated financially, so they will be better able to carry out their mandates, thereby lessening the amount of individuals who have to be imprisoned because of infractions such as personal use of illegal substances. This, by extension, will decrease the amount of money spent for care in penal institutions and lessen the years of productivity lost, as treatments options could be utilized as an alternative to custody.

REFERENCES

- Aguilar-Gaxiola, S., Medina-Mora, M. E., Magnana, C. G., Vega, M.E., Alejo-Garcia, C., Quintanar, T. R. et.al. (1993) Illicit drug use research in Latin America, accessed at www.sciencedirect January 12, 2011.
- Booth, C. & Drummond, T. (1996) The Caribbean Blizzard. *Time: 147 (9)* accessed at ebscohost.com January 12, 2011.
- Brooke, J. (Lt. Col.) 2000: Caribbean drug trafficking and its impact western Hemisphere. Washington D. C. Retrieved at 19, 2011. http://library.jid.org/en/mono39/taylor.htm, February http://library.jid.org/en/mono39/taylor.htm
- Cawich, S.O., Valentine, C., Evans, N.R., Harding, H. E. & Crandon, I. W. (2009.) The changing demographics of cocaine body packers in Jamaica. *Journal of Forensic Science*: 3 (2) accessed at www.sciencedirect January 12, 2011.
- Francis, M., Eldemire, D., Clifford, R. (1995). A pilot study of alcohol and drug related traffic accidents and deaths in two Jamaican parishes, 1991. West Indian Medical Journal 44:99-101.
- Gold, M. R., Seigel, J. E., Russell, L. B. & Weistein, M. C. (1996) Cost effectiveness in Health and Medicine. Oxford: Oxford University Press.
- Graham, Col. L. (2006) Transnational threat: Drug trafficking and its impact on international security: The Caribbean perspective. In Hall, K. & Chuck-A-Sang, M. (Eds.), Survival and sovereignty in the Caribbean community: The integrationist (p.105-135). Kingston: Ian Randle
- Harwood, H., Reuter, J., Kleinman, P., Mark, A. R. et. al. (1999). The cost estimates for alcohol and drug abuse. *Addiction:* 94 (5) *accessed* at ebscohost.com January 12, 2011.
- Inter-American Drug Abuse Control Commission (CICAD), Organization of American States (OAS), University of Medicine and Dentistry- New Jersey. The Pilot study on human, social and economic costs of drugs in the Americas: Final report.
- Inter-American Drug Abuse Control Commission (1998). Multi-lateral Evaluation Mechanism. Accessed at www.eigad.gas.org/MEM_January_12, 2011.
- International Statistical Classification of Disease and related health problems, 10th edition revision. Retrieved at http://apps.who.int/classifications/icd10/browse/2010/en, January 12, 2012.
- Ministry of Finance and the Public Service: Estimates of Expenditure Financial year ending March 31, 2012: Jamaica.
- National Council on Drug Abuse (1997). National/Master Drug Abuse, Prevention and Control Plan: 1997-2002. Ministry of Health and Ministry of Social Security and Justice.
- Platzer, M., Mirella, F. & Resa Nestares, C. (2004) Illicit drug market in the Caribbean: Analysis of information on drug flows through the region (p.189-223) in Klein, A.,

- Day, M. & Harriot, A. (Eds.), Caribbean drugs: from criminalization to harm reduction. Kingston: Ian Randle
- Ribando, C., L. Sun Whyler & J. S. Beitter, 2011; LAC: illicit drug trafficking and US counterdrug programs. Accessed at www.crs.gov
- Singh, W. (2004) Drugs and the Prison system: Impact of legislative changes on the prison crises in the Commonwealth Caribbean Region. (Ed.) Axel, Klein, Day & Harriot (2004), Caribbean Drugs: From Criminalization to Harm Reduction. Kingston: Ian Randle
- Single, E., Collins, D., Easton, B., Harwood, H., Lapsley, H., Kopp, P. and Wilson E. (2003). The International Guidelines for estimating the cost of substance abuse. Accessed at ebscohost.com, November 11, 2010.
- The Dangerous Drug Act (15th April, 1948) retrieved from http://cits.uga.edu/programs/legislation/jamaica/jm_drug-pdf, January6, 2012.
- The Planning Institute of Jamaica, (2010) Economic and Social Survey of Jamaica. Kingston.
- United Nations Office on Drugs and Crime (UNODC, 1998). Technical series 6: Economic and social consequences of drug abuse and illicit trafficking. Accessed at www.unodc.org February 6, 2011.
- United Nations Office on Drugs and Crime (2005) World Drug Report accessed at www.unodc.org February 19, 2011.
- U.S. Department of State (2011) Jamaica. Retrieved at http://www.stae.gov/r/pa/ie/bgn/2032.htm, January 6, 2012.
- World Health Organization (2011) Observatory Data Repository. Accessed January 16, 2011 at www.http://apps.who.int/ghodata
- World Health Organization (2001) Global Burden of disease studies: global program on evidence for health policy. WHO, Geneva. Retrieved at http://www.who.int/healthinfo/nationalburdenofdiseasemanual.pdf, January 4, 2012.
- Yearwood, M. J. (2004) The estimation of costs attributed to substance abuse and loss of productivity for inmates at Glendairy Prison: Barbados. Accessed at http://elendil.segurewebz.com/nesaorg February 19, 2011.

Appendix 1: Data and Statistical Inventory Protocol

UWI CONSULTING INC.

ECONOMIC AND SOCIAL COSTS OF SUBSTANCE ABUSE IN CARICOM MEMBER STATES

Data and Statistical System Inventory Protocol

UWI Consulting Inc., a subsidiary of the University of the West Indies, has been contracted by the Caribbean Community (CARICOM) Secretariat to conduct a research on the economic and social costs of substance abuse in three CARICOM member states (Jamaica, Suriname and Trinidad and Tobago) with the purpose of informing policy on drugs and to provide information that will be used to engage political support for drug demand reduction programmes. This protocol has been developed to assist in identifying data sources and assessing the quality of available data in participating countries. It has been adapted from the Inter-American Drug Abuse Control Commission (CICAD)'s Questionnaire for the Fourth Evaluation Round (2005-2006) under the Multilateral Evaluation Mechanism. As a stake holder in one of the participating countries, we are asking for your assistance in completing this protocol. As you answer the questions in this protocol, please feel free to suggest sources of data in your country that may be relevant to this study. Thank you for your participation and contribution to the successful completion of this study.

MEMBER STATE:	JAMAICA	
NAME OF STAKEHOLDE	R:	
POSITION OF STAKEHO	LDER:	
MINISTRY/AGENCY/AF	FILIATION:	
DATE COMPLETED:		

Data and Statistical System Inventory Protocol

INSTRUCTIONS: Please indicate your response to the questions below by putting an "X" in the space or column corresponding to the correct answer or by writing your answer in the space provided as appropriate. If **not applicable**, please write "NA". If **none**, please write "None."

I.	Na	tional Anti-Drug Plan/Strategy
	1.	Does Jamaica currently have a National Anti-Drug Plan or Strategy? Yes No
	2.	If Yes to question 1 above, what year was it approved?
	3.	If Yes to question 1 above, which of the following areas are covered in the National-Anti-Drug Plan/Strategy?
		Demand Reduction Yes No
		Supply Reduction Yes No
		Money Laundering Yes No
		Development Programmes Yes No
		Treatment/Rehabilitation YesNo
		Programme Evaluation Yes No
		covered and when it was done:
	5.	What agency/agencies or ministry/ministries are responsible for implementing the National Anti-Drug Plan?
	6.	Please indicate whether or not the National Anti-Drug Plan/Strategy is funded through the following sources:
		Budget Allocation from the Government of Jamaica Yes No
		Contribution from Civil Society Yes No
		Regional Cooperation (e.g., CARICOM, CICAD etc.) Yes No

	Study	Study Condu	cted	Year of
3.	Please indicate if any study related to the following provide the year the most recent study was conducted			in Jamaica and
2		T 1		
2.	If Yes to question 1 above, please provide the name of	of the office/Ag	ency:	
1.	Does Jamaica have a centralized office at the na coordinates drug-related statistics such as seizure Yes No			
Sul	bstance Abuse Data Collection Capacity			
	Others (please specify)			
	Ministry of Education Yes No			
	Ministry of National Security/Police/Defence	Yes No		
	Ministry of Justice Yes No			
	Ministry of Health Yes No			
7.	If the National Anti-Drug Plan/Strategy is funded in particular from the Government of Jamaica, under which age funding for the National Anti-Drug Plan/Strategy provided in the Nationa	ncy's or ministr		No.
	International Cooperation (e.g., UN, WHO et	c.) Yes No_	1	

11.

Study	Study Conducted		Year of	
	Yes	No	latest study	
National household survey/survey of living condition				
Survey of secondary school students				
Survey of higher institution students				
Survey of patients in drug-treatment centres				
Survey of juvenile offenders				
Survey of persons in incarceration				
Survey of patients in emergency rooms				
Survey of substance abuse in the work place				

Study	Study Conducted		Year of	
	Yes No		latest study	
Others				
(specify)				
Others				
(specify)				

4. Below is a list of indicators necessary to carry out a cost study of substance abuse in Jamaica. To the best of your knowledge, please indicate if information on each indicator is available and provide the source of available data.

Indicator		lable	Source of Data
	Yes	No	
Prevalence of substance abuse in the population			
Prevalence of substance abuse among women			
Prevalence of substance abuse among minors			
Number of requests for substance abuse treatment in			
public institutions			
Number of requests for substance abuse treatment in			
private institutions			
Number of substance use-induced hospitalization in			
public institutions			
Number of substance use-induced hospitalization in			
private institutions			
Number of persons undergoing substance abuse			
treatment in publicly-owned drug centres			
Number of persons undergoing substance abuse			
treatment in privately-owned drug centres			
Length of stay for persons undergoing substance abuse			
treatment in publicly-owned drug centres			
Length of stay for persons undergoing substance abuse			
treatment in privately-owned drug centres			
Number of deaths related to substance abuse			
Number of disabilities resulting from substance abuse			
Number of traffic accidents related to alcohol			70
Number of traffic accidents related to substance abuse			
other than alcohol			
Number of drug-related arrests			
Number of convictions for drug-related offenses			
Length of sentences for drug offenses			
Number of persons imprisoned for crimes or offenses			

Indicator	Available		Source of Data
	Yes	No	
connected with substance abuse			
Number of deaths as a result of drug-related crimes			
Numbers of persons disabled as a result of drug-related			
crimes			
Costs of property damage related to drug crimes			
Direct government expenditure related to drug demand			
reduction			
Direct government expenditure related to drug supply			
reduction			
			·

	Direct government expenditure related to drug supply reduction
5.	Has Jamaica conducted any study on the economic and social costs of drug abuse using any of the aforementioned indicators in question 4 above? Yes No
ô.	If Yes to question 5 above, please provide the following information on each of the studies that have been conducted.
	Title of study:
	Author(s):
	Year of study:
	Agency/Ministry/Institution that conducted study:
	Title of study:
	Author(s):
	Year of study:
	Agency/Ministry/Institution that conducted study:
	Title of study:
	Author(s):
	Year of study:

		Agency/Ministry/Institution that conducted study:
III.	Dru	ug Treatment, Rehabilitation and Prevention
	1.	Does Jamaica have drug treatment facilities? Yes No
	2.	If Yes to question 1 above, please answer the following:
		Is a public drug treatment centre available? Yes No
		Is a private drug treatment centre available? Yes No
		Is a female-only drug treatment facility available? Yes No
		Is a drug treatment facility available for minors only? Yes No
	3.	Does Jamaica currently implement any drug prevention programme? Yes No
	4.	If Yes to question 3 above, is any of the programmes targeting the following groups/settings?
		Secondary school students? Yes No
		Tertiary Institution students? Yes No
		Workplace? Yes No
		Women? Yes No
		Incarcerated persons? Yes No
	5.	Does Jamaica's primary healthcare facilities do any special activities (such as screening, referrals
		or brief intervention) to address patients who present with illicit drug abuse-related problems?
		Yes No
IV.	Dru	ug Supply and Supply Reduction
	1.	Is domestic production of illicit drug a problem in Jamaica? Yes No
	2.	If Yes to question 1 above, what types of illicit drugs are produced/grown locally?
		Marijuana Yes No
		Cocaine Yes No

	Heroin Yes No
3.	Are data available on estimate of annual drug production/cultivation? Yes No
4.	If Yes to question 3 above, please provide source of data:
5.	Are data available on quantity of annual drug seizures? Yes No
6.	If yes to question 5 above, please provide source of data:
7.	Does Jamaica have a formal drug crop eradication programme? Yes No
8.	If Yes to question 7 above, please indicate the form(s) of eradication used.
	Aerial spraying Yes No
	Forced manual eradication Yes No
	Voluntary manual eradication Yes No
	Others (please specify)
9.	What agency or agencies carry out crop eradication in Jamaica?
•	
Gei	neral
Ple	ase provide any general comment or suggestions that you may have in the space below:
End	d of protocol

٧.

Appendix 2: Study Questionnaire





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ECONOMIC AND SOCIAL COSTS OF SUBSTANCE ABUSE IN CARICOM MEMBER STATES

HEALTH SECTOR QUESTIONNAIRE - Ministry of Health

UWI Consulting Inc., a subsidiary of the University of the West Indies, has been contracted by the Caribbean Community (CARICOM) Secretariat to conduct a research on the economic and social costs of substance abuse in three CARICOM member states (Jamaica, Suriname, Trinidad and Tobago) with the purpose of informing policy on drugs and to provide information that will be used to engage political support for drug demand reduction programmes. This questionnaire is designed for collecting data in a form that is best suited for cost estimation. Kindly provide the requested information for 2009 and 2010. If information is only available for earlier years, please cross out the years written on the form and write the years for which information is available. Also, if information is only available in a more aggregated form or for different age groups, please modify the age categories and provide data for the modified categories. Thank you for your participation and contribution to the successful completion of this study.

MEMBER STATE:	JAMAICA	
NAME OF STAKEHOLE	DER:	
POSITION OF STAKEH	OLDER:	
MINISTRY/AGENCY/N	IGO:	
DATE COMPLETED:		

I. Hospital Discharges (Country Aggregate)

Age at Admission	Mental Behavion Disorder use of a (F10)	oural rs due to the		and ural disorder other psycho e use	Alcoholic Liver Disease (K70)		
	2009	2010	2009	2010	2009	2010	
Male		and the second				18 CX 17 C TO AT 18 L2 E.I	
Less than 10							
10 – 14							
15 – 19							
20 – 34							
35 – 44							
45 – 64							
65+							
Total Length of							
Stay							
Female							
Less than 10							
10 – 14							
15 – 19							
20 – 34							
35 – 44							
45 – 64						1	
65+							
Total Length of Stay			-				
Both Sexes	COMPL	ETE ONLY IF G	ENDER-SPI	CIFIC INFORMA	ATION IS U	INAVAILABLE	
Less than 10	7						
10 – 14							
15 – 19							
20 – 34							
35 – 44							
45 – 64							
65+							
All ages							

II. Mortality as a Result of Substance Abuse (Country Aggregate)

	Substance Abused										
Age Group	Alcohol		Marijuana		Cocaine		Other Drugs		Poly – Drugs / Alcohol		
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	
Male	STATEL	.acastr.1742	Description.			21-11-10-72-7	22246	Harakan		ar ale de	
Less than 10											
10 – 14											
15 – 19											
20 – 34											
35 – 44											
45 – 64											
65+											
All ages											
Female											
Less than											
10											
10 – 14											
15 – 19											
20 – 34											
35 – 44											
45 – 64		**							1		
65+											
All ages											
Both	COMP	LETE ON	LY IF GEI	NDER-SP	ECIFIC IN	NFORMA	ATION IS	UNAVA	ILABLE		
Sexes											
Less than											
10											
10 – 14											
15 – 19											
20 – 34											
35 – 44											
45 – 64											
65+											
All ages											

III. In-Patients at Specialized Substance Abuse Treatment Centre

Name of Facility: _	
Location:	

Age Group	Alcohol Dependence		Marijuana Dependence		Cocaine Dependence		Other Drugs Dependence		Poly - Drugs / Alcohol Dependence	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
Male	eg.7 femula	rande Experie	DESTRUMENTAL OF THE		ng (Several	uq (Ningelija)	antiqui dale		3/3/4/3/3/5/1905	BABARTA, DA.S
Less										
than 10										
10 - 14										
15 – 19				*					=	
20 – 34										
35 – 44										
45 – 64										
65+										
All ages										
Female			MERCHANIS				anch Went		CHARLES	
Less			(*)							
than 10										
10 – 14										
15 – 19										
20 – 34										
35 – 44			100						V	
45 – 64										
65+										
All ages										
Both Sexes	COMPL	ETE ONL	Y IF GEND	ER-SPECI	FIC INFO	RMATIO	N IS UNA	VAILABLI		
Less										
than 10										
10 – 14										
15 – 19										
20 – 34										
35 – 44										
45 – 64										
65+										
All ages										

IV. First Time Admissions at Specialized Substance Abuse Treatment Centre

Name of Facility:	
Location:	

	Seen a	t Clinic			Admitted to Ward				
Age Group	Drug Addict		Alcoho	Alcoholic		Drug Addict		lic	
	2009	2010	2009	2010	2009	2010	2009	2010	
Male	p.m/anuse					ent academic a	2080.022	alah Guzz.	
Less than 10									
10 – 14									
15 – 19									
20 – 34									
35 – 44									
45 – 64									
65+									
All ages									
Female									
Less than 10									
10 – 14									
15 – 19									
20 – 34									
35 – 44		3							
45 – 64									
65+									
All ages									
Both Sexes	СОМРІ	LETE ONLY	IF GENDE	R-SPECIFI	C INFORM	NATION IS	UNAVAII	ABLE	
Less than 10									
10 – 14									
15 – 19									
20 – 34									
35 – 44									
45 – 64									
65+									
All ages									

V. Total Discharges at Specialized Substance Abuse Treatment Centre

Name of Facility:	 _
Location:	

Principal Diagnosis	Male		Female		Total	
	2009	2010	2009	2010	2009	2010
All diagnosis						
Alcohol dependence						
Cocaine dependence						
Marijuana dependence						
Cocaine, marijuana and						
alcohol dependence						
Alcohol and marijuana						
dependence						
Cocaine and marijuana						
dependence						
Cocaine and alcohol						
dependence						
Other drug					,	
dependence						

VI. Health Care Expenditure at Specialized Substance Abuse Treatment Centre

Name of Facility:	
Location:	

Cost Item	2009	2010
Total Expenditure		
Equipment and other		
capital costs		
Utilities (Light, Water, &		
Phone)		
Personnel Cost (Salaries,		
Wages and Benefits)		
Medications		
Laboratory / Diagnostic		
Procedures		
Supplies (Goods and		
Services)		





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HEALTH SECTOR QUESTIONNAIRE - NGOs

UWI Consulting Inc., a subsidiary of the University of the West Indies, has been contracted by the Caribbean Community (CARICOM) Secretariat to conduct a research on the economic and social costs of substance abuse in three CARICOM member states (Jamaica, Suriname, Trinidad and Tobago) with the purpose of informing policy on drugs and to provide information that will be used to engage political support for drug demand reduction programmes. This questionnaire is designed for collecting data in a form that is best suited for cost estimation. Kindly provide the requested information for 2009 and 2010. If information is only available for earlier years, please cross out the years written on the form and write the years for which information is available. Also, if information is only available in a more aggregated form or for different age groups, please modify the age categories and provide data for the modified categories. Thank you for your participation and contribution to the successful completion of this study.

ECONOMIC AND SOCIAL COSTS OF SUBSTANCE ABUSE IN CARICOM MEMBER STATES

MEMBER STATE:	JAMAICA	
NAME OF STAKEHOLD	DER:	· · · · · · · · · · · · · · · · · · ·
POSITION OF STAKEH	OLDER:	
MINISTRY/AGENCY/N	IGO:	
DATE COMPLETED:		

١.	In-Patients at	Specialized	Substance A	Abuse	Treatment	Cen	tre
1.	III-ratieilts at	Specialized	Substance F	wuse	Heatiment	·	en

Name of Facility:	
Location:	

Age Group	Alcohol Dependence		Marijuana Dependence		Cocaine Dependence		Other Drugs Dependence		Poly – Drugs / Alcohol Dependence	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
Male	08677012		KWEVILLE	TO LETTE SERVE SE	Market St.	oral Suria		jastiletjas.		LEDÁROS E
Less										
than 10										
10 – 14										
15 – 19										
20 – 34										
35 – 44										
45 – 64										
65+										
All ages	-									
Female										
Less					Myalet Elsen		Car David			MEALANSOUTE
than 10			lit.						10	
10 – 14				1						
15 – 19										
20 – 34										
35 – 44										
45 – 64										
65+										
All ages										

1 . D. L' L	. C ! . I! I	C l	A I.	T	C
In-Patients at	r Snacializan	SUNCTONCE	Anlica	Ireatment	CONTRA
 III aticits a	LUDCCIAIIZCA	Jubstance	ADUSC	I I Catillelli	CCITTIC

(b) Both Genders

Name of Facility:	
Location:	

	Alcoho	I	Marijua	na	Cocain	e	Other	Drugs	Poly – I	Drugs /
Age	Depend	dence	Depend	ence	Depen	dence	Dependence		Alcoho	l
Group									Depend	dence
(4.50	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
Both	COMPL	ETE ON	LY IF GEN	DER-SPI	CIFIC IN	IFORM <i>A</i>	TION IS	UNAVA	ILABLE	
Sexes										
Less										
than 10										
10 – 14										
15 – 19										
20 – 34										
35 – 44										
45 – 64										
65+		,	•						Tie.	
All ages										

II. First Time Admissions at Specialized Substance Abuse Treatment Centre

Name of Facility:	 	
Location:		

	Seen a	t Clinic		CONTRACT YES	Admitted to Ward				
Age Group	Drug Addict		Alcoho	Alcoholic		Drug Addict		lic	
(**)	2009	2010	2009	2010	2009	2010	2009	2010	
Male									
Less than 10									
10 – 14									
15 – 19									
20 – 34									
35 – 44									
45 – 64									
65+									
All ages									
Female									
Less than 10									
10 – 14									
15 – 19									
20 – 34									
35 – 44									
45 – 64									
65+									
All ages									

II. First Time Admissions at Specialized Substance Abuse Treat	atment Centre
--	---------------

(b) Both Genders

Name of Facility:	 	
Location:	 	

	Seen at Clinic				Admitted to Ward				
Age Group	Drug A	ddict	Alcohol	Alcoholic		Drug Addict		Alcoholic	
	2009	2010	2009	2010	2009	2010	2009	2010	
Both Sexes	COMPLETE ONLY IF GENDER-SPECIFI				C INFORM	MATION IS	UNAVAI	LABLE	
Less than 10									
10 – 14									
15 – 19									
20 – 34									
35 – 44									
45 – 64									
65+									
All ages									

III. Total Discharges at Specialized Substance Abuse Treatment Centre

Name of Facility:	
Location:	

Principal Diagnosis	Male	e I		Female		Total	
	2009	2010	2009	2010	2009	2010	
All diagnosis							
Alcohol dependence							
Cocaine dependence							
Marijuana dependence							
Cocaine, marijuana and alcohol dependence							
Alcohol and marijuana dependence							
Cocaine and marijuana dependence				,			
Cocaine and alcohol dependence							
Other drug dependence							

IV. Health Care Expenditure at Specialized Substance Abuse Treatment Centre

Name of Facility:	Hibiscus (Ja.)
Location:	13 West Ave. Kingston 4

Cost Item	2009	2010
Total Expenditure	6, 226,000	6,354,000
Equipment and other capital costs	250,000	310,000
Utilities (Light, Water, & Phone)	432,000	500,000
Personal Cost (Salaries, Wages and Benefits)	5,184,000	5,184,000
Medications	-	-
Laboratory / Diagnostic	-	-
Procedures		
Supplies (Goods and Services)	360,000	360,000





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ECONOMIC AND SOCIAL COSTS OF SUBSTANCE ABUSE IN CARICOM MEMBER STATES

PREVALENCE QUESTIONNAIRE - National Drug Council

UWI Consulting Inc., a subsidiary of the University of the West Indies, has been contracted by the Caribbean Community (CARICOM) Secretariat to conduct a research on the economic and social costs of substance abuse in three CARICOM member states (Jamaica, Suriname, Trinidad and Tobago) with the purpose of informing policy on drugs and to provide information that will be used to engage political support for drug demand reduction programmes. This questionnaire is designed for collecting data in a form that is best suited for cost estimation. Kindly provide the requested information for 2009 and 2010. If information is only available for earlier years, please cross out the years written on the form and write the years for which information is available. Also, if information is only available in a more aggregated form or for different age groups, please modify the age categories and provide data for the modified categories. Thank you for your participation and contribution to the successful completion of this study.

MEMBER STATE:	JAMAICA
NAME OF STAKEHOLDER:	
POSITION OF STAKEHOLD	ER:
MINISTRY/AGENCY/NGO:	
DATE COMPLETED:	

I. Prevalence of Substance Abuse (Country Aggregate)

Age Group	Alcoho			Marijuana Dependence		Cocaine Dependence		Other Drugs Dependence		Poly – Drugs / Alcohol Dependence	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	
Male		iradises	A4 5-1	dall a del sa cald	a an e se	to the same of	o Breshin F	Ban - May	r. Jaren-e		
5 – 11											
12 – 18											
19 – 24											
25 – 34											
35 – 44											
45 – 64											
65+											
All ages											
Female											
5 – 11											
12 – 18											
19 – 24											
25 – 34											
35 – 44											
45 – 64											
65+											
All ages			35								
Both Sexes	СОМРІ	LETE ON	LY IF GEI	NDER-SP	ECIFIC IN	NFORMA	ATION IS	UNAVAIL	ABLE		
5 – 11											
12 – 18											
19 – 24											
25 – 34											
35 – 44											
45 – 64											
65+											
All ages											

II. National Drug Council Annual Expenditure/Budget

Cost Item	2009	2010
Total Expenditure/Budget		
Equipment and other capital costs		
Utilities (Light, Water, & Phone)		
Personnel Cost (Salaries, Wages and Benefits)		
Travels		
Supplies (Goods and Services)		





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ECONOMIC AND SOCIAL COSTS OF SUBSTANCE ABUSE IN CARICOM MEMBER STATES

LAW ENFORCEMENT QUESTIONNAIRE - Police

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MEMBER STATE:	JAMAICA	
NAME OF STAKEHOLD	ER:	
POSITION OF STAKEHO	DLDER:	
MINISTRY/AGENCY/NO	GO:	
DATE COMPLETED:		

I. Number of Drug Related Arrests and Convictions

Age Group	Arrests		Conviction	ıs
	2009	2010	2009	2010
Male	especial control in a control	recording state described for street with two	es superior de la Verilla de la co	
Less than 13				
13 – 15				
16 – 19		, , , , , , , , , , , , , , , , , , ,		
20 – 24				
25 – 29				
30 – 34				
35 – 39				
40 – 44				
45 – 49				
50 – 54				
55 – 59				
60 – 64				
65 – 69				
All ages				
Female	A SHEET AND A SHEET			
Less than 13				
13 – 15	Va .			
16 – 19				
20 – 24				
25 – 29	1.00			
30 – 34				
35 – 39				
40 – 44				
45 – 49				
50 – 54				
55 – 59				
60 – 64				
65 – 69				
All ages				

I. Number of Drug Related Arrests and Convictions

Age Group	Arrests		Conviction	s
	2009	2010	2009	2010
Both Sexes	COMPLETE UNAVAILABI		NDER-SPECIFIC	INFORMATION IS
Less than 13				
13 – 15				
16 – 19				
20 – 24				
25 – 29				
30 – 34				
35 – 39				
40 – 44				
45 – 49				
50 – 54				
55 – 59				
60 – 64				
65 – 69				
All ages	2.			16

II. Drug Seizures Information

Quantity Seized		Street Value (\$)		
2009	2010	2009	2010	

III. Cost of Policing in Support of Drug Supply and Demand Reduction

Cost Item	2009	2010
Total Expenditure/Budget		
Equipment and other capital		
costs		
Utilities (Light, Water, & Phone)		
Personnel Cost (Salaries, Wages		
and Benefits)		0
Travels		
Supplies (Goods and Services)		





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ECONOMIC AND SOCIAL COSTS OF SUBSTANCE ABUSE IN CARICOM MEMBER STATES

JUDICIAL SECTOR QUESTIONNAIRE - Prison Service

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MEMBER STATE:	JAMAICA	· ·
NAME OF STAKEHOLD	ER:	
POSITION OF STAKEHO	DLDER:	
MINISTRY/AGENCY/NO	GO:	
DATE COMPLETED:		

I. Number of Person in the Prison for Drug/Alcohol Related Offences

	Offences				
Age Group	Drug	Drug	Drug	Drug	Alcohol-Induced
	Possession	Peddling	Trafficking	Cultivation	Homicide/Manslaughter
Male					
Less than 20					
20 – 29					
30 – 39					
40 – 49					
50 – 59					
60 – 64					
65+					
Female					
Less than 20					
20 – 29					
30 – 39					
40 – 49					
50 – 59					
60 – 64	,				ii ii
65+					
Average				1	
Length of Stay					

II. Number of Juveniles in Incarceration for Drug/Alcohol Related Offences

	Offences				
Age Group	Drug	Drug	Drug	Drug	Alcohol Induced
	Possession	Peddling	Trafficking	Cultivation	Homicide/Manslaughter
Male					
Less than 10					
10 – 12					
13 – 15					
16 – 17					
Female					
Less than 10					
10 – 12					
13 – 15					
16 – 17					
Average					
Length of Stay					

III. Annual Operating Expenses for the Prison Services

Cost Item	2009	2010
Total Expenditure		
Equipment and other capital		
costs		
Utilities (Light, Water, & Phone)		
Personnel Cost (Salaries, Wages		
and Benefits)		
Boarding & Feeding		
Health Care		
Travels		
Supplies (Goods and Services)		