Cost/Benefit Analysis of Drug Policies in Mauritius

Report prepared for PILS

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Acronyms

ADSU	Anti Drug and Smuggling Unit
AIDS	Acquired Immuno Deficiency Syndrome
ART	Anti-Retroviral Treatment
BCR	Benefit Cost Ratio
CBA	Cost Benefit Analysis
CDT	Comissões para a Dissuasão da Toxicodependência
DDA	Dangerous Drug Act
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
GCDP	Global Commission on Drug Policy
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
MOH&QL	Ministry of Health and Quality of Life
MENDU	Mauritius Epidemiology Network on Drug Use
MST	Methadone Substitution Therapy
NAS	National Aids Secretariat
NASA	National AIDS Spending Assessment
NATReSA	National Agency for the Treatment and Rehabilitation of Substance Abusers
NEP	Needle Exchange Programme
NGO	Non Governmental Organisation
PES	Programme d'Echange de Seringues
PILS	Prévention, Information et Lutte contre le SIDA
PTAODU	Patterns & Trends of Alcohol and Other Drug Use
PWID	People who Inject Drugs
PWUD	People who Use Drugs
SIDA	Syndrome d'Immunodéficience Acquise
UN	United Nation
UNODC	United Nations Office on Drug and Crime

Executive Summary

This report is a milestone one as it is probably the first attempt to make a cost/benefit analysis of the drug policies in Mauritius. After more than 30 years of criminalisation of possession and trafficking of illicit drugs, this is a first attempt to make an analysis of the costs related to this repression and the benefit linked. This report will show that the repressive policy towards people who use drugs is not bringing the expected benefits in terms of curbing down the problem of drugs.

The report begins with an analysis of the two types of approach that exist in relation to drug namely the repressive approach and the human-centred approach. The repressive approach involves the use of repression or the use of punishment as a method of reducing drug proliferation, consumption and trafficking. On the other hand, the human-centred approach is based on the reduction of harms. Harm reduction is meant to support people with a problematic drug use, and give them the means to reduce health, social and economic consequences of their drug use. In Mauritius, harm reduction is done through the Needle Exchange Programme and the Methadone Substitution Therapy, to complement prevention and rehabilitation services related to drug use.

The report then goes into a critical analysis of repression versus harm reduction. It is shown that repression alone does not bring along meaningful reduction in drug consumption. Harm Reduction's objective is to give people who use drugs the means of staying alive, protecting their health, and addressing the socio-economic consequences of their dependency. Furthermore it brings along a reduction in the social harms associated with drug use. It is shown that in Mauritius, Harm Reduction programme has led to significant fall in HIV/AIDS incidence from 542 detected cases in 2006 to 322 in 2014, a fall of 40.6%.

Countries which have moved away from repressive policies and which have even adopted decriminalisation are briefly considered. The cases of Portugal, Czech Republic and of Colorado (USA) show that decriminalisation or even a regulated market, accompanied by medical support can have meaningful impact on the use of drugs.

The situation in Mauritius is then analysed since the drug problem came into the limelight in the 80s, the institution of the Rault Commission and the enactment of the Dangerous Drugs Act (DDA). The DDA spells out the drugs considered as dangerous and which must be forcibly removed from the country namely: Gandia (Cannabis), Heroin, Buprenorphine (Subutex®), psychotropic substances such as diazepam (Valium®) which are illegal for possession when not accompanied by a medical prescription and newly introduced synthetic cannabinoids such as "Black Mamba".

The Anti-Drug and Smuggling Unit (ADSU) is the division within the police which is responsible for enforcement of the repression against people who use drugs. The role of

this division is examined as well as statistics pertaining to cases judged in courts and the situation of detention in prisons for people convicted for drug offences. It is highlighted that reported offences relating to drugs in 2013 have decreased by 23.5% as compared to 2008. However, there is a systematic repression against people who use cannabis: between 2011 and 2014, there has been an increase of 78% of convictions related to cannabis.

The Harm Reduction programmes i.e. the Methadone Substitution Therapy (MST) and the Needle Exchange Programme (NEP) are then examined. Concerning the MST, as at December 2012, 5,442 clients had been induced on methadone through sixteen dispensing units including one in prison. The Needle Exchange Programme's (NEP) goal is to encourage people who inject drugs (PWID) to use clean syringes so that they do not share needles between them and thus increasing the risk for HIV/AIDS and Hepatitis C transmission. It covers fifty-one sites though there is none in prisons.

Government has also set up a parastatal body, the National Agency for the Treatment & Rehabilitation of Substance Abusers (NATReSA) whose main objective is the coordination and facilitation of programmes for the prevention of substance abuse and the treatment and rehabilitation of people who use drugs. It works in close collaboration with NGOs in that respect.

The report then proceeds with the analysis of expenditure and benefits. A caveat is made as per the absence of data which has forced the consultant to make assumptions and extrapolation which do not reflect the reality concerning expenditure and benefits drawn. This section highlights that:

- The budget of government for the police to combat drugs was Rs. 176,328,000 in 2014 and is budgeted to increase in the coming years.
- The cost of cases related to drugs dealt with by the Judiciary is Rs. 8,329,335. However, the data used to get this figure relates to an extrapolation of the total annual budget of the judiciary divided by the total of number of cases disposed of over one year. It is, therefore, only indicative.
- The spending of government for drug detainees is around Rs. 116,252,500 over a year. Again this figure is based on extrapolation.
- Concerning harm reduction, the total spending for 2012 for the MST and the NEP is Rs. 53,929,838.
- The NATReSA received some Rs. 32,000,000 in 2014 under the budget of the Ministry of Health and Quality of Life for the Treatment and Prevention of HIV and AIDS while NATReSA's mandate is specifically the treatment and rehabilitation of people who use drugs.

With regards to benefits:

It is noted that with the introduction of harm reduction, there has been a notable decrease in convictions related to drug offences as well as in the number of thefts. Moreover, harm reduction has been beneficial for PWID who are the main group at risk with respect to HIV/AIDS in Mauritius: new HIV/AIDS cases detected has known a stabilisation since 2007 and then began to drop as from 2010. Since 2010 to 2014 there has been a drop of 43.3% in the number of new HIV/AIDS cases detected.

The benefits are quantified in monetary terms to carry out cost benefit analysis.

- Concerning the harm reduction programmes - One can assume that this cost would be stable over a period of ten years.
- The costs related to the number of drug related offences treated by court of laws are expected to drop by 5% yearly.
- The costs related to the number of detainees in prison related to drug offences are expected to drop by 7% yearly.
- A partial decriminalisation of cannabis i.e. of possession of a given amount of cannabis as well as associated paraphernalia would represent an overall 30% savings annually to the prisons services and 30% savings annually to the judiciary.

Based on the above analysis, a Cost Benefit Analysis (CBA) was carried out considering two options:

1. Option 1 takes into account all expenditures and benefits described above but excluding the benefits of a partial decriminalisation of cannabis possession.
2. Option 2 takes into account all expenditures and benefits described above including the benefits of a partial decriminalisation of cannabis possession.

The results of the CBA are summarised below and show that the value of costs is stronger than the value of benefits in both options. This results in a Benefit Cost Ratio (BCR) of 0.01 for option 1 and 0.42 for option 2. The BCR indicates that for one rupee invested by the government mostly in repression (option 1), it will receive 1 cent. However, investing one rupee in partial decriminalisation of cannabis will return 42 cents. While a BCR lower than 1 is normally not viable for consideration, it is to be noted that decriminalisation will bring more benefits than the actual repressive policy.

Cost-benefit analysis of monetary costs and benefits at the Public Sector Discount Rate	Option 1 Without Partial Decriminalisation of Cannabis	Option 2 With Partial Decriminalisation of Cannabis
Present Value of Benefits	Rs37,454,853.22	Rs87,563,447.71
Present Value of Costs	Rs2,555,224,827.56	Rs207,834,362.24
Benefit Cost Ratio	0.01	0.42

The report concludes on five major findings as a result of the analysis of drug policies in Mauritius:

1. There is a significant improvement of the crime situation and by extension of the social climate since the introduction of the harm reduction programme in 2006. However, from the calculations made in this report, it is noted that 78% of public funds are used for repression while 22% goes to harm reduction. 30 years the repressive policy has not brought about any meaningful change in improving the situation of drugs in Mauritius. On the other hand, since the introduction of harm reduction in 2006, there has been a constant drop in number of cases related to drugs disposed of by courts of law, in terms of incarceration related drugs and in terms of HIV/AIDS cases related to PWID. There is a need to shift from investment in repression to investment in health and harm reduction for people who use drugs.
2. There has been much more repression against users than traffickers. From 2011 to 2014, 77% of convicted drug offences involved users (possession and consumption cases), whereas only 8% concerned traffickers (importation, dealing, cultivation).
3. The increase in the number of persons who use cannabis that have been convicted indicates that repression is geared towards them principally. Between 2011 and 2014, here has been an increase of 78% of convictions targeting cannabis users.
4. There is an absence of disaggregated data pertaining to cost incurred relating to drug offences. For example, from statistics available it is difficult to know how much is spent on drug related offences by the Judiciary as compared to other offences or other cases treated by courts of law.
5. There is a need to make regular in-depth studies about the effects of our current drug policies on drug use, so as to assess their effectiveness.

This first study calls for a second and more in-depth one on a longer span to ensure proper data collection.

Introduction

StraConsult was commissioned by the NGO, Prevention, Information et Lutte contre le SIDA (PILS) to conduct a preliminary cost-benefit analysis of drug policies in Mauritius, a drug policy being "a system of laws, regulatory measures, courses of action and funding priorities concerning illicit psychoactive drugs and promulgated by a governmental entity or its representatives"[1].

Though a State response towards drugs is multifaceted and entails a series of determinants, it can be summarized in two broad approaches:

1. The repressive approach
2. The human-centred approach

The Repressive Approach

As its name indicates, this approach makes use of repression or the use of punishment as a method of reducing drug proliferation, consumption and trafficking. The repressive approach is based on the ideology that harsh drug policies will lead to a decrease in use, possession and traffic.

This approach entails direct investment in

(i) the police as repressive agents
(ii) the judiciary to treat cases linked to drug offences
(iii) the reform institutions where drug-related offenders are imprisoned

The repressive actions are financed from public funds and managed by government.

The Human-Centred Approach

In this approach, the onus of the response does not take the form of repression. This approach tries to find ways to reduce drug related harms. Harm reduction is meant to support people with a problematic drug use, and give them the means to reduce health, social and economic consequences of their drug use. This can be done by giving out proper equipment for those still injecting drugs to protect themselves and others regarding HCV and HIV and also providing medical assistance for injuries.

In Mauritius, harm reduction is done through the Needle Exchange Programme and the Methadone Substitution Therapy and are mostly funded by the Global Fund.

[1]European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), *Drug Policy & Law*. Available at http://www.emcdda.europa.eu/policy-and-law

Some countries have even gone to the point of decriminalizing drug (see Benchmark section below).

This approach also entails investment:

(i) Costs of Programmes for harm reduction including treatment and medical staff;
(ii) Other costs such has information campaigns and prevention campaigns.

Repression v/s Harm Reduction

It is a recognized fact that repression alone does not bring along meaningful reduction in drug consumption. As stated by Rosmarin & Eastwood (2013)[2]:

"Rates of drug use remain high across the world, incarceration for drug offences is at record levels, and spending to wage the 'war'(on drugs) costs billions of pounds each year. Our current drug policies are a failure."

The fact is that repression does not reduce the dependency of drug users. It is just a way of trying to prevent people who use drugs to get access to them. When UN drug conventions were ratified,

"policymakers believed that harsh law enforcement action against those involved in drug production, distribution and use would lead to an ever-diminishing market in controlled drugs such as heroin, cocaine and cannabis, and the eventual achievement of a 'drug free world'. In practice, the global scale of illegal drug markets – largely controlled by organized crime – has grown dramatically over this period. While accurate estimates of global consumption across the entire 50-year period are not available, an analysis of the last 10 years alone shows a large and growing market. "[3].

On the other hand, harm reduction deals with the person who uses drugs as a human being. By its very nature, drug dependency is difficult to stop, if not by progressive and hands-on support to those who use drugs. The Harm Reduction International defines Harm Reduction as:

" (…) policies, programmes and practices that aim primarily to reduce the adverse health, social and economic consequences of the use of legal and illegal psychoactive drugs without

[2]Release, 2012. A Quiet Revolution: Drug Decriminalisation Policies in Practice Across the Globe, page 11 Available at http://www.release.org.uk/sites/default/files/pdf/publications/Release_Quiet_Revolution_2013.pdf.
[3]GCDP (Global Commission on Drug Policy), 2011.*War on Drugs*, Pg 4. Available at http://www.globalcommissionondrugs.org/wp-content/themes/gcdp_v1/pdf/Global_Commission_Report_English.pdf

necessarily reducing drug consumption. Harm reduction benefits people who use drugs, their families and the community."[4]

Harm reduction is based on evidence and the United Nations Office on Drugs and Crime (UNODC) evidence clearly states that of all people who use illicit drugs, only 11% are problematic users.[5]Problematic use here refers to people who engage in the high-risk consumption of drugs, for example, people who inject drugs, people who use drugs on a daily basis and/or people diagnosed with drug use disorders or as drug-dependent based on clinical criteria. They are essentially geared towards health concerns with respect to people who use drugs.

Harm Reduction's objective is to give people who use drugs the means of staying alive, protecting their health, and addressing the socio-economic consequences of their drug use. Furthermore it brings along a reduction in the social harms associated with drug use. As we will see later in the report, the Harm Reduction programme in Mauritius has led to significant fall in HIV/AIDS incidence, from921 detected cases in 2005, to 322 in 2014, representing a fall of 65%. Drug related crimes have also dropped as will be seen later in this report.

[4]http://www.ihra.net/what-is-harm-reduction HRI (Harm Reduction International), 2010. *What is Harm Reduction, A position statement from the International Harm Reduction Association*. Available at http://www.ihra.net/files/2010/08/10/Briefing_What_is_HR_English.pdf

[5]UNODC (United Nations Office on Drugs and Crime), 2014.*World Drug Report*, Pg 1. Available at http://www.unodc.org/documents/wdr2014/World_Drug_Report_2014_web.pdf

Benchmarks

To better understand the whole issue of repression versus harm reduction and decriminalisation of drugs it is important to view how some other countries have managed to implement a transition from repressive policies to a more human centred approach. The cases of Portugal, Czech Republic and Colorado (USA) are described below.

Portugal

Portugal embarked on the decriminalisation of drug use and possession in 2001. The decriminalisation is accompanied with investment from the State in public health geared towards people who use drugs. Rosmarin & Eastwood (2013)[6] report that:

"Portugal passed new harm reduction measures in 2001 to better coordinate and bolster drop-in centres, shelters, mobile health units, prescription programmes, syringe-exchange schemes, and other initiatives for dependent drug users *[sic]*."

The decriminalisation law states that any individual found by the police in possession of 10 days' worth an average daily dose of drugs for personal use, is referred to a 'dissuasion commission' (CDT) – a three-person panel made up of medical experts, social workers and legal professionals."[7] The meeting between the CDT and the person who uses drugs does not take the form of a courtroom hearing but instead of a dialogue to have more insight on what treatment he/she needs.

This approach has led to a decrease in drug use among some of the most vulnerable populations – young people and problematic users.[8]

[6]Release, 2012. A Quiet Revolution: Drug Decriminalisation Policies in Practice Across the Globe, page 30 Available at http://www.release.org.uk/sites/default/files/pdf/publications/Release_Quiet_Revolution_2013.pdf.
[7] ibid
[8] ibid

Czech Republic

It decriminalised the possession of illegal drugs in 2010 and is among the most recent countries to have taken this decision. The Czech Republic took this step following a Cost/Benefit analysis of the existing law which showed:

1. Penalisation of drug use had not affected the availability of illicit drugs;

2. there was an increase in the levels of drug use within the country;

3. the social costs of illicit drug use increased significantly[9]

Law enforcement officials charge individuals possessing up to 15 grams of cannabis, 1 gram of cocaine, 1.5 grams of heroin, 4 ecstasy tablets, or 40 pieces of hallucinogenic mushrooms with an administrative offence and not with a criminal charge.

It should be noted also that the Czech policy had for long focused on public health approaches to drug use and this was reflected in the low rates of imprisonment for possession offences even before the decriminalisation of drugs.

The State of Colorado, USA

The sale of cannabis (marijuana) for recreational use was legalised in Colorado in November 2012[10]. The Washington Post[11] reports that this has led to the generation of 700 million USD in 2014, and would lead revenues up to USD 1 billion by 2016.

The benefits are not only in economic terms but also in social terms. While many opponents to the legalisation process were claiming it would lead to an increase in car accidents, this has not been the case. A status report[12] from the Drug Policy Alliance states that:

"In the first 11 months of 2014, the state had 436 traffic fatalities, a 3% drop from the 449 fatalities in the first 11 months of 2013."

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[9]Release, 2012. A Quiet Revolution*: Drug Decriminalisation Policies in Practice Across the Globe*, page 23 Available at http://www.release.org.uk/sites/default/files/pdf/publications/Release_Quiet_Revolution_2013.pdf.

[10]https://en.wikipedia.org/wiki/Drug_policy_of_Colorado

[11]**Article "Colorado's legal weed market: $700 million in sales last year, $1 billion by 2016" available at http://www.washingtonpost.com/blogs/wonkblog/wp/2015/02/12/colorados-legal-weed-market-700-million-in-sales-last-year-1-billion-by-2016/**

[12] Available at https://www.drugpolicy.org/sites/default/files/Colorado_Marijuana_Legalization_One_Year_Status_Report.pdf

The same report also argues that crime rates have gone down in the main city of the state, Denver. Violent crime went down by 2.2% in the first 11 months of 2014, compared with the first 11 months of 2013. In the same period, burglaries decreased by 9.5% and overall property crime decreased by 8.9%.

Moreover, the cost to the judiciary has also gone down. The Drug Policy Alliance reports:

"According to data from the Colorado Court System, marijuana possession arrests have dropped 84% since 2010. In 2010, 9,011 people were arrested for marijuana possession. Using the same data we are projecting 1,464 possession arrests for 2014. Given that arrests such as these cost roughly $300 to adjudicate, it is reasonable to infer that the state is saving millions in adjudicatory costs for possession cases alone in 2014 compared to 2010. Over the same period, arrests for cultivating and distributing marijuana have also dropped by more than 90%"[13]

[13]Ibid

Analysis of Drug Policies in Mauritius

The drugs problem in Mauritius came into the limelight in the 1980s. The problem had reached a point forcing the then-government to set up an Anti-Drug Commission in 1986 which became known as the Rault Commission as it was presided over by Sir Maurice Rault. The workings of this Commission brought about the Dangerous Drugs Act (DDA) 1986 which was later updated in 1995[14]and in 2000[15]. The Act proposes a repressive approach against not only traffickers but also towards people using or found in possession of drugs, as well as drug paraphernalia[16], which are articles used for the consumption of a Dangerous Drug. Article 21(1) of the Act states:

"No person shall possess any dangerous drug unless he is authorised to do so under this Act. Shall commit an offence and shall, on conviction, be liable to a fine not exceeding 100,000 rupees and to imprisonment for a term not exceeding 5 years."[17]

It is important here to note that the following substances, among others, are considered as Dangerous Drugs as per the DDA.

- Gandia (Cannabis)
- Heroin
- Psychotropic Substances such as diazepam (Valium®) which are legal for possession only when accompanied by a medical prescription
- Buprenorphine (Subutex®)
- A recent newsletter (issue 47[18]) from the Office of the Director of Public Prosecution mentions that the list of dangerous drugs has been amended through Government Notice 242/2013) to include synthetic cannabinoids such as "Black Mamba"[19].

These are the most commonly available drugs in the country, though we are also experiencing a new trend in new synthetic drugs lately

The Dangerous Drugs Act makes provision for a special division under the Mauritius Police Force. The division called the Anti-Drug and Smuggling Unit (ADSU) has the responsibility for the repressive action against drugs in the country. As stated on their webpage,[20] the role of ADSU is to:

[14]Available at http://www.unodc.org/enl/showDocument.do?documentUid=556&node=docs&country=MAR&cmd=add
[15] Copy available at http://www.fiumauritius.org/images/stories/Dangerous_Drug_Act_2000_upd.pdf
[16]Drug paraphernalia, as per the Dangerous Drugs Act, refers to pipe, syringe, utensil, apparatus or other article for use in connection with smoking, inhaling sniffing, consuming or the administration of any dangerous drug,
[17]Available athttp://www.fiumauritius.org/images/stories/Dangerous_Drug_Act_2000_upd.pdf
[18]Available at http://dpp.govmu.org/English/Documents/Issue47.pdf
[19]L'Express, *Black mamba: La liste des drogues prohibées s'allonge*. Available at http://www.lexpress.mu/article/black-mamba-la-liste-des-drogues-prohibees-sallonge
[20]http://police.govmu.org/English/Organisation/Branches/Pages/Anti-Drug-and-Smuggling-Unit-.aspx

- Suppress the supply of illicit drugs.
- Arrest drug offenders (Consumers and Traffickers) and have them prosecuted.
- Locate and destroy illicit cannabis plantations.
- Prevent the entry of illicit drugs at the airport/ seaport and through Postal Services.
- Prevent and detect smuggling.
- Additionally, enforcement of Laws relating to other crimes which have a bearing on the drugs network viz :-
  - Larcenies
  - Gambling
  - Prostitution

With the Dangerous Drugs Act the anti-drug policy has been for a long time now, geared towards repression thus involving the ADSU as law enforcement agency, the courts of law and the prison authorities.

It is important here to show some statistics about offences reported and the trend in drug related offences.

Table 1: Summary of reported offences according to UN classification, Republic of Mauritius, 2008 to 2013

Offences	Number					
	2008	2009	2010	2011	2012	2013
Homicide and related offences	**107**	**105**	**89**	**108**	**128**	**117**
Intentional homicide (committed)	*48*	*54*	*51*	*45*	*49*	*41*
Assault and related offences	**14307**	**14509**	**14282**	**14149**	**12,900**	**12,761**
Sexual offences	**413**	**442**	**432**	**466**	**455**	**588**
Property offences	**21909**	**21442**	**18440**	**16168**	**14,323**	**15,094**
Drug offences	**4217**	**4144**	**3943**	**3721**	**3,472**	**3,227**
Road traffic contraventions	**108939**	**142535**	**163475**	**195960**	**213,686**	**211,546**
Other offences	**28211**	**20757**	**20357**	**22867**	**24,918**	**24,712**
Total	**178103**	**203934**	**221018**	**253439**	**269,882**	**268,045**

Source: Statistics Mauritius[21]

Reported offences related to drugs in 2013 have decreased by 23.5%% from 2008. Moreover, in its report on Crime, Justice and Security Statistics, 2013, Statistics Mauritius notes that drug offences are on a declining trend:

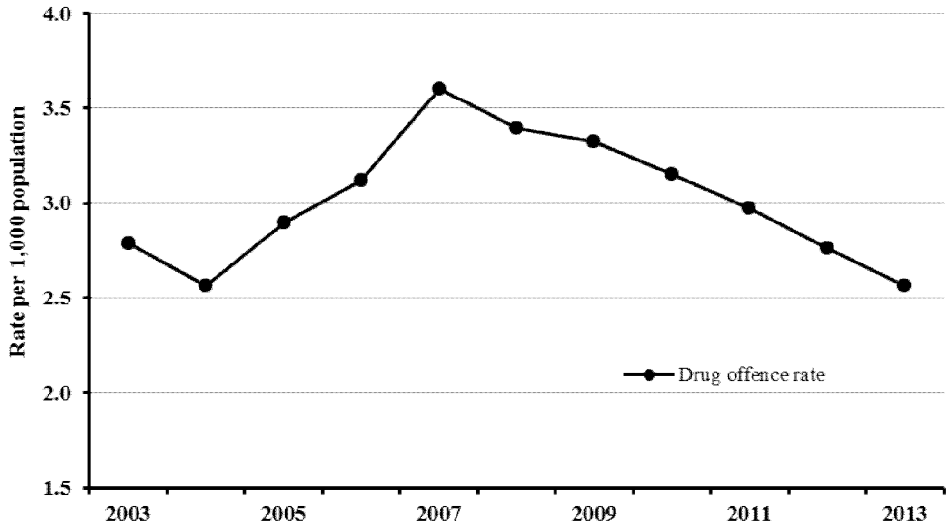
"The drug offence rate per 1,000 population, which was 2.8 in 2003, decreased to 2.6 in 2004 and peaked up to 3.6 in 2007. Thereafter, it declined continuously to 2.6 in 2013."

[21]Adapted from Digest of crime, Justice and Security statistics 2011 and Crime, Justice and Security Statistics 2013 available at http://statsmauritius.govmu.org/English/StatsbySubj/Pages/CRIME,-JUSTICE-AND-SECURITY.aspx

This trend is shown in Figure 1 below.

However, it is important to note that the drug offence rate cannot be equated to the drug use rate. In that respect, the reported drug offences are only indicative of the success rate of the repressive policy and not of the success rate of the overall policy for reducing drugs usage. As a matter of between 2011 and 2014, here has been an increase of 78% of convictions fact, related to cannabis which, as we will show later in this report, is not the most dangerous drug available in the country. Yet, it is the drug which has seen the highest increase in drug related offences in recent years. Also the recent rise in synthetic drugs use cannot be measured by the number of arrests since a lot of these substances are not scheduled in our DDA.

Figure 1 - Drug offence rate, Republic of Mauritius, 2003 - 2013



Source: Statistics Mauritius 2014[22]

[22] Available at http://statsmauritius.govmu.org/English/Publications/Documents/ei1124/intro.doc

With regards to the courts of law, the dangerous drugs offences fall under the jurisdiction of the Criminal Division of the Supreme Court and of the Intermediary court. In 2014, 2,266 convictions related to drug offences were registered.[23] The table below gives an idea of the breakdown of offences.

Table 2 Drug offences convicted by type, Republic of Mauritius, 2011 - 2014

Drug offences	2011	2012	2013	2014
Heroin	**347**	**284**	**401**	**303**
Importation	8	11	27	15
Dealing	6	3	12	40
Possession (heroin & articles)	333	270	256	207
Consumption	*	*	106	29
Other	*	*	*	12
Gandia	**565**	**510**	**778**	**1,006**
Importation	13	2	-	7
Cultivation	63	14	78	91
Dealing	14	2	2	25
Possession (gandia & articles)	475	492	567	680
Consumption	*	*	131	182
Other	*	*	*	21
Other drugs	**1,744**	**1,600**	**1,243**	**957**
Importation	4	1	22	7
Dealing	32	33	17	267
Possession (drugs & articles)	1011	728	654	414
Consumption	299	410	178	121
Other	398	428	372	148
Total	**2,656**	**2,394**	**2,422**	**2,266**

*Not collected separately

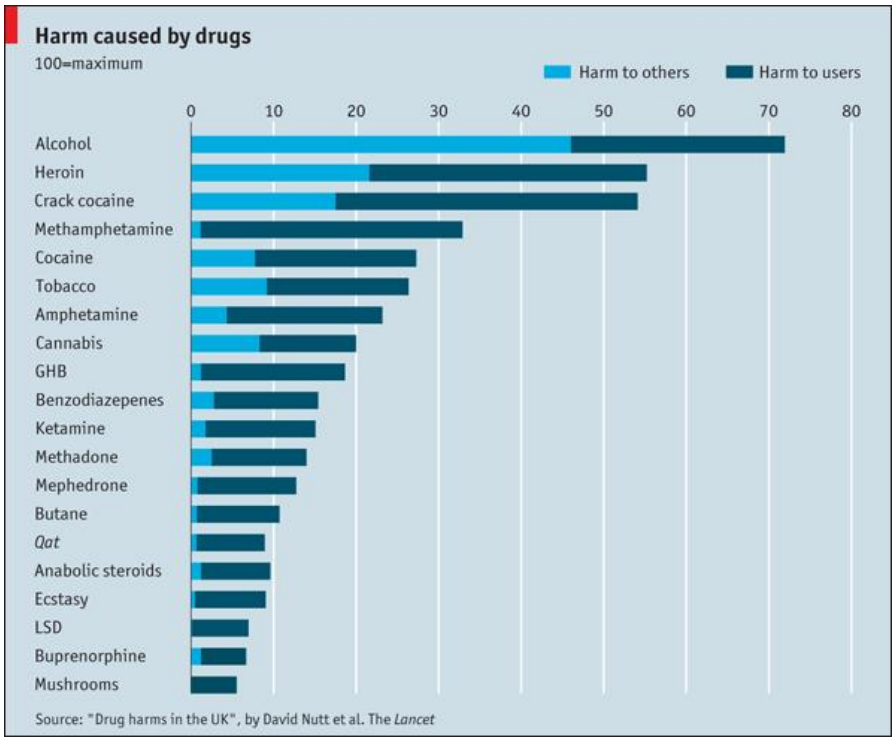
Source: Annual Report of the Judiciary 2014

[23] Annual Report of Judiciary 2014, June 2015 page 45 available at http://supremecourt.govmu.org/scourt/pubabout/CSODocs/Annual%20Report%20Judiciary%202014.pdf

There are three main findings from the table above:

1. There is a fall in the number of convictions related to drug offences between 2011 and 2014. There has been a decrease of 14.7%.
2. There has been much more repression against users than traffickers. The majority of convictions concern consumption and possession of drugs and/or articles for all types of drugs. In the same period, 77% of convicted drug offences involved users (possession and consumption cases), whereas only 8% concerned traffickers (importation, dealing, cultivation).
3. While, from 2011 to 2014, there has been a decline in convictions related to heroin (-12.7%) and other drugs (-45.1%), there has been a sharp increase in the convictions related to cannabis (+78%).It is to be noted also that convictions for possession of cannabis and articles have increased by 43.1%.The above tends to indicate that the repression is targeting mainly people who use cannabis and people in possession of cannabis and paraphernalia. When we consider the chart below where cannabis has lower levels of dependency and physical harm than alcohol and tobacco, the data concerning conviction related to cannabis is questionable.

Figure 2: Scale of Harm Drugs cause



Source: "Drug harms in the UK", Nutt, D.et al. *The Lancet*[24]

[24]Article entitled "Scoring drugs" dated November 2nd, 2010available at http://www.economist.com/blogs/dailychart/2010/11/drugs_cause_most_harm

In terms of incarceration, statistics from the Mauritius Prison Service also show a fall in the number of detainees for drug offences as shown in Table 3 below. A similar trend can be observed between the situation with cases reported to the police and cases treated by the judiciary. There has been a drop of nearly 48% in the number of convictions relating to drug offences from 2005 to 2013. However, there has been an increase of almost 78% for gandia (cannabis) related offences. This reinforces the idea that there is a stigmatisation of people who use cannabis in the country.

Table 3 - Number of persons convicted for drug offences from 2005 to 2013

Year	Heroin	Gandia	Opium	Others*	Total	Total number of Detainees	Percentage
MALE DETAINEES							
2005	344	50	-	249	643	2323	27
2006	315	59	-	202	576	2423	23
2007	227	40	-	311	578	2626	22
2008	305	97	-	352	754	3032	25
2009	162	67	-	431	660	3517	18
2010	103	111	-	398	612	3551	17
2011	97	104	-	340	541	3250	17
2012	53	43	-	381	477	2905	16
2013	102	96	-	126	324	2710	12
FEMALE DETAINEES							
2005	17	04	-	08	29	80	36.3
2006	10	02	-	16	31	93	33.33
2007	10	-	-	08	18	87	20.7
2008	16	01	-	16	33	103	32
2009	11	02	-	12	25	123	20
2010	14	01	-	12	27	112	24
2011	11	15	-	14	40	122	33
2012	7	7	-	23	37	125	30
2013	7	-	-	19	26	124	21

Source: Mauritius Prison Service Website[25]

Apart from the repressive policy, government in collaboration with NGOs came with important measures since 2006 which are in line with the harm reduction policies. Two programmes have been implemented in Mauritius:

[25]Table adapted from data available at http://prisons.govmu.org/English/statistics/Pages/drug-offences-Male.aspx and http://prisons.govmu.org/English/statistics/Pages/drug-offences-Female.aspx

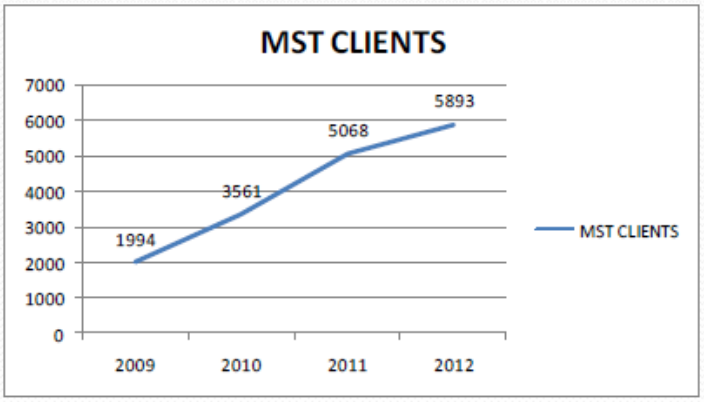
1. The Methadone Substitution Therapy (MST)
2. Needle Exchange Programme (NEP)

The Methadone Substitution Therapy

The Methadone Substitution Therapy (MST) was first meant only for male clients and was set up in November 2006. It was extended to female clients in March 2008. The National AIDS Secretariat, in its National AIDS Spending Assessment (NASA) Report 2012[26], states that as at 31 December 2012, 5,442 clients had been induced on methadone through sixteen dispensing units including one in prison.

The number of people registered under the MST programme is shown in the chart below:

Figure 3: Number of PWID under MST Programme - 2012



Source: Ministry of Health and Quality of Life[27]

It can be observed that there has been a constant increase in the number of MST clients between 2009 and 2012. There has actually been an increase of 195.5% from 2009 to 2012.This is an indication that the MST is a successful programme. It is reaching more than half people who inject drugs (PWID) who are estimated to be about 10,000[28] in Mauritius.

[26]Page 13 Available at http://www.unaids.org/sites/default/files/en/media/unaids/contentassets/documents/data-and-analysis/tools/nasa/20141017/mauritius_2012_en.pdf

[27]Excerpt from presentation done by MOHQL on Harm Reduction Services in Mauritius at 12th Indian Ocean HIV/Aids Colloque, held in Mauritius in October 2013

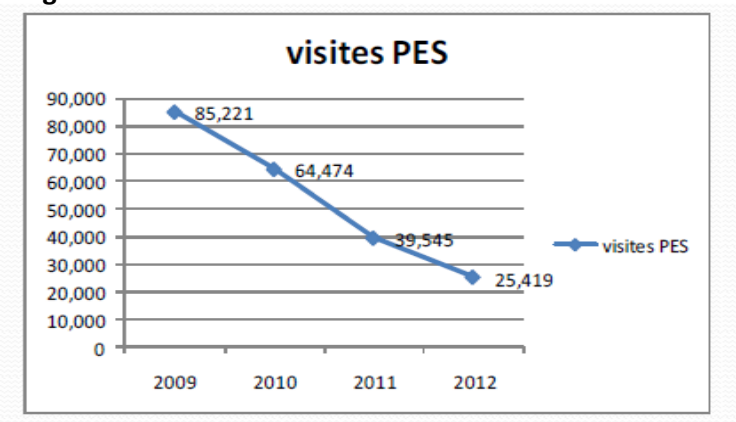
[28]Global Aids Response Progress Report 2014 page 20. Available at http://www.nas.co.mu/English//DOCUMENTS/GARPR%202012.PDF

The Needle Exchange Programme

As indicated in the NASA report[29], the Needle Exchange Programme (NEP) was introduced and implemented in November 2006 and was only given full-fledge support by government in May 2008. The aim of the NEP is to provide people who inject drugs (PWID) with clean syringes so that they do not share needles between them and thus increasing the risk for HIV/AIDS and Hepatitis C transmission. As at 2012, the NEP covers fifty-one sites, 35 run by Government and 16 by NGOs. It is to be noted that to this date, there is no NEP in prisons.

The chart below gives an indication of the number of visits to NEP sites.

Figure 4: Number of PWID who visit NEP Centres - 2012



Source: Ministry of Health and Quality of Life

In the case of NEP, there has been a drop of 70% from 2009 to 2012. This can be attributed to the success of the MST which has an impact on the number of persons who inject drugs.

[29] Page 13 Available at http://www.unaids.org/sites/default/files/en/media/unaids/contentassets/documents/data-and-analysis/tools/nasa/20141017/mauritius_2012_en.pdf

The National Agency for the Treatment and Rehabilitation of Substance Abusers (NATReSA)

The National Agency for the Treatment & Rehabilitation of Substance Abusers (NATReSA) is a parastatal body which is regulated by the NATReSA Act No. 25 of 1996.

It operates under the aegis of the Ministry of Health & Quality of Life.

As per the NATReSA Act No. 25 of 1996, the objectives of NATReSA are as follows:

" (a) coordinate and facilitate efforts at national level towards the implementation of programmes for the prevention of substance abuse and the treatment and rehabilitation of substance abusers;

(b) complement existing facilities for—
(i) the prevention of substance abuse; and

(ii) the treatment and rehabilitation of substance abusers;

(c) mobilise resources locally and overseas for treatment and rehabilitation of substance abusers;

(d) set up and manage institutions for the treatment and rehabilitation of substance abusers;

(e) provide after-care services for the rehabilitation of substance abusers;

(f) advise, guide and help voluntary social organisations engaged in the prevention of substance abuse and in the treatment and rehabilitation of substance abusers."

The latest reports produced by NATReSA is Patterns & Trends of Alcohol and Other Drug Use (PTAODU), the latest of which available for the Island of Mauritius is in 2010.[30] This report indicates that the NATReSA supports 13 rehabilitation centres on the Island of Mauritius[31] and two centres in Rodrigues.[32] All of these centres are run by NGOs.

As per the latest budget (see table below)[33], NATReSA received Rs. 32,072,000[34] as part of the Ministry of Health and Quality of Life Budget for Treatment and Prevention of HIV and

[30]NATReSA, 2010.Patterns and Trends of Alcohol and Other Drug Use. Available at http://natresa.govmu.org/English/Documents/NATRESA_Year_2010_PTAODU_FINAL_REPORT.pdf
[31]Ibid, , Page 6 Available at http://natresa.govmu.org/English/Documents/NATRESA_Year_2010_PTAODU_FINAL_REPORT.pdf
[32] Information available on NATReSAwebsite: http://natresa.govmu.org/Pages/Day-Care-Services.aspx
[33]Available at http://budget.mof.govmu.org/budget2016/2016_11_1_MOH.pdf Page 90
[34] As shown in Table 4, in 2014 NATReSA receives Rs 8,897,000 for ñRehabilitation of Alcoholics and Drug Addictsò under ñOther goods and servicesò and Rs. 23,175,00 under Grants for Extra-Budgetary Units.

AIDS, though NATReSA's mission is mainly geared towards rehabilitation and treatment of people who use drugs, as per their objectives aforementioned.

Table 4 – Extract of Budget Provisions of Ministry of Health and Quality of Life – 2015/2016

Sub-Head 11-104: Treatment and Prevention of HIV and AIDS		Rs '000	2014 (Jan-Dec) Actual	2015 (Jan-Jun) Estimates
Recurrent Expenditure			**90,639**	**49,100**
21	**Compensation of Employees**		**14,493**	**9,243**
21110	Personal Emoluments		13,813	8,176
21111	Other Staff Costs		639	1,034
21210	Social Contribution		42	33
22	**Goods and Services**		**51,221**	**27,019**
22010	Cost of Utilities		33	17
22020	Fuel and Oil		400	200
22030	Rent		106	625
22040	Office Equipment and Furniture		10	8
22060	Maintenance		500	250
22100	Publications and Stationery		3	2
22120	Fees		323	163
22140	Medical Supplies, Drugs and Equipment		10,831	5,500
22900	Other Goods and Services		39,015	20,255
	of which			
.915	Multi sectoral Response to HIV/AIDS Programme		29,611	12,000
.925	Rehabilitation Programme for Alcoholics and Drug Addicts by NATReSA		8,897	8,000
26	**Grants**		**23,175**	**11,588**
26313	Extra-Budgetary Units			
.051	National Agency for the Treatment and Rehabilitation of Substance Abusers		23,175	11,588
28	**Other Expense**		**1,750**	**1,250**
28211	Transfers to Non-Profit Institutions			
.018	Prevention, Information et Lutte Contre Le SIDA (PILS)		1,500	750
.054	Dr. Idriss Goomany Centre		250	500
TOTAL			**90,639**	**49,100**

Source: Ministry of Finance and Economic Development

Cost of Drug Policies

Caveat: The data used for the calculation of costs and consequently of benefits thereafter are based on data available from the sources mentioned.

For instance, it has been impossible to have specific information on the actual amount spent by the Judiciary on drug related offences over the period of time available for this study. Some costs related to the prosecution of drug offences such as fees of lawyers could not be accounted for.

In that respect, the costs detailed thereafter may not reflect a true picture of the actual situation but are indicative of the possible costs incurred.

Investment in Police Action against Drugs

The budget of government for the police to combat drugs was Rs. 176,328,000 in 2014 (See Annex 1). Government has indicated that it estimates that the budget for the current financial year will be Rs. 192,300,000, an increase of 9% over the past year. It is to be noted that an increase in staff from 323 to 337 (+4.3%) is funded for the current financial year. Moreover, the government is planning an increase of 2% in the budget of the police to combat drugs for the next two financial years, respectively.

This seems in contradiction with the official statistics which shows a drop in drug related offences as shown earlier in the report.

Investment in the Judiciary for Drug Offences

As shown in the Table below, the total expenditure of the Judiciary in 2014 was Rs. 481,749,000.

This budget was used to dispose of a total number of 139,667 cases in all level of courts (Supreme, Intermediary, Industrial, family and district courts). This means that on average, one case costs Rs. 3,449.

Yet this figure is only indicative of a situation where all cases are placed on a same level in terms of complexity and time-taken for a judgement to be given. The figure does not also take into account the attorneys' and lawyers' fees.

The data available from the Annual Report 2014 of the Judiciary indicates that 2,415 cases of drug related offences were disposed of in 2014.[35]

We can therefore extrapolate that the total cost of drug related cases for the Judiciary was Rs. 8,329,335 in 2014.

[35] Annual Report of Judiciary 2014, June 2015 page 39. Available at http://supremecourt.govmu.org/scourt/pubabout/CSODocs/Annual%20Report%20Judiciary%202014.pdf

Table 5– Summary of Expenditure of the Judiciary – Budget

Rs 000

Details	2014 (Jan-Dec) Actual	2015/16 (Jul-Jun) Estimates	2016/17 (Jul-Jun) Planned	2017/18 (Jul-Jun) Planned
VOTE 1-6 TOTAL EXPENDITURE	481.749	**600,000**	645.000	635.500
of which				
Recurrent	454.851	536.664	558.500	566.580
Capital	26.898	63.336	86.500	68.920

Source: Ministry of Finance and Economic Development[36]

Investment in reform institutions for Drug Offences

As indicated by the Minister S. Soodhun in a declaration to the press, government spends Rs 910 daily per prisoner.[37] This means that government spends Rs. 332,150 per year per detainee. Considering that there were 350 detainees having committed drugs related offences in 2013, we may consider that the spending of government for drug detainees is around Rs. 116,252,500 over year.

However it is important to note here that not all detainees remain in prison for a period of one full year. Some may be in prison for shorter periods, while others are incarcerated for several years. Therefore the figure above is only indicative and is based on the assumption that detainees for drug related offences spend a full year in prison on average.

Investment in Harm Reduction

Apart from the financing of its repressive actions, government also finances harm reductions programmes. In the National AIDS Spending Assessment Report 2012, the National Aids Secretariat indicates that the total spending for 2012 for the MST and the NEP is Rs. 53,929,838[38].

Government total expenditure related to HIV/AIDS in 2012 was Rs. 161.2 million compared to Rs. 141.9 million in 2010, an increase of 13.6%. This increase in spending is attributed to "increased number of patients under MST programme and ART."[39]

[36] Available at http://budget.mof.govmu.org/budget2016/2016_1_6_Jud.pdf
[37] Press Article, Le Mauricien, 24.04.15. Criminalité : Soodhun en faveur de la peine capitale. Available at http://www.lemauricien.com/article/criminalite-soodhun-en-faveur-la-peine-capitale
[38] Page 30 Available at http://www.unaids.org/sites/default/files/en/media/unaids/contentassets/documents/data-and-analysis/tools/nasa/20141017/mauritius_2012_en.pdf
[39] National AIDS Spending Assessment (NASA) Report 2012 Page 8 Available at http://www.unaids.org/sites/default/files/en/media/unaids/contentassets/documents/data-and-analysis/tools/nasa/20141017/mauritius_2012_en.pdf

As already pointed out the cost of the harm reduction programme in 2012 was Rs. 53,929,838 which represent 33.4% total budget of government spent on HIV/AIDS in that year.

Based on the assumption that there have been more efforts to get more PWID under the MST programme and the NEP since 2012, one cannot expect the expenditure to decrease but instead to increase.

One can assume a minimum increase of 5% per year in expenditure related to harm reduction programmes.

Investment in organisations involved in accompanying PWUD

As noted in the previous section, NATReSA which has for official mandate to coordinate and facilitate the implementation of programmes for the prevention of substance abuse and the treatment and rehabilitation of substance abusers, received some Rs. 32,000,000 in 2014 under the budget of the Ministry of Health and Quality of Life for the Treatment and Prevention of HIV and AIDS.[40]

Moreover, the Dr Idrice Goomany Centre for the Prevention and Treatment of Alcoholism and Drug Addiction[41] also received Rs. 250,000 separately from the funds received by NATReSA.[42]

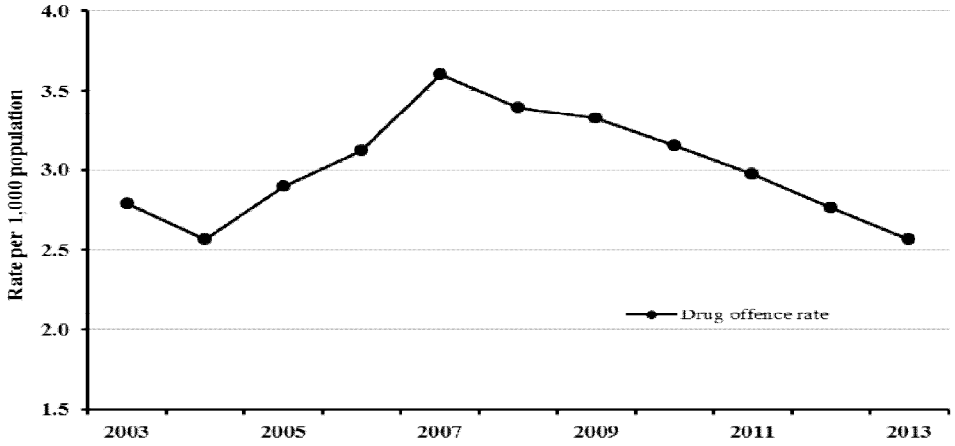
[40]Available at http://budget.mof.govmu.org/budget2016/2016_11_1_MOH.pdf Page 90
[41]Available at http://www.actogether.mu/sante_details.aspx?id=37
[42]Available at http://budget.mof.govmu.org/budget2016/2016_11_1_MOH.pdf Page 90

Benefits of Drug Policies

As explained in the section concerning the analysis of drug policies in Mauritius, though the repressive actions against people who use drugs are still present, there is a notable decrease in convictions related to drug offences since the introduction of the Harm Reduction Programme since 2006.

As an indication, the chart below presented on page 22 shows clearly the drop in drug offences after 2006.

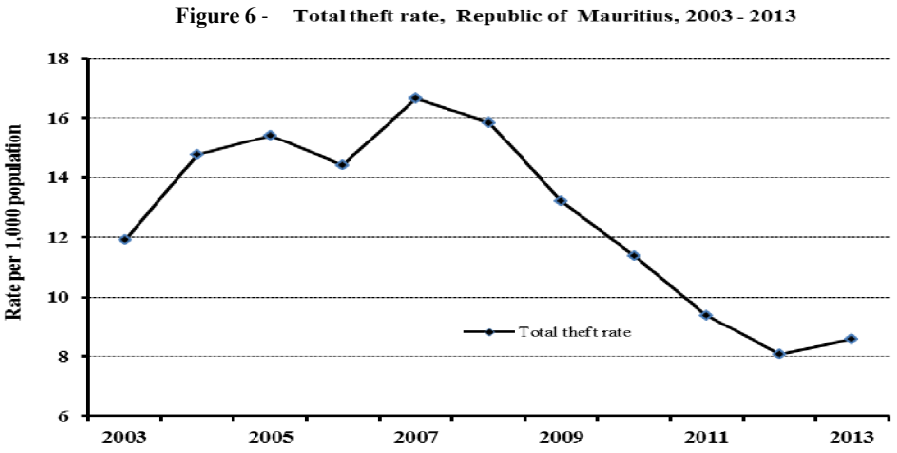
Figure 5- Drug offence rate, Republic of Mauritius, 2003 - 2013



Source: Statistics Mauritius 2014[43]

However this is not the only benefit which can be attributed to the Harm Reduction programmes. The Ministry of Health and Quality of Life noted in its presentation on Harm Reduction Services in Mauritius at 12th Indian Ocean HIV/Aids Forum, held in Mauritius in October 2013 that the level of criminality linked to drugs namely thefts has been on the decline as from 2007. This is shown in the chart below.

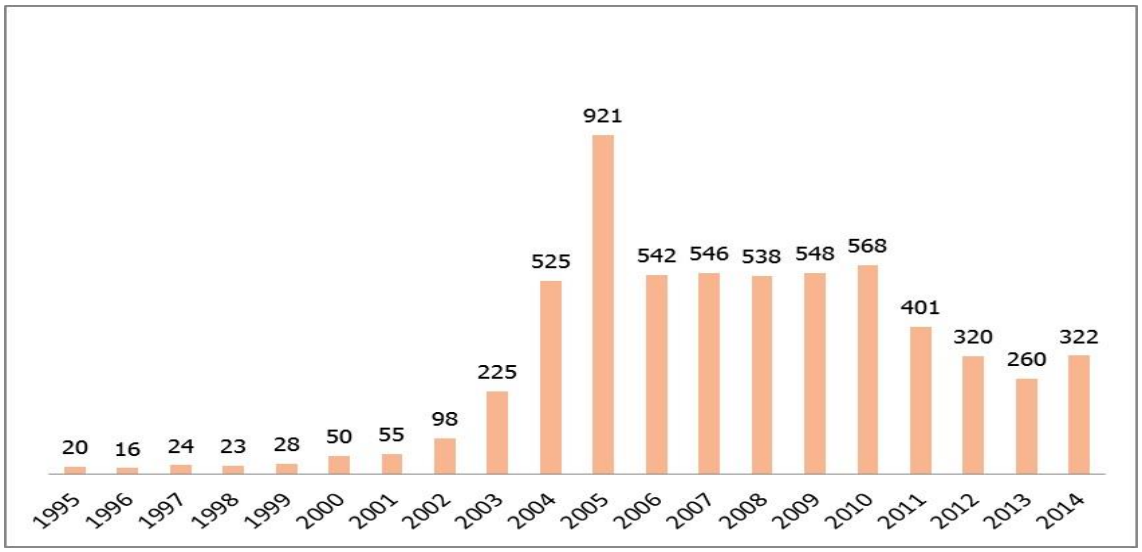
[43] Available at http://statsmauritius.govmu.org/English/Publications/Documents/ei1124/intro.doc page 17



Source: Statistics Mauritius 2014[44]

Moreover, in the same presentation, it is noted that the number of new HIV/AIDS cases detected has also known a stabilisation since 2007 and then began to drop as from 2010. This can also be attributed to the success of the Harm reduction programmes as the main group at risk with respect to HIV/AIDS infection is the PWID. The chart below shows that since 2010 to 2014 there has been a drop of 43.3% in the number of new HIV/AIDS cases detected.

Figure 7: Number of new detected HIV/AIDS cases annually from 1995 to 2014



Source: National Aids Secretariat, Ministry of Health & Quality of Life[45]

[44] Available at http://statsmauritius.govmu.org/English/Publications/Documents/ei1124/intro.doc page 16

These benefits should be quantified in monetary terms in order to make a cost benefit analysis. In that respect, the benefits are divided in three categories:

1. Benefits directly linked to the harm reduction programmes e.g. drop in HIV/AIDS new detected cases;
2. Benefits indirectly linked to the harm reduction programmes:
   i. costs related to drop in number of drug related offences treated by court of laws
   ii. costs related to drop in number of detainees in prison related to drug offences
3. Benefits linked to decriminalisation of drugs

1. Benefits directly linked to the harm reduction programmes e.g. drop in HIV/AIDS new detected cases

As already pointed out, the cost of the harm reduction programme since 2012 is expected to increase while government and NGOs intensify their efforts to get more PWID to become clients of the MST and NEP.

However, these efforts should lead to a reduction in the number of persons who undergo antiretroviral treatment (ART) in long term and not for the next five years.

In 2012, the spending on ART was Rs. 27.6 million.[46]One can assume that this cost would be more or less stable over a period of ten years. Data available from a report by NAS[47] indicate that there were 4,245 persons needing ART in 2012. This number was projected to increase to 4,508 (+6.2%) in 2013 and to 4,743 (+5,2%) in 2014 to reach 4,954 (+4.4%) in 2015. While the projections show a potential increase, the latter is on a diminishing trend.

Costs for ART could therefore remain at a level of Rs. 28 million for ten years and as a result will not be accounted for in this CBA.

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[45]Available at http://www.pils.mu/vih-sida/la-situation-a-lile-maurice.html accessed on 16.06.2015

[46]National AIDS Spending Assessment (NASA) Report 2012 Page 32 available at http://www.unaids.org/sites/default/files/en/media/unaids/contentassets/documents/data-and-analysis/tools/nasa/20141017/mauritius_2012_en.pdf

[47] NAS - HIV Estimates and Projection Report 2013 available at http://www.nas.co.mu/English//DOCUMENTS/HIV%20ESTIMATES%20AND%20PROJECTIONS%20REPORT%202013.PDF

2. Benefits indirectly linked to the harm reduction programmes:

i. Costs related to drop in number of drug related offences treated by court of laws

The number of drug related offences disposed of by courts has decreased by 4.4% from 2013 to 2014[48]. Based on these figures and the downward trend experienced since 2007 in drug related offences, one can assume than there can be a drop of 5% in drug related convictions in the next years if the legislation concerning drugs remains the same. In that respect number of cases disposed by courts and costs associated would drop as follows:

Table 6–Expected Change in Number of Drug Related Offences disposed of by courts and its impact on Judiciary Expenditure on Drug Offences (10 years projection)

Years	Number of Drug Offences disposed of by courts	Cost to the Judiciary (Rs.)	Expected Savings (Rs.)
Year 0	2415	8,329,335	
Year 1	2294	7,912,868	416,467
Year 2	2180	7,517,225	395,643
Year 3	2071	7,141,364	375,861
Year 4	1967	6,784,295	357,068
Year 5	1869	6,445,081	339,215
Year 6	1775	6,122,827	322,254
Year 7	1686	5,816,685	306,141
Year 8	1602	5,525,851	290,834
Year 9	1522	5,249,558	276,293

It is to be noted that the recent change in Government and subsequent statements in the press[49] might suggest harsher law enforcement in the coming years. This approach would not be cost effective as will be shown later in the report.

[48] Annual Report of Judiciary 2014, June 2015 page 39 available at http://supremecourt.govmu.org/scourt/pubabout/CSODocs/Annual%20Report%20Judiciary%202014.pdf

[49] Le Mauricien, *PMQT: SAJ confirme la mise sur pied d'une commission d'enquête sur le trafic de drogue*, 28 April 2015. Available at http://www.lemauricien.com/article/pmqt-saj-confirme-la-mise-sur-pied-d-commission-d-enquete-sur-trafic-drogue

ii. Costs related to drop in number of detainees in prison related to drug offences

Based on figures compiled from Table 3 in this report, the average percentage change in the number of detainees for drug related offences is around 7% downwards from 2005 to 2013. Based on this average one can assume than there can be a drop of 7% in drug related convictions in the next years. In that respect number of detainees for drug offences and costs associated would drop as follows:

Table 7 – Expected Change in Number of Convictions Related to Drug Offences and its impact on Prisons Expenditure (10 years projection)

Years	Number of convictions related to drug offences	Cost to the Prison Services (Rs.)	Expected Savings (Rs.)
Year 0	350	116,252,500	
Year 1	326	108,114,825	8,137,675
Year 2	303	100,546,787	7,568,038
Year 3	282	93,508,512	7,038,275
Year 4	262	86,962,916	6,545,596
Year 5	243	80,875,512	6,087,404
Year 6	226	75,214,226	5,661,286
Year 7	211	69,949,230	5,264,996
Year 8	196	65,052,784	4,896,446
Year 9	182	60,499,089	4,553,695

Benefits of Decriminalisation

The analysis of the repressive policy of government earlier in this report has shown a focus on people who use cannabis (gandia). Based on the level of potential dependency and threats to health that cannabis represents as compared to legal drugs such as alcohol and tobacco, a move to decriminalize cannabis can be envisaged.

Though a complete decriminalization would most certainly not gather national support, it can be argued that decriminalizing the possession of a certain amount of cannabis and associated paraphernalia would reduce the cost related to conviction. In that respect, we can talk of a partial decriminalization which would allow individuals to have a certain amount of cannabis for their personal consumption as well as the paraphernalia associated with it. As shown in Table 2 in this report, 43.1% of convicted cases are for possession of cannabis and articles (paraphernalia).

In 2013, out of the 350 detainees reported to be in prisons for drug offences, 96 were imprisoned in relation to cannabis. According to disaggregated data available from the Annual Report of the Judiciary 2014 (see Table 2 on page 14 in the report), importation, cultivation and dealing of cannabis account for 12% of convictions while possession and consumption account for about 86% of convictions. Based on this latter figure, one can assume that about 90% of the 96 detainees imprisoned for cannabis related offences i.e. 86 detainees have been convicted for possession of cannabis and related articles. One can infer that decriminalizing the latter would represent a drop of around 24% in the number of detainees over and above the predicted drop of 7% presented in Table 7. Partial decriminalization would therefore bring about a decrease of about 30% in the number of detainees related to drug offences. This will impact on expenses of Prisons Services as shown in Table 8 below:

Table 8 – Expected Change in Number of Convictions Related to Drug Offences with partial decriminalisation of cannabis and its impact on Prisons Expenditure (10 years projection)

Years	Number of convictions related to drug offences	Cost to the Prison Services (Rs.)	Savings
Year 0	350	116,252,500	
Year 1	245	81,376,750	34,875,750
Year 2	172	56,963,725	24,413,025
Year 3	120	39,874,608	17,089,118
Year 4	84	27,912,225	11,962,382
Year 5	59	19,538,558	8,373,668
Year 6	41	13,676,990	5,861,567
Year 7	29	9,573,893	4,103,097
Year 8	20	6,701,725	2,872,168
Year 9	14	4,691,208	2,010,518

Moreover, the treatment in courts of such cases would also become inexistent and this would cut down the cost of the Judiciary. Based on the calculation presented earlier, the judiciary would save Rs. 2,345,000 based on the 680 cases convicted for possession of gandia and paraphernalia in 2014 as shown in Table 2. This represents a 28% reduction in the cost incurred by the courts. One can infer that over ten years, an additional 25% over and above the 5% saving described in Table 6 would be saved per year. The saving would therefore be 30% per year. This is shown in Table 9.

Table 9–Expected Change in Number of Drug Related Offences disposed of by courts with partial decriminalisation of cannabis and its impact on Judiciary Expenditure on Drug Offences (10 years projection)

Years	Number of Drug Offences disposed of by courts	Cost to the Judiciary (Rs.)	Expected Savings
Year 0	2415	8,329,335	
Year 1	1691	5,830,535	2,498,801
Year 2	1183	4,081,374	1,749,160
Year 3	828	2,856,962	1,224,412
Year 4	580	1,999,873	857,089
Year 5	406	1,399,911	599,962
Year 6	284	979,938	419,973
Year 7	199	685,957	293,981
Year 8	139	480,170	205,787
Year 9	97	336,119	144,051

It would also have been important to factor in the various social benefits of decriminalization for example in terms of employment and productivity of people who use cannabis and who are in prison. The persons who are currently imprisoned for possession of cannabis would be carrying out an economic activity either as employees or as entrepreneurs if they were not in prison. The benefits of this economic contribution are not quantified. Moreover, incarcerations for cannabis–related offences are visible on police records for life, and this hinders the social re-integration of the ex-inmates after incarceration. Other incurred costs like having to treat HIV or having to treat symptoms of

HCV (jaundice, cirrhosis or liver cancer) or mental health problems linked to incarceration have not been included in this study and will require further investigation.

Cost/Benefits Analysis Presentation

Based on the above figures, an analysis of the Costs and Benefits has been carried out using an Excel template available online.[50] The appraisal period is 10 years to be able to assess the relevance of the Cost Benefit Analysis (CBA) on medium-term basis.

The social discount rate for the analysis is 10% as a range between 8 and 15% is normally for developing countries.[51]

The base year (Year 0) has not been set to a specific year as data available is sometimes for 2012, 2013 or 2014. For example data for Police expenditure is available for 2014 while for Harm Reduction programmes data are available for 2012.

Two options have been considered in the analysis:

Option1 takes into account all expenditures and benefits described above without analysing the benefits of partial decriminalisation of cannabis possession (that is decriminalisation of possession of a certain amount of cannabis and paraphernalia associated to it.)

Option 2 takes into account all expenditures and benefits described above including the benefits of partial decriminalisation of cannabis possession.

The table below summarises the results of the CBA. The detailed analysis is given in Annex II

Table 10 – Summary Table of Cost Benefit Analysis of Drug Policies

	Option 1 Without Partial Decriminalisation of Cannabis	Option 2 With Partial Decriminalisation of Cannabis
Appraisal period (years)	10	10
Capital Costs	Rs0.00	Rs0.00
Whole of Life Costs	Rs3,976,788,227.18	Rs3,456,509,107.87
Cost-benefit analysis of monetary costs and benefits at the Public Sector Discount Rate		
Present Value of Benefits	Rs37,454,853.22	Rs87,563,447.71
Present Value of Costs	Rs2,555,224,827.56	Rs207,834,362.24
Benefit Cost Ratio	0.01	0.42
Net Present Value	-Rs2,517,769,974.34	-Rs5,389,097,644.87

[50]Available at https://www.tec.govt.nz/Documents/Forms%20Templates%20and%20Guides/Cost-Benefit-Analysis-Tool.xls
[51]JuzhongZhuang et al 2007, *Theory and Practice in the Choice of Social Discount Rate for Cost -benefit Analysis: A Survey* page 20 Available at http://adb.org/sites/default/files/pub/2007/WP094.pdf

The summary shows that, based on data available, the value of costs is stronger than the value of benefits in both options. This results in Benefit Cost Ratio (BCR) which is 0.01 for option 1 and 0.42 for option 2. In other words, for each rupee that Government is investing in Option 1, which is geared mostly towards repression, it is getting back 1 cent. On the contrary, one rupee invested in the partial decriminalisation of cannabis would return 42 cents

As explained on the website of the Cost-Benefit Knowledge Bank for Criminal Justice[52]: "A BCR greater than 1 means the benefits outweigh the costs and the investment should be considered. If the ratio is less than 1, the costs outweigh the benefits. If the BCR is equal to 1, the benefits equal the costs." In that respect, both options are not feasible but the partial decriminalisation is a better option than the current policy.

However, it is to be stressed that a more in-depth study with access to more data about actual public spending on repression of drugs and on other potential benefits can bring the BCR closer to 1 for option 2.

[52] Available at http://cbkb.org/toolkit/reporting-cost-benefit-results/

Conclusions/Recommendations

This study is a first step towards more in-depth analysis of the possibility for government to move from its current emphasis on repression concerning the drug problem in the country to more emphasis on harm reduction and potentially to some form of decriminalisation of drugs as many other countries have already done.

The results of this preliminary study show that there are more benefits of moving away from the repressive policy currently in use in Mauritius than to maintain the status quo. One rupee invested in partial decriminalisation of cannabis would bring 42 cents as return while maintaining the current policy only one cent.

As a matter of fact, one of the major drawbacks of this study is the difficulty to find appropriate data to be able to quantify costs and more particularly benefits in monetary terms. More disaggregated data relating directly to the drug problem would have surely brought more positive outcomes.

However, the study has shed light on certain aspects of the current situation in the country which need to be given more attention by all stakeholders engaged in helping people who use drugs:

1. There is a significant improvement of the crime situation and by extension of the social climate since the introduction of the harm reduction programme in 2006. There are lesser cases related to drug offences taken to court and there are lesser detainees in prison for drug related offences. Yet, based on calculations made for this report Government is still spending 78% of its budget on repression and only 22% on health related expenses concerning the harm reduction programme. The report shows that there has been a total of Rs 300,909,835 invested in repression in 2014 (Budget of ADSU Rs. 176,328,000, Prison Rs. 116,252,000 and Judiciary Rs. 8,329,335) and Rs.85,929,838 on health services in 2012 (NATReSA 32,000,000 and Harm reduction 53,929,838). This shows that 78% of investment goes for repression while 22% goes for health services. This is a matter of serious concern for the authorities. The onus should be on harm reduction which is bringing significant results among PWID while 30 years the repressive policy has not brought about any meaningful change in improving the situation of drugs in Mauritius. Since the introduction of harm reduction in 2006, there has been a constant drop in number of cases related to drugs disposed of by courts of law, in terms of incarceration related drugs and in terms of HIV/AIDS cases related to PWID. There is a need to shift from investment in repression to investment in health and harm reduction for people who use drugs.

2. There has been much more repression against users than traffickers. From 2011 to 2014, 77% of convicted drug offences involved users (possession and consumption cases) whereas only 8% concerned traffickers (importation, dealing, cultivation).
3. The increase in the number of persons who use cannabis that have been convicted is to be pointed out. It seems that these persons are targeted and especially those who are in possession of cannabis or paraphernalia associated to cannabis.
4. There is an absence of disaggregated data pertaining to cost incurred relating to drug offences especially for the Judiciary. For example, from statistics available it is difficult to know how much is spent on drug related offences by the Judiciary as compared to other offences or other cases treated by courts of law. Moreover, statistics pertaining to other legal associated costs such as legal aid for persons who were prosecuted for drug related offences are not readily available.
5. There is a need for more studies about the effects of our current drug policies on drug use and the effectiveness of such policies. These studies should be made at regular intervals and should look at all aspects of the drug issue in the country. This first attempt for a cost/benefit analysis of drug policies in Mauritius definitely calls for a more in-depth study.

ANNEX I – Breakdown of Police Expenses for Combating Drugs

Sub-Head 2-305: Combating Drugs

Rs 000

Item No.	Details	In Post 2014	Funded 2015/16	2014 (Jan-Dec) Actual	2015/16 (Jul-Jun) Estimates	2016/17 (Jul-Jun) Planned	2017/18 (Jul-Jun) Planned
Recurrent Expenditure				**173,219**	**186,300**	**190,300**	**194,400**
21	**Compensation of Employees**			**154,572**	**165,430**	**169,430**	**173,530**
21110	Personal Emoluments			145,331	155,830	159,800	163,870
.001	Basic Salary			108,553	115,070	118,042	120,987
	Deputy Commissioner of Police	1	1	1,224	1,224	1,224	1,254
	Assistant Commissioner of Police	1	1	960	960	960	984
	Superintendent of Police	1	4	666	890	912	935
	Assistant Superintendent of Police	5	5	2,879	3,032	3,076	3,153
	Chief Inspector of Police	5	5	2,519	2,627	2,627	2,692
	Inspector of Police	24	24	10,290	11,852	11,900	12,198
	Woman Police Inspector	1	2	450	650	780	800
	Sub Inspector of Police	6	6	2,612	2,633	2,633	2,690
	Police Sergeant	53	54	22,542	23,100	23,680	24,275
	Woman Police Sergeant	7	7	2,944	3,188	3,709	3,801
	Police Corporal	19	19	7,664	8,148	8,382	8,591
	Woman Police Corporal	4	4	1,453	1,532	1,555	1,593
	Police Constable	162	162	43,989	45,090	46,216	47,370
	Woman Police Constable	29	38	7,362	9,090	9,315	9,550
	Police Attendant/ Senior Police Attendant	5	5	998	1,054	1,074	1,101
	Total	**323**	**337**				
.002	Salary Compensation - 2015			-	2,430	2,430	2,430
.004	Allowances			21,977	22,662	23,342	24,042
.006	Cash in Lieu of Leave			5,588	5,778	5,946	6,125
.009	End-of-year Bonus			9,213	9,890	10,040	10,286
21111	Other Staff Costs			7,756	8,080	8,080	8,080
.002	Travelling and Transport			7,315	7,630	7,630	7,630
.100	Overtime			441	450	450	450
21210	Social Contributions			1,485	1,520	1,550	1,580
22	**Goods and Services**			**18,647**	**20,870**	**20,870**	**20,870**
22010	Cost of Utilities			2,346	2,660	2,660	2,660
22020	Fuel and Oil			5,014	6,050	6,050	6,050
22040	Office Equipment and Furniture			71	300	300	300
22050	Office Expenses			55	80	80	80
22060	Maintenance			5,135	5,395	5,395	5,395
22100	Publications and Stationery			411	465	465	465
22120	Fees			779	700	700	700
22140	Medical Supplies, Drugs and Equipment			348	350	350	350
22900	Other Goods and Services			4,490	4,870	4,870	4,870
	of which						
.001	Uniforms			510	800	800	800
.008	Medals, Prizes and Rewards			3,706	3,700	3,700	3,700

Rs 000

Item No.	Details	2014 (Jan-Dec) Actual	2015/16 (Jul-Jun) Estimates	2016/17 (Jul-Jun) Planned	2017/18 (Jul-Jun) Planned
Capital Expenditure		**3,109**	**6,000**	**6,000**	**6,000**
31	**Acquisition of Non-Financial Assets**	**3,109**	**6,000**	**6,000**	**6,000**
31121	Transport Equipment	2,999	5,000	5,000	5,000
31122	Other Machinery and Equipment	109	1,000	1,000	1,000
	TOTAL	**176,328**	**192,300**	**196,300**	**200,400**

ANNEX II – Detailed Cost/Benefit Analysis

Cost Benefit Analysis	**COST-BENEFIT ANALYSIS OF DRUG POLICIES - MAURITIUS**									
Option 1:	**without Partial Decriminalisation of Cannabis**									
25 June 2015										
Key Assumptions:										
Public Sector Discount Rate 2011	10.00%									
Appraisal period (years)	10	years								
Summary of the Results of the Analysis:										
Capital Costs	Rs0.00									
Whole of Life Costs	Rs3,976,788,227.18									
Present Value of Benefits	Rs37,454,853.22									
Present Value of Costs	Rs2,555,224,827.56									
Benefit Cost Ratio	Rs0.01									
Net Present Value	-Rs2,517,769,974.34									
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Year	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**
Discount factor (mid-year)	0.95346	0.86678	0.78799	0.71635	0.65123	0.59203	0.53820	0.48928	0.44480	0.40436
Discount factor (start of year)	1.00000	0.90909	0.82645	0.75131	0.68301	0.62092	0.56447	0.51316	0.46651	0.42410
Decrease in exp. Judiciary - Drug offences	Rs0	Rs416,467	Rs395,643	Rs375,861	Rs276,293	Rs339,215	Rs322,254	Rs306,141	Rs290,834	Rs276,293
Decrease in exp. Prisons - Drug offences	Rs0	Rs8,137,675	Rs7,568,038	Rs7,038,275	Rs6,545,596	Rs6,087,404	Rs5,661,286	Rs5,264,996	Rs4,896,446	Rs4,553,695
Total Benefits (mid-year)	Rs0	Rs8,554,142	Rs7,963,681	Rs7,414,136	Rs6,821,889	Rs6,426,619	Rs5,983,540	Rs5,571,137	Rs5,187,280	Rs4,829,988
Present Value of Benefits (mid-yr)	Rs0.00	Rs7,414,594.89	Rs6,275,266.04	Rs5,311,120.44	Rs4,442,603.61	Rs3,804,720.74	Rs3,220,369.80	Rs2,725,829.58	Rs2,307,288.32	Rs1,953,059.81
Present Value of Benefits	Rs37,454,853.22									
Police cost for combatting drugs	-Rs176,328,000	-Rs192,300,000	-Rs196,146,000	-Rs200,068,920	-Rs204,070,298	-Rs208,151,704	-Rs212,314,738	-Rs216,561,033	-Rs220,892,254	-Rs225,310,099
Judiciary costs	-Rs8,329,335	-Rs7,912,868	-Rs7,517,225	-Rs7,141,364	-Rs6,784,295	-Rs6,445,081	-Rs6,122,827	-Rs5,816,686	-Rs5,525,851	-Rs5,249,559
Prisons costs	-Rs116,252,500	-Rs108,114,825	-Rs100,546,787	-Rs93,508,512	-Rs86,962,916	-Rs80,875,512	-Rs75,214,226	-Rs69,949,230	-Rs65,052,784	-Rs60,499,089
Harm reduction costs	-Rs53,929,838	-Rs56,626,330	-Rs59,457,646	-Rs62,430,529	-Rs65,552,055	-Rs68,829,658	-Rs72,271,141	-Rs75,884,698	-Rs79,678,933	-Rs83,662,879
Funding NATReSA and other NGO	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000
Total Costs (mid-year)	-Rs387,089,673	-Rs397,204,023	-Rs395,917,659	-Rs395,399,325	-Rs395,619,564	-Rs396,551,955	-Rs398,172,932	-Rs400,461,647	-Rs403,399,822	-Rs406,971,627
Capital Costs (at start of year)	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00
Total Costs	-Rs387,089,673.00	-Rs397,204,022.90	-Rs395,917,658.65	-Rs395,399,324.86	-Rs395,619,564.44	-Rs396,551,955.06	-Rs398,172,932.10	-Rs400,461,647.30	-Rs403,399,822.06	-Rs406,971,626.80
Total Capital Costs	Rs0.00									
Total Whole of Life Costs	-Rs3,976,788,227.18									
Present Value of Costs (mid-year)	-Rs369,075,521.89	-Rs344,290,160.12	-Rs311,977,418.13	-Rs283,244,525.97	-Rs257,638,449.74	-Rs234,768,771.28	-Rs214,298,573.30	-Rs195,936,700.68	-Rs179,431,165.65	-Rs164,563,540.79
Present Value of Costs (start year)	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00
Present Value of Costs (by year)	-Rs369,075,521.89	-Rs344,290,160.12	-Rs311,977,418.13	-Rs283,244,525.97	-Rs257,638,449.74	-Rs234,768,771.28	-Rs214,298,573.30	-Rs195,936,700.68	-Rs179,431,165.65	-Rs164,563,540.79
Present Value of Costs	-Rs2,555,224,827.56									
Net Cash Flows	-Rs387,089,673.00	-Rs388,649,880.90	-Rs387,953,977.65	-Rs387,985,188.86	-Rs388,797,675.44	-Rs390,125,336.06	-Rs392,189,392.10	-Rs394,890,510.30	-Rs398,212,542.06	-Rs402,141,638.80
Net Present Value (by year)	-Rs369,075,521.89	-Rs336,875,565.23	-Rs305,702,152.09	-Rs277,933,405.53	-Rs253,195,846.13	-Rs230,964,050.55	-Rs211,078,203.50	-Rs193,210,871.10	-Rs177,123,877.33	-Rs162,610,480.99
Cumulative NPV	-Rs369,075,521.89	-Rs705,951,087.12	-Rs1,011,653,239.21	-Rs1,289,586,644.74	-Rs1,542,782,490.87	-Rs1,773,746,541.42	-Rs1,984,824,744.92	-Rs2,178,035,616.02	-Rs2,355,159,493.35	-Rs2,517,769,974.34

Cost Benefit Analysis	**COST-BENEFIT ANALYSIS OF DRUG POLICIES - MAURITIUS**									
Option 2:	**with Partial Decriminalisation of Cannabis**									
30 June 2015										
Key Assumptions:										
Public Sector Discount Rate 2011	10.00%									
Appraisal period (years)	10	years								
Summary of the Results of the Analysis:										
Capital Costs	Rs0									
Whole of Life Costs	Rs3,456,509,108									
Present Value of Benefits	Rs87,563,448									
Present Value of Costs	Rs207,834,362									
Benefit Cost Ratio	0.42									
Net Present Value	Rs5,389,097,645-									
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Year	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**
Discount factor (mid-year)	0.95346	0.86678	0.78799	0.71635	0.65123	0.59203	0.53820	0.48928	0.44480	0.40436
Discount factor (start of year)	1.00000	0.90909	0.82645	0.75131	0.68301	0.62092	0.56447	0.51316	0.46651	0.42410
Decrease in exp. Judiciary - Drug offences	Rs0	Rs2,498,801	Rs1,749,160	Rs1,224,412	Rs857,089	Rs599,962	Rs419,973	Rs293,981	Rs205,787	Rs144,051
Decrease in exp. Prisons - Drug offences	Rs0	Rs34,875,750	Rs24,413,025	Rs17,089,118	Rs11,962,382	Rs8,373,668	Rs5,861,567	Rs4,103,097	Rs2,872,168	Rs2,010,518
Total Benefits (mid-year)	Rs0	Rs37,374,551	Rs26,162,185	Rs18,313,530	Rs12,819,471	Rs8,973,630	Rs6,281,540	Rs4,397,078	Rs3,077,955	Rs2,154,569
Present Value of Benefits (mid-yr)	Rs0.00	Rs32,395,669.24	Rs20,615,425.33	Rs13,118,907.39	Rs8,348,395.61	Rs5,312,615.57	Rs3,380,754.82	Rs2,151,389.43	Rs1,369,066.18	Rs871,224.13
Present Value of Benefits	Rs87,563,447.71									
Police cost for combatting drugs	-Rs176,328,000	-Rs192,300,000	-Rs196,146,000	-Rs200,068,920	-Rs204,070,298	-Rs208,151,704	-Rs212,314,738	-Rs216,561,033	-Rs220,892,254	-Rs225,310,099
Judiciary costs	-Rs8,329,335	-Rs5,830,535	-Rs4,081,374	-Rs2,856,962	-Rs1,999,873	-Rs1,399,911	-Rs979,938	-Rs685,957	-Rs480,170	-Rs336,119
Prisons costs	-Rs116,252,500	-Rs81,376,750	-Rs56,963,725	-Rs39,874,608	-Rs27,912,225	-Rs19,538,558	-Rs13,676,990	-Rs9,573,893	-Rs6,701,725	-Rs4,691,208
Harm reduction costs	-Rs53,929,838	-Rs56,626,330	-Rs59,457,646	-Rs62,430,529	-Rs65,552,055	-Rs68,829,658	-Rs72,271,141	-Rs75,884,698	-Rs79,678,933	-Rs83,662,879
Funding NATReSA and other NGO	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000	-Rs32,250,000
Total Costs (mid-year)	-Rs387,089,673	-Rs368,383,614	-Rs348,898,746	-Rs337,481,018	-Rs331,784,452	-Rs330,169,831	-Rs331,492,807	-Rs334,955,581	-Rs340,003,082	-Rs346,250,305
Capital Costs (at start of year)	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00
Total Costs	-Rs387,089,673.00	-Rs368,383,614.40	-Rs348,898,745.55	-Rs337,481,018.12	-Rs331,784,451.73	-Rs330,169,830.92	-Rs331,492,807.11	-Rs334,955,580.66	-Rs340,003,081.61	-Rs346,250,304.78
Total Capital Costs	Rs0.00									
Total Whole of Life Costs	-Rs3,456,509,107.87									
Present Value of Costs (mid-year)	-Rs30,749,168.50	-Rs27,953,789.55	-Rs25,412,535.95	-Rs23,102,305.41	-Rs21,002,095.83	-Rs19,092,814.39	-Rs17,357,103.99	-Rs15,779,185.45	-Rs14,344,714.04	-Rs13,040,649.13
Present Value of Costs (start year)	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00
Present Value of Costs (by year)	-Rs30,749,168.50	-Rs27,953,789.55	-Rs25,412,535.95	-Rs23,102,305.41	-Rs21,002,095.83	-Rs19,092,814.39	-Rs17,357,103.99	-Rs15,779,185.45	-Rs14,344,714.04	-Rs13,040,649.13
Present Value of Costs	-Rs207,834,362.24									
Net Cash Flows	-Rs387,089,673.00	-Rs331,009,063.40	-Rs322,736,560.55	-Rs319,167,488.12	-Rs318,964,980.73	-Rs321,196,200.92	-Rs325,211,267.11	-Rs330,558,502.66	-Rs336,925,126.61	-Rs344,095,735.78
Net Present Value (by year)	-Rs30,749,168.50	Rs4,441,879.70	-Rs4,797,110.62	-Rs9,983,398.02	-Rs12,653,700.22	-Rs13,780,198.82	-Rs13,976,349.17	-Rs13,627,796.01	-Rs12,975,647.86	-Rs12,169,424.99
Cumulative NPV	-Rs30,749,168.50	-Rs26,307,288.81	-Rs31,104,399.43	-Rs41,087,797.45	-Rs53,741,497.67	-Rs67,521,696.50	-Rs81,498,045.67	-Rs95,125,841.68	-Rs108,101,489.54	-Rs120,270,914.54
Net Cash Flows	$87,563,448	$0	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00	Rs0.00
Net Present Value (by year)	-Rs563,417,673.00	-Rs523,309,063.40	-Rs518,882,560.55	-Rs519,236,408.12	-Rs523,035,278.73	-Rs529,347,904.92	-Rs537,526,005.11	-Rs547,119,535.66	-Rs557,817,380.61	-Rs569,405,834.78
Cumulative NPV	-Rs563,417,673.00	-Rs1,086,726,736.40	-Rs1,605,609,296.95	-Rs2,124,845,705.06	-Rs2,647,880,983.80	-Rs3,177,228,888.72	-Rs3,714,754,893.82	-Rs4,261,874,429.48	-Rs4,819,691,810.09	-Rs5,389,097,644.87