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Drug policy and its economic cost

An overview of law enforcement and
social costs in Eastern and Southern Africa

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FEBRUARY 2023

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ACKNOWLEDGEMENTS

The ESACD is funded by the European Union. The contents of this publication can in no way be taken to reflect the views or position of the European Union.

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Acronyms and abbreviations

ESA	Eastern and Southern Africa
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
NGO	Non-governmental organization
NSP	Needle and syringe programme
OST	Opioid substitution therapy
PWID	People who inject drugs
PWUD	People who use drugs
UNODC	United Nations Office on Drugs and Crime
WHO	World Health Organization

SUMMARY

This paper provides an overview and analysis of the economic cost of illegal drug use in Eastern and Southern Africa (ESA). It collates the limited available information from 11 countries in the region to describe features of drug-related government expenditures in the spheres of criminal justice and health. It gives an indication of the extent of police activity and prison resources dedicated to the enforcement of drug laws, of the health costs associated with drugs under the dominant policy approach and of the support for harm reduction programmes. These are broadly compared to show that revising these relative resource priorities might offer large direct budgetary dividends.

Key points

- All countries in ESA continue to concentrate their direct drug-related expenditures in the criminal justice system. Policing and prison expenditures for drug law enforcement are large.
- Much of this activity has little prospect of disrupting drug supply and may even increase harms and costs in the longer term.
- Governments incur major health costs, not just despite, but in fact because of their failure to prioritize health considerations.
- Although there is strong evidence that harm reduction measures can reduce drug-related harms and costs, these receive little attention and funding.
- Many costs typically ascribed to drugs are the costs of a certain approach to drug policy. This is subject to change.
- There is too little of the necessary information available for rigorous analysis or to draw firm conclusions. Governments and other role-players must invest in data collection to make drug policy decision-making and evaluation possible.

INTRODUCTION

Matters of principle are important, but another key consideration for policy evaluation and decision making is economic cost. All governments have a responsibility to their citizens to allocate resources as effectively as possible to advance the public good. The countries in the ESA region are for the most part low- to middle-income economies,¹ which means they must address their numerous pressing social concerns with limited revenues. It is essential that they determine and pursue policy positions that offer value within always tightly constrained budgets.

Many of the costs associated with drugs do have a bearing on national fortunes but are impossible to quantify. Measures exist to describe such factors as reductions in quality of life, community cohesion, or human potential, but these can only ever be rough approximations of concepts that, although entirely real, are qualitative and intangible in nature. Other possible drug-related costs to countries' economies are more quantifiable but indirect. Examples include trade losses due to delays in customs inspections, fiscal losses to grey markets, worker productivity losses to premature morbidity and mortality, and domestic and foreign investment losses due to declining confidence in governance.

This paper considers only those direct drug-related costs within formal, government financial expenditure. Even this relatively straightforward kind of accounting, however, is very difficult. Drug-related expenditures are rarely differentiated as such and they fall under multiple budget categories, within multiple departments, at multiple administrative levels (central, regional and local). Some, however, can be broadly estimated by extrapolating from other information.

To this end, fieldworkers were commissioned to collect data on over 20 expenditure-related variables in 11 ESA countries.² They consulted official state budgets, the reports of government departments, international publications and various other data sources. Where official information was not publicly available, it was requested. The fieldworkers also conducted dozens of interviews with members of law enforcement, health authorities and non-governmental organizations (NGOs) that work with or provide services to people who use drugs (PWUD). This paper combines that information with that from other briefing papers in this series to provide an overview and analysis of the economic cost of drugs in ESA. In many countries, very little of the necessary information could be found. Much of what could be found is partial and disputable.

A more inherent obstacle to firm conclusions on this topic is that of how to distinguish between costs that should be ascribed directly to drugs or rather to inappropriate drug policy. As discussed in other papers in this series, the harms associated with drugs are in many ways exacerbated rather than reduced by the region's broadly dominant policy approach, often characterized as prohibitionist. Some costs associated with drugs should therefore instead be understood as costs of drugs under prohibition. Policy change would see some expenditures immediately eliminated, some effectively reallocated from one objective or department to another, and others increasing or decreasing over time in response to these and other dynamics.

Any policy and resultant budgetary change would also have other, connected effects. All costs are also opportunity costs: every saving presents an opportunity for alternative expenditure. For example, reduced prison occupancy might make more correctional resources available for rehabilitation. Less bloodborne disease might allow health authorities to invest more in prenatal care. The positive knock-on effects of eliminating what amounts to not only wasteful but destructive drug policy expenditure are immeasurable.

This paper does not constitute a rigorous cost-benefit analysis of the status quo or any possible policy change. That kind of assessment would require more extensive and ongoing engagement with role-players in each country, particularly about the development of sustainable systems of data collection and sharing. However, this paper does indicate some of the essential pieces of information required for such an analysis. It also broadly describes key features of ESA country expenditures within the current drug policy framework, based on the most authoritative data that could be gathered, within the focus areas of criminal justice and health. It offers a starting point for more detailed further work and the best current evidence base for drug policy cost evaluation in these spheres across 11 countries in ESA.

LAW ENFORCEMENT COSTS

In broad terms, all countries in ESA continue to place law enforcement at the forefront of their drug response. This means that criminal-justice-system expenditures are their most prominent and direct drug-related economic costs. These are fairly identifiable and calculable, as compared to health system costs. On the other hand, there is major variation in legal frameworks, criminal-justice-system structures, and data categorization and dissemination practices. Comparison between countries is therefore of limited value. Certain patterns, however, can be shown in the available data.

Total annual state spend on police and prisons

The total combined police budgets for the 11 countries in 2019 or the closest year for which data could be sourced,³ was about US\$9.1 billion⁴ per year.⁵ Prison budgets are much smaller than policing budgets. In 2019 or the closest year with available data, total prison spending as a proportion of combined police and prison spending ranged from 1% in Zimbabwe to 31% in Lesotho, with an average proportion across all the countries of 20%. The combined annual prison spending for the 11 countries was about US\$2.3 billion. The total police and prison expenditures come to a total of about US\$11.4 billion per year.

	Police spend (US\$)	Prison spend (US\$)	Combined spend (US\$)	Per capita (US\$) ⁶	Percent GDP ⁷
Botswana	201 100 000	47 300 000	248 400 000	108	1.5%
Eswatini	143 800 000	36 200 000	180 100 000	157	4.0%
Kenya	912 900 000	274 400 000	1 187 300 000	23	1.2%
Lesotho	53 400 000	24 500 000	77 900 000	37	3.2%
Malawi	42 500 000	5 600 000	48 100 000	3	0.4%
Mauritius	206 400 000	20 700 000	227 000 000	179	1.6%
Namibia	335 000 000	55 900 000	390 900 000	157	3.1%
Seychelles	24 200 000	3 600 000	27 800 000	285	1.7%
South Africa	6 549 900 000	1 717 100 000	8 267 000 000	141	2.1%
Uganda	229 700 000	67 600 000	297 300 000	7	0.8%
Zimbabwe	438 700 000	2 200 000	440 900 000	30	2.3%
Total	9 137 600 000	2 255 100 000	11 392 700 000	58	1.9%

Figure 1: Total annual budgets for policing and prison departments, by country (in 2019 or closest possible year).

There is major variation between the countries. South Africa contributes 73% of the total and Kenya a further 10%. These are, however, also the most populous countries in the region. The average combined police and prison spend on a per capita basis is US\$58 but the range spans from US\$3 in Malawi to US\$285 in Seychelles. For comparison, the 2019 equivalent in the US is about US\$625.8 When the expenditure is expressed as a percentage of gross domestic product, the average is 1.9%, with the Seychelles figure in fact relatively low at 1.7% and that for Eswatini very high at 4%.

These estimates are approximate. Exchange rates and budgets fluctuate. They also exclude judicial expenditures, which are not included here because there is insufficient data to do any analysis of the proportion of judicial resources spent on drug law enforcement, as is done for policing and prisons in the sections that follow. What these totals do, however, is begin to give an indication of the overall regional scale of the state resources dedicated to law enforcement. These are the economic stakes involved and the background against which discussions of drug policy evaluations must begin.

Arrests for drug-related offences

Of the 11 surveyed ESA countries, information on the total number of drug-related arrests or charges for two years could be found for 10.⁹ Unfortunately, the dates do not align and despite attempts to standardize the data collected, significant differences in institutional practices remain.¹⁰ The following table should therefore be understood as an imperfect estimation and as a poor point of comparison between the countries. It does, however, indicate the overall level of activity involved in policing drug-related crimes.

	2014 or closest year available	2019 or closest year available
Botswana	1 115	1 890
Eswatini	2 448	3 355
Kenya	4 965	6 867
Lesotho	211	98
Malawi	517	861
Mauritius	2 091	3 382
Namibia	917	1 333
Seychelles	1 279	1 146
South Africa	251 944	158 621
Uganda	2 740	1 714
Zimbabwe	No data	

Figure 2: Total recorded arrests for drug-related offences, by country (in 2014 and 2019 or closest possible years).

Poor data alignment makes precise summation difficult, but the combined total of drug-related arrests or charges over the two years in these countries is about 447 000. This suggests that in just two years, there were somewhere in the region of half a million arrests recorded for drug-related crimes in just 10 ESA countries. South Africa accounted for 92% of these.

Trends varied. Most of the countries saw an increase in drug arrests between their two time periods. However, South Africa's figures declined by 37% between 2014 and 2019, which is explained by the fact that personal possession of cannabis was legalized over this period. A similar decline is seen in Lesotho, where cannabis cultivation has also been partially legalized. Uganda also saw a major decline to 2020, which its police ascribed to the COVID-19 lockdown, increased severity in sentencing for drug-related offences, and police successes in disrupting trafficking and cultivation.¹¹

The definitions of the incidents represented in those arrest figures vary. Lesotho sources refer to 'habit drugs'; Uganda to 'narcotics'; South Africa, to 'drug-related crimes'. More critically, each of those categories encompass a wide range of different behaviours, including drug use, possession for personal use, possession for sale or supply, dealing, prescription forgery, cultivation or manufacture, importation, and even causing death through drugs. Each country is distinct in how it defines these legally and the extent to which it disaggregates them in its statistics.

In the five countries that do to some extent distinguish between different kinds of drug offences in their arrest reporting, the unvarying pattern is that the overwhelming majority are categorized as cases of drug use or possession. The proportion of drug arrests that are for use and/or possession is 89% on average, with its lowest at 73% in Eswatini¹² and as high as 99% in Namibia.¹³ The average proportion of drug-related arrests that are categorized as cases of trafficking (rather than simply use or possession for personal use) is just 11%. It may well be that police opt for lesser charges than they in fact suspect, because these are easier to substantiate and ultimately prosecute.

It does also suggest, however, that only a tiny fraction of the roughly half a million cases shown here resulted from the kind of organized crime investigation that could plausibly disrupt supply. Instead, the brunt is borne by people who use drugs (PWUD) and/or low-level, non-violent dealers, typically from poor communities and disadvantaged social and ethnic groups.¹⁴ In Kenya, for example, over 7% of criminal cases against children related to drug offences and almost a quarter of these consisted of possession charges.¹⁵

Qualitative evidence also corroborates this pattern. An officer of the Anti-Narcotics Bureau of the Seychelles Police Force said in interview that dismantling drug trafficking networks was the priority, but then highlighted their strategy of constant and increasing patrols and numerous arrests at known drug hotspots.¹⁶ An interviewed drug user confirmed that 'every day, they come four or five times'.¹⁷ There is no evidence that a strategy of hotspot patrols and low-level arrests is effective at drug market disruption.¹⁸ Nevertheless, across the region a vast number of vulnerable people who use drugs, including children, are being arrested every year purely for having drugs in their possession.

Proportion of police time spent on drug offences

The next key variable needed to count the economic cost of anti-drug activity is what proportion of police resources this absorbs. Some countries have dedicated anti-drug units, which allocate virtually all their time and resources to drugs, which makes such estimation relatively easy.

For example, the budget of the Seychelles Anti-Narcotics Bureau in 2020 was 52 222 000 Seychellois rupee, or about US\$2 497 000, rising to 64 274 000 rupee, or US\$4 441 000 in 2021.¹⁹ In interview, a unit member said this was far from enough and that the unit lacked sufficient appropriate vehicles to conduct proactive patrols and that it was unable to do important capacity building initiatives and officers' training.²⁰ The Kenyan Anti-Narcotics Authority falls under the broader Directorate of Criminal Investigations, which in the 2020 budget was allocated 8 billion Kenyan shillings,²¹ or about US\$70 million.

In most cases, however, the resources expended enforcing drug laws could at best be only broadly estimated. A member of the Lesotho Diamonds and Narcotic Unit estimated that 80% of the designated seven-member unit staff's time is spent on drug-related offences, plus about 30% of non-unit staff's time.²² The Anti-Narcotics unit of Eswatini was said to spend 100% of its time on drug-related offences, with other units dedicating about 10% of their time.²³ Similarly, Zimbabwe has a dedicated Narcotics Unit, while other units were estimated to contribute up to 20% of their time to drug-related issues.²⁴ The overall estimate in Malawi was 5% of police time.²⁵ No estimates were found for other countries. The proportion of police time and other resources dedicated to drugs could for the most part only be estimated in rough, impressionistic terms.

One very approximate quantitative proxy for this is the number of drug-related arrests as a proportion of all arrests. This data is shown in Figure 3 for those countries where it could be determined.

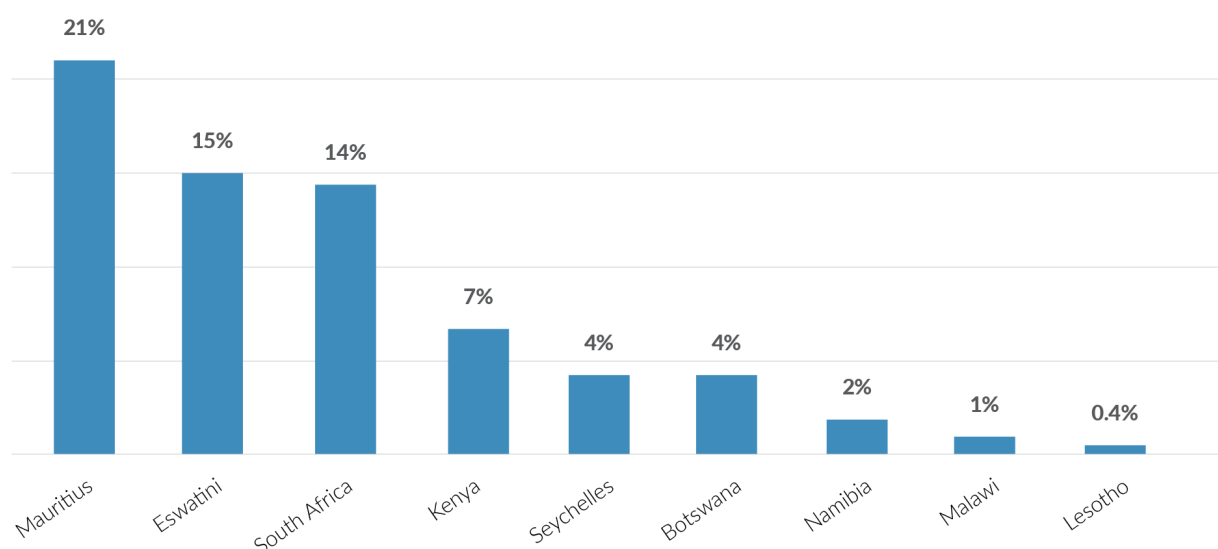


Figure 3: Proportion of recorded arrests that were for drug-related offences, by country in 2019 or closest possible year.

Major variation between countries is apparent, but arrests for drug-related offences represented an average of 7.5% of all arrests. Clearly, a significant proportion of police time is absorbed in these activities. This is only a broad approximation, because a great deal of important police work does not convert into arrest numbers, but given that the total combined annual police spending for the 11 countries was about US\$9.1 billion, that figure of 7.5% of police resources would represent over US\$680 million every year. What this ignores is the issue of opportunity costs. An average of 7.5% of police time no longer spent enforcing drug crimes could instead be reallocated to other ends, such as better responses to victims of domestic violence, prevention of human trafficking or improving police–community relations.

Another thing suggested by the figures above is roughly what the reduction in arrest numbers would be in each country if police were to stop enforcing these crimes entirely – all else being equal. Whereas Lesotho would see a decline of less than half a percent if these offences were no longer enforced, the police in Mauritius would see as much as 21% of their annual arrests fall away. This would be a significant reduction in the number of cases introduced to the criminal justice system and could relieve considerable pressure, not only in terms of policing, but also judicial and correctional resources.

Prison spending on drug-related offences

Total prison costs should not be expected to vary in direct proportion to number of prisoners. For example, there are large, fixed costs in infrastructure and relatively inflexible costs in employment. Releasing 10% of prisoners would not result in a 10% reduction in prison costs. It is nevertheless possible to make a very generalized estimation of costs per prisoner.

The combined annual prison spending calculated earlier in the paper for the 11 countries was about US\$2.3 billion. This pays, among other things, for the incarceration of a combined number of people, serving a sentence for any offence, of about 347 300.²⁶ Combining these figures shows that the average annual spending per imprisoned individual is about US\$6 500.²⁷

Determining what proportion of this goes towards drug-related offences is difficult. No data could be found for Botswana or Eswatini. Some other countries do publicize such figures, but in several cases sources differed, and it was uncertain. Namibian official information from the Offender Management System indicated that in 2021 it had 36 people imprisoned for drug-related offences, but the same commissioner of the Namibian Correctional Service who provided this information, said in interview that there may be a problem with the information system.²⁸ The Namibian Police reported that between 2018 and 2020, 2 313 people were imprisoned on drug-related offences.²⁹ Similarly, the Lesotho Correctional Service statistics indicated that in 2015 it had 17 prisoners on drug-related offences,³⁰ but the deputy commissioner of the Lesotho Correctional Service estimated that the real total was 'just under a quarter' of the prison population.³¹ No official figures could be found for Zimbabwe, but a source at the Zimbabwe Prisons and Correctional Service estimated that about a quarter of its prisoners were imprisoned for drug-related offences.

Across the 11 countries, the total combined number of individuals incarcerated on drug-related offences therefore ranges anywhere between about 17 000 and 38 000. Depending on the source of the figures, the average proportion of total prisoners who are imprisoned on drug-related offences ranges between 5% and 11%. See Figure 4 below.³²

At an average annual spend per imprisoned individual of about US\$6 500, this represents annual spending on imprisonment for drug-related offences of between about US\$112.8 million and US\$248.1 million within the 11 countries. Note that there is considerable variation between the different countries in both annual spend per prisoner and proportion of prisoners held for drug-related offences. To estimate its costs, each country should do its own calculations, based on its own best available data, and accounting for its own correctional service budget structure. However, on their averages and as a broad indication of scale, the prison spending range given above can be taken as an estimate.

	Total prisoners	Proportion drug-related offences
Botswana	3 882	
Eswatini	3 610	
Kenya	77 347	6.8%
Lesotho	3 651	0.5-25%
Malawi	15 600	0.4%
Mauritius	3 913	8.3%
Namibia	4 526	0.8%
Seychelles	245	31.0%
South Africa	154 449	2.0%
Uganda	60 085	1.6%
Zimbabwe	~20 000	25.0%
Total	347 308	Average up to 11%

Figure 4: Total number of imprisoned individuals and proportion imprisoned for drug-related offences, by country in 2019 or closest possible year.

Two last points must be made about drug-related law enforcement costs. First is that the direct, annual, financial costs to taxpayers may be only a fraction of the full, long-term cost of these measures. Arrest and imprisonment can be life-changing experiences – seldom for the better. It was widely reported by law enforcement members, NGOs, and PWUD in many of the countries that it was overwhelmingly the poor who were affected, because the wealthier could afford the bribes, fines or good lawyers. Arresting and imprisoning large numbers of people, typically vulnerable people who possess drugs only for their own use, have a lasting impact not only on those individuals, but also on their families, their communities, the integrity and perceptions of law enforcement officials, the capacity of the criminal justice system to serve victims of crime, and so on. As discussed later in this paper, law enforcement expenditures may also induce greater expenditures in health. For example, HIV prevalence is up to 50 times higher among prisoners than among the general public,³³ such that increased rates of imprisonment may require later increases in public health spending.

Finally, it is important to note that the costs represented above are not inevitable. They are not intrinsic to the phenomenon of drug use. They are the costs of a certain policy response to that phenomenon. This is subject to change.

HEALTH COSTS

Even though all ESA countries still understand drug policy primarily as a question of law enforcement, they also bear drug-related health expenditures, including in terms of drug-related deaths, for instance from overdose, and the treatment of secondary illnesses, including HIV/AIDS, Hepatitis B and Hepatitis C. Compared to criminal justice costs, however, drug-related health costs are considerably more difficult to estimate.

Drug-related expenditures in the sphere of criminal justice are relatively direct and calculable. Their nature also makes it easier to see that most of those costs are not, in fact, inherent to drug use itself, but are rather costs of the criminal prohibition of drug use. This distinction is less clear in the sphere of health, although it is equally critical.

An overdose, for example, may seem directly attributable to drug use, given that it occurs following an excessive dose or the use of several drugs at one time. Its likelihood, however, is related to variability in drug potency and purity. These are a function of an unregulated market. The outcome of overdose also depends on the extent to which people likely to witness an overdose are trained to identify, prevent or manage one. Overdose is also a common cause of death among people newly released from prison. Policy therefore has a huge bearing on the harms that result from a given level of drug use. Many health costs associated with drug use are in fact health costs of drug use under unsafe conditions, with unsafe equipment, by people who are socially marginalized and unable to access preventive and ongoing help and support from healthcare providers.³⁴

A more practical difficulty is simply that almost no ESA countries can explicitly demarcate those health expenditures that are related to drugs. What estimates can be made must rely on other data, most critically on the overall prevalence of drug use and especially of injecting drug use.

Prevalence of drug use and injecting drug use

Determining the incidence of a behaviour that takes place in private and commonly attracts stigma is inevitably extremely difficult. It is impossible to confidently estimate the number or proportion of people in a population who use drugs, because under a policy regime that criminalizes a behaviour, there is a strong incentive to obscure it. Estimates and trends of drug use prevalence are invariably drawn indirectly from various other data sources, all imperfect and incomplete in their own ways, and then extrapolated by means of various assumptions, resulting in an extraordinarily wide range of estimates. For example, those obtained for Zimbabwe ranged from 100 000³⁵ to 1.5 million.³⁶ Those for Lesotho comprised one estimate of about 12 000 (from an international non-profit organization³⁷) one of 21 000 (from a study that referred only to heroin, cocaine, and methamphetamine use³⁸) and one of over 50 000 (from a rehabilitation centre).³⁹

Estimates can be based on survey measures. A survey in South Africa in 2012, for example, found that 4.4% of the population had used an illegal drug in the past three months.⁴⁰ However, the most common source of relevant information comes from demand for treatment services. The likelihood of seeking or receiving treatment, however, depends on multiple factors, including the nature of those services, their absolute and relative accessibility, the level of stigma associated with the substance concerned, and the extent to which an individual's drug use impairs the rest of their functioning. Such figures can therefore be misleading.

In Botswana, the relevant information obtained was as follows. The clinical program manager of an NGO, the Botswana Substance Abuse Support Network (BOSASNet), indicated that the organization currently serves a population of about 250 clients, most of whom are seeking support related to their alcohol use.⁴¹ The programs director of a community based organization called Captive Eye similarly indicated that they serve about 200 clients, also mostly for alcohol.⁴² The predominance of the demand for alcohol-related treatment be understood in the context that this is not an illegal drug and its use is not nearly as stigmatized as other substances. Moreover, these two organizations could refer only to

their work in the capital, Gaborone, which cannot reasonably be extrapolated to the rest of the national population. In contrast, one focus group discussion with PWUD estimated that over 45% of the youth population in large and medium cities in Botswana use drugs, and another focus group estimated that it was over 60%.

As the case of Botswana demonstrates, an additional challenge to determining the number of PWUD derives from the fact that the term ‘drug’ can be interpreted in different ways. Many estimates include alcohol. A Kenyan survey measure concluded that about 18% of the national adult population used drugs, including in this not only alcohol, but also tobacco.⁴³

Whatever the measure used, historical patterns and the best available recent data sources suggest that increased availability, economic development, urbanization and population growth, mean that the number of PWUD in the region will have increased by 14 million people between 2018 and 2050.⁴⁴ Arguably, however, estimates of the total number of PWUD are not essential for policymaking, because evidence suggests that only about one in ten of those who consume drugs can be considered ‘problem users’,⁴⁵ in the sense that many of those who use drugs may not do themselves or anyone else significant physical harm.⁴⁶

On the other hand, estimates of the number of people who inject drugs (PWID) are critical. The joint UNODC/WHO/UNAIDS/World Bank best estimate for the number of PWID in East Africa and Southern Africa combined is 410 000.⁴⁷ However, the study notes that the range could be anywhere between 190 000 and 860 000, when using exactly the same underlying data but applying different assumptions about and ways of trying to account for the huge amounts of missing data. Although to a lesser extent than for the total number of PWUD, the few available country estimates for the number of PWID also vary a great deal (see Figure 5).

	Harm Reduction International ⁴⁸	UNAIDS ⁴⁹	Other sources	
Eswatini		300	850 ⁵⁰	5 800 ⁵¹
Kenya	30 500	16 000		
Lesotho	2 600		130 ⁵²	
Malawi			450 ⁵³	
Mauritius		11 700	6 000 ⁵⁴	20 000 ⁵⁵
Seychelles	2 600		3 000 ⁵⁶	
South Africa	76 000	82 500		
Uganda	3 900	7 400	1 600 ⁵⁷	

Figure 5: Estimates of the approximate number of people who inject drugs, by country at various dates.

Using other samples and assumptions, there are other estimates available. Research and monitoring practices and capacity mean that the ranges of estimates tend to be larger in the ESA countries than in places like Western Europe. This presents a real challenge.

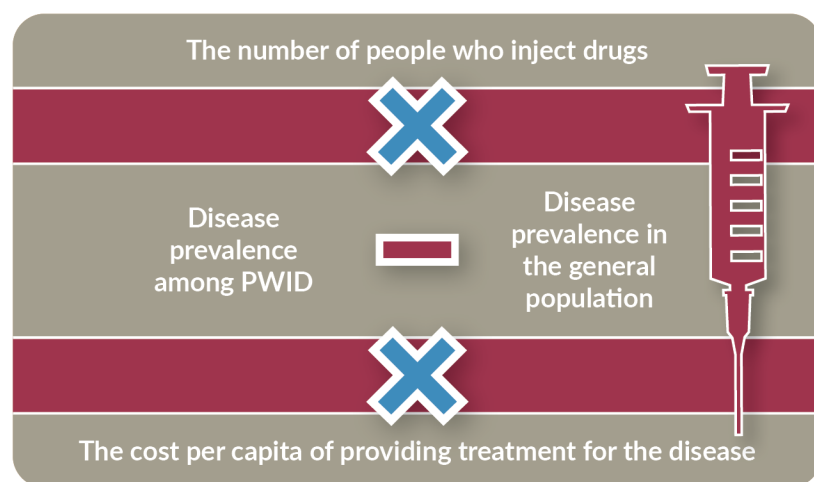
The reason estimates of the prevalence of PWID are so important for health costing and policy is that rates of bloodborne disease tend to be significantly higher among PWID than in the general population.⁵⁸ This is due to the sharing and (re)use of contaminated injecting equipment (e.g. needles, syringes, cookers), and indirect exposure through unprotected and/or transactional sex or sexual violence. These risk factors are strongly influenced by policy and must in turn prompt policy response, both because they are harms in their own right and because they increase the demand for treatment for health issues.

In Mauritius, for example, information from the National Drug Observatory shows that the total number of admissions in public health institutions known to be due to complications resulting from drug use is about 900 per year.⁵⁹ There were 1 338 recorded drug-related deaths in Kenya in 2016.⁶⁰ There are various health costs that may be associated with drug use, including in response to non-fatal overdoses, injection site injuries and drug-related violence. The clearest and best-understood, however, relates to bloodborne disease.

Treating bloodborne disease

Elevated rates of HIV/AIDS and viral hepatitis among PWID are a key factor in the health costing of drugs. As discussed in another paper in this series,⁶¹ across Africa the estimated prevalence of HIV is almost three times higher among PWID than among the general population,⁶² and the estimated prevalence of hepatitis C virus (HCV) is seven times higher among PWID than the general population.⁶³

Disease cost modelling is an extremely complex exercise, but in its simplest form, estimating the additional treatment costs that result from the higher disease prevalence among PWID, over and above the rest of the population, involves a calculation requiring at least four pieces of information:



The results are a function of the reliability of all these parts of the equation. Although many had figures for one or two of these, estimates for all four necessary pieces of information could be obtained in very few of the ESA countries. For only four countries could any such calculation be made, and even this only for HIV. However, the wide range of available estimates of the number of PWID in each country made for an equally wide range of cost estimates.

	Approximate number PWID (N)			HIV prev. general pop (%)	HIV prev. PWID (%)	Cost per annum per capita (US\$)	Total additional cost per annum (US\$)		
	Est 1	Est 2	Est 3				Est 1	Est 2	Est 3
Eswatini	300	850	5 800	17%	29%	257	9 066	25 687	175 274
Kenya	16 000	30 500		6%	18%	174	345 216	658 068	
South Africa	76 000	82 500		20%	22%	250	266 000	288 750	
Uganda	1 600	3 900	7 400	6%	17%	155	26 536	64 682	122 729

Figure 6: Estimates of the additional annual treatment costs due to the higher prevalence of HIV/AIDS among PWID than in the general population, by country at various dates.

More broadly, among the nine ESA countries where plausible estimates could be found, the average annual per capita cost of providing treatment for HIV was US\$267. Among the six with the relevant data, the average prevalence of HIV among PWID was 13 percentage points higher than in the general population.

Using the estimate for the number of PWID in East Africa and Southern Africa of 410 000 (see above), this means that the additional treatment costs resulting from elevated HIV prevalence among PWID could be in the region of US\$14.5 million per year.

This gives an indication of the annual health costs in the region that could be averted, and therefore diverted elsewhere, if the rate of HIV among PWID could be reduced. As in the criminal justice sphere, drug-related health costs are not inevitable, but rather a function of policy. This is manifested in the large body of research evidence on the efficacy and cost-effectiveness of various measures commonly referred to under the umbrella of harm reduction.

Harm reduction costs and benefits

Harm reduction practices aim to minimize the negative impacts associated with drug use, without necessarily aiming to eliminate drug use itself. Core harm reduction interventions include needle and syringe programmes (NSPs) for PWID, opioid substitution therapy (OST) for people with opioid dependence, and other evidence-based interventions, including distribution of naloxone (a medicine that reverses an opioid overdose), and provision of safer spaces for drug consumption. Some consider such programmes controversial because they could be interpreted as normalizing drug use and undermining a commitment to the fight against drugs. Many countries have begun shifting policy to make them possible, but their policy provision and practical availability, both globally and in ESA, are still extremely limited. This is not because they do not work.

There are aspects of drug policy costing that are still subject to a measure of dispute. However, evidence is by now unequivocal on various harm reduction measures' effectiveness at reducing the incidence and costs of communicable and other serious disease among PWUD, particularly PWID, and by extension their cost-effectiveness in terms of reducing public health expenditures.

These vary according to the nature of the practice. The evidence of the effectiveness of NSPs in reducing HIV spread among PWID was already compelling by the beginning of the 1990s.⁶⁴ In fact, NSPs are 'one of the most cost-effective public health interventions in existence', and NSP costs in such diverse contexts as Australia, Ukraine, Bangladesh and China have been found to be cost-effective.⁶⁵ OST is more expensive than NSP but there is also 'strong evidence' that OST is effective in reducing the risk of HIV acquisition among PWID – in one example it has been estimated to reduce the risk by 54%.⁶⁶ One United Kingdom study found that combined NSP and OST reduces the risk of acquiring HCV by up to 71%.⁶⁷ It is so well established that NSPs and OSPs reduce the risk of HCV acquisition that academic papers on the subject now take it as a given of what is already known about the subject.⁶⁸ One Slovakian study concluded that each euro invested in harm reduction generated benefits worth three euros.⁶⁹

Supposing that the rate of HIV prevalence among PWID in the region could be halved through adequate provision of harm reduction services, and that (as suggested in the previous section) the additional annual HIV treatment costs for PWID was about US\$14.5 million, the potential annual saving would be US\$12.7 million. This gives an indication of the amount of direct annual health expenditure in the region that could be directed elsewhere if harm reduction were adequately supported. This represents the potential saving for HIV only: the potential cost savings in healthcare when accounting for the reduced need for treatment of HCV, HCB and other secondary illnesses, as well as such incidents as overdoses and injection site injuries, are far greater.

Of the 11 countries surveyed in this report, in only three could data on the cost of harm reduction services be accessed. Geographic coverage remains limited, but Kenya offers NSP, OST antiretroviral therapy, sexual and reproductive health programmes for PWID, community distribution of naloxone, and a number of other services, with a total direct cost per client of harm reduction treatment estimated as US\$537 per year.⁷⁰ The annual OST cost for one injecting drug user in the Seychelles is US\$49.⁷¹ Mauritius spends about US\$77 000 per year on NSP, and US\$585 000 on drug substitution treatment.⁷²

These investments are miniscule in comparison to criminal justice system expenditures, but they are highly commendable. Harm reduction measures are arguably the most evidence-based tool for reducing drug-related harms and costs to government.

REHABILITATION COSTS

The final area of direct government drug-related expenditure considered in this paper is drug treatment, or what is commonly known as rehabilitation. This can combine both medical (pharmacological) and psychosocial interventions. Although there is good evidence of the effectiveness and large potential returns on investment in certain prevention programmes,⁷³ there is not, in fact, very good evidence of the effectiveness of most rehabilitation programmes.⁷⁴ Even so, the social costs associated with some dependent PWUD can be so enormous that even interventions with modest success rates can offer a positive return on investment.⁷⁵

There is almost no information on ESA drug treatment costs. By one estimate, only about 3% of those in the region who need such treatment are receiving it.⁷⁶ Public health access is very limited, while private facilities are beyond the means of the majority. Two private rehabilitation centres in Uganda charge between US\$400 and 550 per month.⁷⁷ In Mombasa, Kenya, the cheapest rehabilitation centre charges US\$150 per month and the most expensive is US\$1 000;⁷⁸ other programmes cost up to US\$3 000 for a three-month programme.⁷⁹ Lesotho has only one rehabilitation centre.⁸⁰

Cost effectiveness varies by treatment type. Incarceration as well as brief stabilization and detoxification approaches have frequently been shown to be highly ineffective, with typically much better outcomes seen in inpatient treatment of longer duration, in combination with continuing outpatient therapy.⁸¹ On the other hand, some of the best outcomes have been seen with community-based treatment, which uses a bio-psychosocial, primarily outpatient approach, including maintenance pharmacotherapy, coordinating a range of support services to meet patient needs, and strong aftercare and support for patients, their family and community.⁸² There is also evidence that inexpensive, brief interventions (for example consisting of conversation, information and counselling from a primary care provider) can be as effective for hazardous and harmful alcohol drinkers as longer treatment.⁸³ By contrast, there is very little evidence to support compulsory drug treatment, with for example one study in Vietnam finding conclusive evidence that compulsory detention was both less effective and two and a half times more costly than community-based voluntary methadone treatment.⁸⁴

CONCLUSION AND RECOMMENDATIONS

A significant proportion of criminal justice system resources is devoted to enforcing drug laws, even though most of that activity has little prospect of disrupting drug supply, and may even increase harms and costs in the longer term. Drug responses feature far less, and less directly, in health budgets. Yet there are major long-term costs associated with drug use under unsafe conditions, with unsafe equipment, by people who are socially marginalized and unable to access preventive and ongoing help and support from healthcare providers. Most countries have zero budgets for harm reduction measures, even though there is strong evidence for their effectiveness and cost-effectiveness.

There is as yet far too little data to conduct a rigorous cost-benefit analysis of drug policy alternatives in ESA. However, based on the best of what data is available, the analysis in this paper has made it possible to broadly describe some key factors that determine drug-related expenditures in criminal justice and health in ESA countries (see the points below).

- Drug-related arrests in two years in 10 countries: 447 000
- Proportion of drug arrests for use and/or possession (i.e. not trafficking): 89%
- Drug-related offences as proportion of all arrests: 7.5%
- Number of prisoners on drug-related offences: between 17 000 and 38 000
- Proportion of total prisoners on drug-related offences: between 5% and 11%
- Additional treatment costs from higher HIV prevalence among PWID: US\$14.5 million

Extrapolating further from these figures, the following rough and generalized estimations can be made about potential direct annual savings in the police, prison system and healthcare if the policy approach in ESA were shifted from one based on criminal justice to one based on healthcare and harm reduction.



Police: US\$680 million



Prisons: US\$112.8 to US\$248.1 million



Health (HIV only): US\$12.7 million

Total: US\$800 million to US\$940 million

Recommendations

More conclusive analysis will require far more data. On the face of what is available, however, there could be major gains to the fiscus and public health system – to say nothing of national well-being more broadly – if drug-related priorities were shifted and resources radically reallocated to follow the evidence of what actually works.

- Recognize that many costs are due to policy, not drugs themselves.
- Count the direct and indirect costs of the criminal justice policy response.
- Focus law enforcement expenditures on upstream activities and transnational trafficking networks that may have some prospect of disrupting supply.
- Prioritize health considerations and expenditure over criminal justice.
- Increase harm reduction expenditure.
- Develop necessary data systems to properly count the costs.

Notes

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- ² Botswana, Eswatini, Kenya, Lesotho, Malawi, Mauritius, Namibia, Seychelles, South Africa, Uganda and Zimbabwe.
- ³ Botswana: Ministry of Finance and Development Planning, 2019 Budget Speech; Eswatini: Government of The Kingdom of Swaziland; Kenya: The Independent Policing and Oversight Authority, Performance Report and National Treasury Budget Statement; Lesotho: Supt. Retšelisitsoe Bokopane, head of Diamonds and Drugs Unit, LMPS, Maseru, and Commissioner (CC) Chabana J. Majara; Malawi: Treasury Department in the Ministry of Finance; Mauritius: Rep. Of Maurit. Budget Speech, and Mauritius Prison Service, Budget data; Namibia: Ministry of Finance, Government accountability report; Seychelles: Budget Book; South Africa: Annual reports of the South African Police Service and Department of Correctional Services; Uganda: Ministry of Finance Planning and Economic Development; Zimbabwe: Ministry of Finance & Economic Development, and Parliament of Zimbabwe, National Assembly, Hansard No13 of 5 December 2019.
- ⁴ All currency conversions in this paper were made using the OANDA online service: www.oanda.com/currency-converter/en/.
- ⁵ Note that Botswana budget data referred only to the total across police and prisons, so for costs analysis it was assumed that its policing costs represented 80% of this total, which is the average proportion across the other countries.
- ⁶ Population estimates are for 2019, from World Bank, World Development Indicators, <https://databank.worldbank.org/indicator/SP.POP.TOTL/1ff4a498/Popular-Indicators#>.
- ⁷ GDP estimates are for 2019, from World Bank, World Development Indicators, <https://databank.worldbank.org/indicator/NY.GDP.MKTP.CD/1ff4a498/Popular-Indicators#>.
- ⁸ Data from the Urban-Brookings Tax Policy Center, www.taxpolicycenter.org/statistics/state-and-local-revenues-and-expenditures-capita-function.
- ⁹ Botswana: provided by Botswana Police Service's public relations officer, Dipheko Motube; Eswatini: provided by Ass. Supt Michael Dlamini REPS, HQ; Kenya: Kenya National Bureau of Statistics, Economic Survey 2020; Lesotho: Lesotho Bureau of Statistics, Crime statistics reports 2013 and 2019; Malawi: provided by National Police Service; Mauritius: Statistics Mauritius, Digest of Crime, Justice and security statistics; Namibia: provided by Deputy Commissioner Fabian Musweu, Namibia Drug Law Enforcement Unit commander; Seychelles: Anti-Narcotics Bureau, annual reports; South Africa: South African Police Service, annual crime statistics reports; Uganda: Uganda Police Force, annual crime reports.
- ¹⁰ In Kenya, for example, the data on total drug-related incidents obtained referred to charges before magistrates' courts, rather than arrests by the police. In Lesotho, law enforcement sources appeared to find the term 'arrest' ambiguous, as depending on context, it could refer to bringing in for questioning, bringing in for detention or arresting for trial, fine, or diversion. As such, for Lesotho it is the total reported cases indicated in the table. In some countries, there appeared to be no distinction between number of cases and number of arrests. In others, these figures were distinct, but typically roughly equivalent. This is because, whereas most other crime types, such as theft, are reported to the police by victims, drug-related crimes are 'victimless'. There is no incentive for most parties to a drug-related crime to report this to the police. They come to be recorded because police seek them out and find a perpetrator. A large proportion of victim-reported theft cases will never result in a perpetrator being identified and arrested. However, the police recognition of a drug-related crime is usually concurrent with an arrest.
- ¹¹ Uganda Police, Annual crime report 2020, www.upf.go.ug/wp-content/uploads/2021/04/ANNUAL-CRIME-REPORT-2020-1.pdf?x74136.
- ¹² Figures provided by Assistant Superintendent Michael Dlamini, Royal Eswatini Police Service, Anti-Narcotics Unit, Police Headquarters, Mbabane, 2020.
- ¹³ Interview with Deputy Commissioner Fabian Musweu, Namibia Drug Law enforcement Unit commander, 2021.
- ¹⁴ Global Commission on Drug Policy, Enforcement of drug laws: Refocusing on organized crime elites, 2020, http://files.server.idpc.net/library/GCDP_report_2020.pdf.
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- ²⁰ Interview with Seychelles Anti-Narcotics Bureau officer, 2021.
- ²¹ Government of Kenya, 2020/2021 supplementary estimates.
- ²² Interview with Sg. Tšepo Nkebenyana, Diamonds and Narcotic Unit, LMPS, 2021.
- ²³ Interview with Cons. Telamsile Dlamini of RESP, Manzini Region, 2021.
- ²⁴ Interview with retired Zimbabwe Republic Police officer, 2021.
- ²⁵ Interview with Malawi National Police Authority, 2014.
- ²⁶ Note that the Zimbabwe total of 20 000 prisoners is an interview estimate. Note also that total imprisonment figures may not offer a good representation of per person costs, because they do not indicate turnover.
- ²⁷ This is consistent with another source, which estimated the South African annual spend per prisoner as 163 155 South African rands, which is about US\$10 800, see <https://acjr.org.za/events/review-of-south-africas-correctional-services-annual-report-2019-2021>. The country analyses show that South Africa has among the higher spends per prisoner, although the highest was Seychelles, with an average annual spend per prisoner of about US\$14 700.
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- ³⁰ Lesotho Bureau of Statistics, 2015, Lesotho Correctional Service Statistics Report.
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- ³⁷ Interview with Leshoboro Mokhameleli, M&E officer, PACT Global Lesotho Linkages Programme (key populations), 2021.
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The ESACD is funded by
the European Union

The Eastern & Southern Africa Commission on Drugs

Global Initiative Against Transnational Organized Crime

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