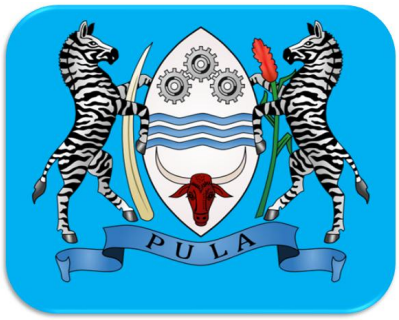

Government of Botswana
National AIDS and Health Promotion Agency

BOTSWANA

NATIONAL AIDS SPENDING ASSESSMENT

As part of the Harmonized SHA-NASA

2018/19 – 2019/2020

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Abbreviations

ABYM	Adolescent Boys and Young Men
ACS	African Collaborative for Health Financing Solutions
AIDS	Acquired Immune Deficiency Syndrome
ART	Anti-Retroviral Therapy
AGYW	Adolescent Girls and Yong People
AYP	Adolescents and Yong People
CMS	Central Medical Stores
CBO	Community Based Organization
eMTCT	Elimination of Mother to Child Transmission of HIV
ER	Expenditure Reporting (PEPFAR's data)
GABS	Government Accounting and Budgetary System
GDP	Gross domestic product
GoB	Government of Botswana
PMTCT	Prevention of Mother to Child Transmission of HIV
DREAMS	Determined, Resilient, Empowered, AIDS Free, Mentored, Safe
DHMT	District Health Management Team
EID	Early Infant Diagnosis
FBO	Faith Based Organizations
FP	Family Planning
GPC	Global Prevention Coalition
GFATM	Global Fund to Fight AIDS, TB, and Malaria
Global Fund	Global Fund to Fight AIDS, TB, and Malaria
GoB	Government of Botswana
HABSP	HIV & AIDS Basic Services Package
HBC	Home Based Care
HCW	Health Care Worker
HIV	Human Immuno-deficiency Virus
HTC	HIV Testing and Counseling
INH	Isoniazid (TB preventive therapy)
IEC	Information Education and Communication
IP	Implementing partner
MAS	Medical Aid Schemes
MLGRD	Ministry of Local Government and Rural Development
MoHW	Ministry of Health & Wellness
MSM	Men who are having sex with other men.
NAHPA	National AIDS and Health Promotion Agency
NGO	Non-Governmental Organization
NHLS	National Health Laboratory Services
NSF III	National Strategic Framework III
OIs	Opportunistic Infections
OOP	Out-of-pocket payments
PLHIV	People Living with HIV
PMTCT	Prevention of Mother to Child Transmission of HIV
PPCSD	Program Planning, Coordination and Support Division (NAHPA)
PR	Principal Recipient
RTT	Resource Tracking Tool
RTTWG	Resource Tracking Technical Working Group
SDG	Sustainable Development Goal
UHC	Universal Health Coverage
USD	United States dollar
USG	United States Government
VMMC	Voluntary Medical Male Circumcision

Foreword

The National AIDS Spending Assessment (NASA) is an all-inclusive approach to track the flow of resources for the national HIV and AIDS response from the financing source through the different agents/proxies to the beneficiaries/recipients. The NASA resource tracking approach is designed (as a key HIV tracking framework without replacing other approaches and instruments already in use) to describe financial flows and expenditures using the same categories in the global resource needs estimation. It is based on globally accepted standardized methods and definitions, that are compatible with, but broader (also tracks non-health HIV/AIDS spending) and more disaggregated than, the System of Health Accounts (SHA), originally known as National Health Accounts (NHA). NASA generates useful evidence to assist with the comprehensive planning and financing of the HIV response including all the necessary services and can be used to gauge the impending financial gap and accordingly to mobilize for supplementary resources. Thus, it is a formidable tool for policy makers and other stakeholders involved in the national HIV and AIDS response, and provides informative insights on the extent of coordination and alignment of the overall resource envelope to the programmatic priorities. This is extremely important, particularly in a transitioning country - where current and/or future partner HIV funding is dwindling and/or endangered by competing global and national priorities, including the potential national economic down turn, despite high expectations to achieve more.

The NASA scope covers both health expenditures for HIV as well as non-health expenditures such as justice, labour, social mitigation, education and other segments associated with the multisectoral HIV response. Its categories of classifications are similar to those of SHA, as in financing, production and consumption of HIV services; though with diverse and pronounced disaggregation of the HIV services (AIDS Spending Categories), as well as of the HIV service providers, in order to adequately capture all the non-health actors in the multisectoral response.

From 2003/04 to 2011/12, the country conducted a NASA every three years. Post the 2011/12 NASA, the country resolved to end the NASA approach and support the National Health Accounts (NHA) system, which was believed to be comprehensive enough on overall health, while also adequate to facilitate the HIV and AIDS response in all dimensions. However, the SHA (both 1 and 11) proved to be incapable to meet all the HIV and AIDS component expectations, as were initially met through NASA. This resulted in a reporting gap, which was addressed through a supplementary exercise in 2019, which tracked and analysed HIV and AIDS investments over the period 2012/13 to 2017/18.

In pursuit of optimal investment returns and/or efficiency gains amid limited resources and competing national priorities, the country, in 2019, resolved to harmonise some of the SHA with the NASA processes to comprehensively track investment in the health sector and, particularly drive HIV and AIDS' evidence-based policy making, targeted programmatic planning and prudent resource allocation, including adequate reporting at global level (using Global AIDS Monitoring (GAM) tool 8.1) for continual health and HIV and AIDS response progress as well as comparisons with other countries worldwide. The harmonised SHA-NASA approach systematically measures the flow and magnitude of broader health and HIV and AIDS specific funds in Botswana's health care system, as well as non-health HIV/AIDS funds. The harmonized approach does not only reduce operational costs to achieve the two-pronged output result (SHA and NASA reports), but also augments and enriches the two components for comprehensiveness and adequate/detailed reporting in accordance with the respective standardised global reporting templates.

This report focuses on the NASA component and specifically provides the most recent analysis of HIV and AIDS expenditure patterns thereby generating evidence on the country's HIV and AIDS financing arrangement to better inform policy making, customized programming and prudent allocation and utilization of the limited national resources in the HIV and AIDS response with the aim to achieve the desired epidemic control, end AIDS as a public health threat by 2030 and ultimately attain Universal Health Coverage (UHC).

The SHA-NASA approach is to be institutionalized as a routine health and HIV and AIDS expenditure tracking exercise in Botswana, availing continual, well-timed information on the investments and drive evidence-based financing decision making, including performance tracking on key indicators such as the UNAIDS 2020 fast-track targets, the Abuja target, the Sustainable Development Goal (SDG) target 3.8 and the GAM reporting in general.

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The displayed patience, commitment and professionalism among all contributors cannot be overemphasized as demonstrated by the product quality, achieved with their invaluable contribution.

Executive Summary

Botswana has the world's third highest HIV prevalence after Eswatini and Lesotho[1]. HIV prevalence for adults aged 15 to 49 years was estimated at 19.9% in 2020, with women continuing to bear the biggest burden at 24.8% compared to men at 15.2%. There were an estimated 370,000 people living with HIV in 2020, with 320,000 on ART in 2020[2]. Botswana is one of the countries that have met the 90-90-90 HIV testing and treatment cascade targets set by UNAIDS for the year 2020, when 91% of people living with HIV knew their status, of which 95% were on ART and more than 98% of those on ART were virally suppressed (91-95->98)[3].

Classified by the World Bank as an upper middle-income country, Botswana's HIV response is mainly financed through public resources. Mining is a major contributor to the Government of Botswana's (GoB) budget. In the fiscal year 2019/20, revenues from mining contributed 26.8% to the government revenues of BWP54,299.9 million, down from the 39.2% of BWP57,398.4 in 2016/17[4.] Since 2011/12, Botswana has been spending between 11% and 12% of the government budget on health (BWP8.09 billion in 2019/20) and about 1% of the country's gross domestic product (GDP) on HIV[i].

This report present findings on the National AIDS Spending Assessment (NASA) for the years 2018/19 and 2019/20, applying the NASA 2020 methodology developed by UNAIDS. Based on the Namibian lessons and tools, Botswana stakeholders agreed to a joint data collection for NASA and Systems of Health Accounts (SHA). The SHA is an internationally recognized methodology used to track expenditures in a health system for a specified period of time. The assessment was therefore conducted through a collaboration between the Ministry of Health and Wellness (MoHW) and the National AIDS and Health Promotion Agency (NAHPA). The harmonization of expenditure tracking was done as far as data collection, capturing, cleaning and verification. The analysis and presentation of the data were done separately; with the MoHW responsible for the SHA and NAHPA responsible for the NASA.

Initially 366 entities were sampled for data collection, including public ministries and departments, international partners and donors, NGOs, profit making private business and parastatals, Medical Aid Schemes and training/research institutions. After accounting for duplications and entities that were no longer operating in Botswana, the sample reduced to 345. Of these, 254 were private profit-making businesses and parastatals that in the past, NASAs have reportedly contributed less than 5% of HIV spending, and their response rate was very poor with data received from only 7% of these entities. From the remaining entities, which included all the largest funders and services providers such as the Government of Botswana (GOB), PEPFAR and Global Fund, 84% of the data was received.

COVID-19 severely hampered data collection efforts and face-to-face interviews were limited. This resulted in a poor response rate from the private for-profit entities and Medical Aids Schemes (MAS). Implementing the harmonized approach to data collection faced some challenges. Data collectors / research assistants were new to both the NASA and SHA approaches and thus obtaining a comprehensive understanding of both in just one week of training was challenging. This sometimes

[i] Calculated from Bank of Botswana Financial Statistics Report of October 2021

resulted in respondents being asked to recomplete the data collection tools, or answer subsequent questions of clarification from the data supervisors, and this slowed down the NASA progress. At the time of writing, there had been no estimation and allocation to the NASA totals of MoHW's 'shared' or embedded costs of service delivery covered by the general health budgets, such as shared personnel for HIV and other health services. These MoHW costs will be estimated by the SHA process and added to the NASA HIV totals. As in the previous NASAs, out of pocket (OOP) payments were not included in the scope for this NASA. Given that HIV treatment is provided free to people living with HIV (PLHIV) in Botswana, except for those opting to use private MAS, the missing OOP should be immaterial to the reported spending.

This NASA found that spending on Botswana's national response to HIV was at BWP1.505 billion (USD 144.3 million) in 2018/19 and BWP1.770 in 2019/20 (USD 162.7 million), an increase of 18% between the two years. Public financing entities contributed the majority, and increasing (59% and 61%), of financial resources followed by international entities.

Financing Entities (BWP)	**BWP 2018/19**	**BWP 2019/20**	**% 2018/19**	**% 2019/20**
Public FE	888,097,963	1,072,803,826	59%	61%
Private Funding Entity	29,497,287	33,903,468	2%	2%
International Funding Entities	586,933,556	663,491,165	39%	37%
Total	**1,504,528,806**	**1,770,198,459**	**100%**	**100%**

* NB. Some public financing for the MOH **shared operational** costs (not a relatively large amount) attributable to HIV services are still to be estimated by the SHA team and inserted here.

These resources were mainly channeled through the public financing agents and purchasers (FAPs) (62% in both years). The international FAPs managed 30% and 31% in 2018/19 and 2019/20 respectively, with the remaining balance managed by private FAPs. In terms of service provision, 61% and 62% of 2018/19 and 2019/20, respectively, was spent through public sector providers. PEPFAR's non-governmental implementers spent 30% and 31% in 2018/19 and 2019/20 respectively. Non-profit (NGOs) spent 7% of 2018/19 and 6% of 2019/20, respectively, with private for-profit service providers accounting for 2% of spending in each year.

The table below summarises spending by HIV programme area. Care and treatment accounted for most of the spending during the assessment period (44% and 49%), followed by social protection and economic support (20% and 18%) and prevention, taking 12% of spending in 2018/19 and 11% in 2019/20, which was below the target rate of 25% by the Global Preventing Coalition[ii].

HIV Programme Area	**2018/19 BWP**	**2019/20 BWP**	**% 2018/19**	**% 2019/20**	**% Change**
Prevention	186,434,355	197,136,445	12%	11%	6%
HTC	79,546,680	79,063,834	5%	4%	-1%
Care and treatment	664,916,305	865,936,747	44%	49%	30%

[ii] The Global HIV Prevention Coalition, formed in 2017, aims to strengthen and sustain political commitment for primary prevention by setting a common agenda among key policy makers, funders, and programme implementers.

Social protection & economic support	297,976,719	311,943,396	20%	18%	5%
Social enablers	9,452,807	5,033,980	0.63%	0.3%	-47%
Programme enablers & system strengthening	262,601,947	288,495,065	17%	16%	10%
Development synergies	246,200	-	0.0%	0.0%	-100%
Research	3,353,792	22,588,992	0.2%	1.3%	574%
Total (BWP)	**1,504,528,806**	**1,770,198,459**	**100%**	**100%**	**18%**

* NB. Some public financing for the MOH shared costs attributable to HIV services are still to be estimated by the SHA team and inserted under the treatment and care programme area.

Over the two-year assessment period, PLHIV benefitted the most from HIV spending, accounting for 47% of spending, on average. Vulnerable and accessible populations, accounted for 24.6% of spending, mainly made up of spending on orphans and vulnerable children (18.5%). Included in vulnerable and accessible populations are adolescent girls and you women (AGYW), who accounted for 2.87% of spending. Interventions that are not targeted, like HIV related research, development synergies, programme enablers and health systems strengthening accounted for 18% of spending. Spending on key populations accounted for 1.22% on average, having declined from 1.5% in 2018/19 to 1% in 2019/20.

To determine if the amounts spent on HIV in Botswana were adequate to meet the national strategic objectives and targets, the NASA findings for each study year could be compared with the estimated resources needed for the matching years in the National Strategic Framework (NSF). NASA covered 2018/19 which was in the previous NSF period, and 2019/20 which is covered in the current NSF (2019-2023). Since the cost estimates for the national operational plan (NOP) were not available at the time of writing, the NASA findings for 2019/20 were compared with the estimated costs of the HIV/AIDS Basic Service Package (HABSP[iii]) for 2020 (which was the base/actual year of the costing before the dramatic scale-up of targets in the HABSP, therefore somewhat comparable). Care and treatment reflected the biggest gap, with spending in 2019/20 of BWP 164 million less than anticipated as needed in 2020, which can be mostly explained by the fact that NASA had not yet been able to capture the MoHW's expenditure on shared personnel and overhead costs for the HIV treatment services in the health facilities – which will be estimated for the SHA and will be added to the NASA HIV expenditure.

A simple measure of value for money (VfM) was determined by calculating the spending per output or person reached – units of expenditure broken into production factors and compared with the HABSP unit cost (to explore their main cost drivers). This was only done for interventions with discrete outputs that could be directly attributed to specific expenditures, such as ART, VMMC, HTC, AGYW, PrEP and so on – where performance targets were available for the NASA study years. These calculations show that some economies of scale were reached in the AGYW programme, while diseconomies were evidenced in VMMC and HTC programmes. The ART programme, given its largest share of overall HIV spending in Botswana, could realise greater savings through reduced ARV and laboratory prices – further analysis of the spending per ARV regimen per patient compared with regional procurement prices might indicate areas for potential action. For the ART program, the ARV drugs and laboratory monitoring unit costs when compared with those from there SADC countries

[iiiii] NAHPA 2021. HIV/AIDS Basic Service Package, Costs Estimates and Funding Landscape. V12, September 2021.

(Zambia, South Africa and Mozambique) proved to be the highest, highlighting again possible diseconomies of scale and the potential for reduced prices through pooled procurement mechanisms.

Key recommendations:

- To improve the representation of the total GoB contribution, the MoHW shared personnel and operational costs attributable to HIV services should be estimated by the SHA, with updated distribution keys and agreement on the assumptions applied.
- Undertaking activity-based costing (ABC) studies would assist with providing insight into the share of human resource time and costs per HIV activity.
- To improve the inclusion of the private sector contributions, NAHPA should design a system to more routinely and comprehensively collect their HIV expenditures, possibly with mandated annual reporting requirements.
- SHA should collect or estimate the out-of-pocket payments and allocate the HIV-related OOP.
- Although prevention spending increased by 6% between the two study years, the proportional amount of total HIV spending for prevention decreased from 12% to 11%, and would need concerted commitments to increase it to 25% of total HIV spending (especially with treatment costs continuing to rise).
- Key prevention interventions were mainly donor funded and therefore face greater sustainability uncertainty if donors reduce their support – therefore public funds for prevention should be increased and directed towards the high impact prevention interventions (the Five Pillars of Prevention).
- Spending on condoms, AGYW and VMMC (with demand creation) needs to be increased to match the NSF resource needs and prioritisation.
- Regarding its ART programme, Botswana could realise greater efficiencies especially in the ARV and laboratory price - further analysis of the spending per ARV regimen per patient compared with regional procurement prices might indicate areas for potential action.
- Further efficiency gains might be achieved through the expansion of differentiated service delivery modalities.
- Increased joint planning to determine where to direct public and donor funds could minimize duplication of funding and parallel planning processes, with consideration of improving the sustainability of key interventions.

1. Introduction and Background

This report presents the findings of the Botswana National AIDS Spending Assessment (NASA) for the years 2018/19 and 2019/20. It will supplement the pending National Health Accounts (NHA) report. The economic situation and health spending are described briefly, followed by the HIV situation in Botswana and the country's response. Thereafter, an overview of the NASA approach, data collected, study limitations and assumptions applied, is provided, before presenting the NASA findings in detail.

1.1. Botswana's Economic Situation

At constant 2016 prices, Botswana's gross domestic product (GDP) in 2020 was BWP167.58 billion from BWP164.42 in 2016[5]. The main contributors to GDP are trade, hotels & restaurants and mining industries. Their contributions stood at 19.7% and 15.2% respectively in 2020. Real GDP increased by 3% in 2019 from 4.5% in 2018[6]. It then contracted by 7.9% in 2020, due to a decline in both the mining and non-mining sectors, mainly resulting from the impact of the strict COVID-19 pandemic containment measures[7]. In the fiscal year 2019/20, revenues from mining contributed 26.8% to the government revenues of BWP54,299.9 million, down from the 39.2% of BWP57,398.4 in 2016/17[8].

There are indications that the economy is on the rebound in 2021, with real GDP growing by 4.9 percent in the twelve months to June 2021, compared to a contraction of 5.1 percent in the corresponding period in 2020[9]. At constant 2010 USD prices, GDP per capita in 2020 was USD8,093. The 2019/20 budget deficit was 5.6% of GDP and is projected to be 11.61% in 2020/21 and 2.87% in 2021/22 per the Minister of Finance and Economic Development 2021/22 budget speech[10].

Unemployment in the country remains high at 24% in 2020[11]. Even though poverty and inequity have decreased over the years, these are still considered high. The national headcount poverty was estimated at 16.3% in 2015/16, compared to 19.3% in 2009/10. The proportion of the population living in extreme poverty (below $1.90 a day) also decreased from 6.4% to 5.8% over the same period[12]. It is expected that given the recent economic contraction and job losses from the impact of the COVID-19 containment measures, unemployment, poverty and inequity will have slightly increased.

1.2. Health and HIV Spending

The Government of Botswana (GoB) spent 12% of its recurrent budget on health in 2011/12. This increased to 15% in in 2015/16 and has remained at that level to 2019/20 (BWP8.09 billion). From the development budget, 9.3% was spent on health in 2011/12, and 2,5% in 2019/20. As a percentage of the overall GoB budget, spending on health increased slightly from 11% between 2011/12 and 2016/17 to 12% between 2017/18 and 2019/20[13]. Spending on HIV was 1% of GDP in 2018/19 and 2019/20[iv]. In the period 2012/13 to 2017/18, the GoB is estimated to have financed at least 64% of the total HIV response, with the rest coming from international partners and private businesses[14].

1.3. HIV situation and overview of response

Botswana has the third highest global HIV prevalence after Eswatini and Lesotho[15]. HIV prevalence for adults aged 15 to 49 years was estimated at 19.9% in 2020, with women continuing to bear the biggest

[iv] Calculated by authors of this report, based on figures from the BoB Financial Statistics report of Oct 2021.

burden at 24.8% compared to men at 15.2%. HIV prevalence among young women (aged 15-24) was 8.8% in 2020, while among young men it was 4.2%[16].

The country has made huge strides in providing care and treatment to people living with HIV (PLHIV). There were an estimated 370,000 PLHIV in 2020, with 320,000 (86.5%) on ART in 2020[17]. Botswana is one of the countries that have met the 90-90-90 HIV testing and treatment cascade targets set by UNAIDS for the year 2020. As at 2020, 91% of people living with HIV knew their status, of which 95% were on ART and more than 98% of those on ART were virally suppressed (91-95->98). This translates to 85% of people living with HIV having a suppressed viral load[18] .

HIV prevalence in Botswana varies considerably between districts, ranging from 13.3% in Hukuntsi to 33.4% in Mahalapye district in 2017[19]. Key populations, while representing a small proportion of the country's population, are particularly affected by the epidemic. In 2018, female sex workers (FSW) had an estimated HIV prevalence of 42% and gay men and other men who have sex with men (MSM) a prevalence of 14.8%[20]. In 2016, FSW and MSM were estimated to account for 8.3% and 2.2% respectively of new infections[19]. These groups and other key and vulnerable populations (KVPs), like adolescent girls and young women, face social and structural barriers in accessing HIV services[21].

Botswana became the first high-HIV-burden country to be certified for achieving an important milestone on the path to eliminating mother-to-child transmission (eMTCT) of HIV by the World Health Organization (WHO), having brought the mother-to-child HIV transmission rate to under 5%[22].

There are concerns that efforts to prevent new infections have been less successful in recent years. After a decade of declining HIV incidence until 2010, the number of people newly infected with HIV is estimated to have increased again by an average of 4% each year between 2010 and 2017, with adolescents and young people, particularly young women, accounting for more than a third of new infections[23].

The goals of the Third National HIV Strategic Framework (NSF-III) 2019-2023 are; zero new HIV infections, zero AIDS related deaths and zero discrimination by 2030. The NSF-III acknowledges that the pandemic has shifted from being generalized throughout Botswana to a series of micro-epidemics affecting different populations in different ways. It places a greater focus on key and vulnerable populations (KVPs) and proposes locally tailored interventions for the most affected districts. KVPs prioritised in the framework include: adolescent girls and young women aged 10-24 years; adolescent boys (10-19 years) and men (20-24 years and 25 years and older); young women 25-49 years including pregnant women; and key populations, particularly FSW and MSM.

1.4. Botswana's Harmonised NASA/SHA

The last NASA undertaken in Botswana was for the years 2009/10 to 2011/12, led by the then National AIDS Coordinating Agency (NACA), now called NAHPA, with support from UNAIDS. Additionally, the country has adopted the System of Health Accounts (SHA) framework, previously called National Health Accounts (NHA), to track the country's health spending, and has undertaken several years of assessment, led by the Ministry of Health and Wellness (MoHW) with the support of the World Health Organization (WHO) and the USAID funded Health Financing and Governance (HFG) project.

In previous years, conducting separate health accounts using the SHA framework and NASA has proven duplicative and costly. The MoHW and NAHPA agreed the adoption of a pragmatic, harmonized and institutionalized approach to routinely estimate broader health and HIV/AIDS spending. For the years in which NASAs were not conducted, there were expectations that the health

accounts would provide HIV/AIDS spending through their Disease Specific expenditure analysis. However, it has been noted that the health accounts (HA) reports did not provide the detailed HIV spending, to include health and non-health interventions, according to the programmatic categories that matched the NASA framework and/or priorities outlined in the National AIDS Strategic Framework (NSF). This made it difficult to review the country's progress towards the NSF targets, to measure the financial gap (and mobilize resources appropriately) for specific interventions, and to report to Global AIDS Monitoring (GAM).

In light of these challenges, the GoB requested USAID support, through the African Collaborative for Health Financing Solutions (ACS) project (implemented by a consortium led by Results for Development), to assist with the institutionalization of health and HIV/AIDS expenditure tracking processes in Botswana. Institutionalization of resource tracking should enhance development of strong and sustained processes and capacities for producing SHA/NASA data on a routine basis, which should allow the GoB to identify potential inefficiencies in the allocation and use of domestic resources for the broader health and HIV/AIDS response.

In 2019, ACS provided technical guidance to the GoB (MoHW, NAPHA and the Resource Tracking Technical Working Group- RTTWG) to consider the harmonization options for the NASA and SHA processes. Specifically, ACS facilitated discussions and consensus building on harmonization aspects (with focus on joint data collection tools) between the GoB (NAHPA & MoHW), UNAIDS, WHO, as well as the multi-stakeholder RTTWG. ACS also provided capacity building for the RTTWG in the NASA methodology (as most members were more conversant with the SHA methodology), highlighting the distinction between SHA and NASA, and the need to adjust the SHA data collection tools to ensure they comprehensively cover HIV/AIDS specific categories such as providers of services, AIDS spending categories and beneficiary populations, while also honoring the NASA transaction principle. This work built on Namibia's efforts for joint SHA/NASA data collection tools which was also supported through the ACS project.

The RTTWG discussed (with ACS facilitation, June 13, 2019) and agreed that:

- The harmonization of expenditure tracking would only be done as far as data collection, capturing, cleaning and verification.
- The joint data collection tools or questionnaires were to be based on the SHA tools, which would be adapted to also collect HIV data (health and non-health), with adequate disaggregation and using the NASA classifications (not using SHA classifications and then attempting to crosswalk them to NASA, as this did not work in the previous attempt).
- The jointly cleaned dataset was then to be imported into the NASA Resource Tracking Tool (RTT) by NAPHA (for the HIV data), while MoHW would import the health data into the SHA Health Accounts Production tool (HAPT).
- The analysis and presentation of the data was to be done as follows:
    1. MoHW was to take responsibility for the SHA analysis, presentation, validation and SHA report preparation, committing adequate personnel for these functions.
    2. NAHPA was to take responsibility for the NASA analysis, presentation, validation and NASA report preparation, committing adequate personnel for these functions. UNAIDS also funded two NASA experts to support the NASA aspects.

The rest of this report presents the HIV findings within the SHA/NASA process, to which the NASA methodology was applied, detailed in the next section.

2. The National AIDS Spending Assessment in Botswana

The NASA methodology (developed by UNAIDS and enhanced through implementation globally for over a decade and most recently updated in 2020), seeks to ascertain the funding flows used to finance national responses to HIV. NASA tracks financial transactions from their origin to the beneficiaries[v]. NASA tracks both health-related resources for HIV and non-health resources (such as social mitigation, education, labour, justice, and other sectors involved in the multisectoral HIV response), which enables the capturing of all the non-health actors and reflects the multisectoral HIV response. The data generated by the NASA methodology can quantify the volume and adequacy of funds by comparing the expenditures with estimates of the resources needed for the HIV response, and are also useful for programmatic decision-making, prioritization, and resource allocation.

2.1. Objectives and scope of the NASA in Botswana

The primary objective of this assessment was to collect, collate and analyse all HIV expenditure data in Botswana for financial years 2018/19 and 2019/20[vi], applying the NASA 2020 methodology developed by UNAIDS, as part of the harmonized SHA/NASA process. Based on the Namibian lessons and tools, Botswana stakeholders agreed to a joint data collection for NASA and Systems of Health Accounts (SHA). The SHA is an internationally recognized methodology used to track expenditures in a health system for a specified period of time. The assessment was therefore conducted through a collaboration between the Ministry of Health and Wellness (MoHW) and the National AIDS and Health Promotion Agency (NAHPA).

Specific objectives:

The specific objectives of the NASA assessment were:

- To implement a methodology for systematic monitoring of HIV financial flows at national level using the full NASA methodology in Botswana.
- To implement and/or pilot the Botswana harmonized SHA-NASA data collection methodology
- To adapt the full NASA methodology, classification and tools to the Botswana context.
- To build national level capacity for systematic monitoring of HIV and AIDS financing flows using the full NASA methodology, with a view to a yearly, fully-institutionalized NASA.
- To conduct an HIV spending assessment focusing on public and development partner (external) resources, and including private (both for-profit and not-for-profit) entities known to be contributing to HIV activities in Botswana.
- To identify and measure the flow of resources for HIV by the funding entity *(FE),* financing agent-purchaser *(FAP)*, service provider *(PS),* the service delivery modality *(SDM),* function/ intervention *(ASC)* and beneficiary populations *(BP)*.
- To prepare a report of national expenditure trends that will contribute to among others the global reporting, routine evidence-based policy making and planning towards targeted interventions, financial gap analysis towards resource mobilization, allocative efficiency and overall NSF progress tracking. Thereby ensuring continuity and sustenance of the response through comprehensive, impactful and efficient allocation of limited resources, including synergies between interventions.

[v] Joint United Nations Programme on HIV/AIDS (UNAIDS) 2009, National AIDS Spending Assessment (NASA): Classification and Definitions.

[vi] The Botswana financial year: 1 April to 31 March.

- To guide and support the institutionalization of the harmonized SHA-NASA tracking approach, for effective functionality and sustainability.

2.2. NASA methodology and classifications

The Botswana NASA fully applied the new NASA 2020 framework and tools in order to track HIV expenditures in a comprehensive and systematic manner to determine the flow of resources intended for the multisectoral response to HIV. The following sections provide greater details on the various aspects on the NASA component of the SHA/NASA process.

2.2.1. NASA Classifications

Importantly, the joint SHA/NASA collected data in the required format and detail to allow the full application of the latest NASA 2020 guidelines, vectors and classifications. According to the NASA 2020 framework, the financial flows and expenditure related to the national response to HIV and AIDS are grouped into three dimensions: finance, provision, and use. Each of these dimensions is broken down to give a total of nine vectors that were applied in this assessment, as follows:

***Financing vectors**:*

i. Financing entities (FE) refers to economic units providing the resources to the schemes.
ii. Financing revenues (REV) are mechanisms to provide resources to financing schemes.
iii. Financing schemes (SCH) are modalities through which the population accesses the services.
iv. Financing agents & purchasers (FAP) are economic units that operate the schemes. They collect revenue, pool financial resources, take programmatic decisions (allocation and purchase modalities), and pay for service provision.

Provision vectors:

i. Providers of services (PS) are entities that engage in the production, provision, and delivery of HIV services.
ii. Production factors (PF) are inputs/resources (labour, capital, natural resources, "know-how," and entrepreneurial resources) used to produce interventions and activities.

Use / consumption vectors:

i. AIDS spending categories (ASC) are HIV-related interventions and activities.
ii. Beneficiary population (BP) are populations intended to benefit from specific activities (e.g., key population groups such as men who have sex with men [MSM], female sex workers [FSW], etc.).
iii. Service delivery modality (SDM) – is a new classification created by UNAIDS to add the option of analysing programs disaggregated by models of service provision in terms of efficiency and effectiveness.

This NASA assessment provides answers to the following questions regarding past HIV expenditure:

- ✓ Who paid for HIV services in Botswana?
- ✓ What mechanisms were in place to provide resources to financing schemes?
- ✓ What were the modalities through which populations accessed services?
- ✓ Who pooled funds and purchased HIV services?
- ✓ Who were the providers of HIV services?

- ✓ What HIV services were provided, what was spent on them, and what service delivery modes were being used?
- ✓ Who were the beneficiaries of HIV spending?
- ✓ What were the key cost drivers (production factors) of HIV spending?

Additional questions answered in this assessment include:

- ✓ Was past HIV expenditure adequate to meet the NSF resource needs?
- ✓ Were the NSF priority interventions prioritized in the spending (allocative efficiency)?
- ✓ Were there areas of efficiency gains or potential savings in past spending – was there value for money (VfM)?

2.3. NASA Implementation

The following were the phases in the implementation of the NASA in Botswana:

1. Capacity building of RTTWG and development of harmonized SHA/NASA data collection tools with technical assistance of ACS
2. Identification and sampling of health and HIV/AIDS stakeholders for data collection
3. Setting up of a NASA/SHA Task team to oversee the collection and analysis of data.
4. Sampling of stakeholders for data collection
5. Recruitment of a local consultant for the NASA
6. Recruitment and training of data collectors
7. Data collection
8. Quality control and data cleaning, capturing and validation
9. Data analysis and report writing.

Sampling

The RTTWG led the sampling of organisations for data collection. Data from the main funding sources, i.e., GoB, Presidential Emergency Plan for AIDS Relief (PEPFAR) and Global Fund, were collected at source. GoB data was was extracted from electronic sources such as Government Budgeting and Accounting System (GABS) and Statistics Botswana databases for previous relevant surveys. PEPFAR Expenditure Reporting (ER) dataset was obtained with the assistance of the USAID office in Botswana and also from the Panorama website, and Global Fund data were obtained from the Principal Recipients' (PRs) annual financial reports to Global Fund. Data collection from other organisations was intended to identify funding outside the three main funding sources. In addition, because the GABS does not always allow for the detailed data disaggregation required for the NASA, organisations receiving government funding were requested to provide more detailed breakdowns of their expenditure.

Initially 366 entities were sampled. After correcting for duplications and removing those no longer operating organisations, the sample reduced to 345 entities as shown in table 1 below. Duplications resulted from sampling the head office and satellite offices of the same NGOs and sampling a division/business unit of the same company (Table 1).

NASA Task Team

A NASA Task Team comprising of representatives from NAHPA, MoHW, UNAIDS, ACS project and the local and external consultants was put together to oversee collection and analysis of data. The team met virtually every two weeks to discuss progress, share experiences and resolve challenges.

Table 1: Organisations sampled

ENTITY TYPE	Original Sample Size	Re-allocations	Duplications	No longer Operating in Botswana	Revised Sample Size
Government entities	9	-	-	-	9
Medical Aid Schemes	5	-	-	-	5
Development Partners /Donors (including PEPFAR and GFATM)	15	-	-	(2)	13
NGOs	68	(2)	(4)	(6)	56
Parastatals	49	-	-	-	49
Private for-pprofit Companies	205	-	-	-	205
Training/Research Institutions	15	2	(8)	(1)	8
	366	**-**	**(12)**	**(9)**	**345**

Data Collectors/ Research Assistants

Thirteen (13) data collectors that were recruited underwent a week's training on the NASA and SHA frameworks and on the harmonised data collection tools or questionnaires, including a practice session the following week in conducting virtual interviews. The data collectors were split into four teams, each supervised by a member of the NASA/SHA Task Team and each team concentrating on specific types of entities.

Data Collection

The approach to data collection was both top-down and bottom-up. The top-down approach involved collecting data from the three main funding sources (GoB, PEPFAR, Global Fund). The bottom-up approach involved collecting detailed data from the service providers and linking this back to the source of funding through financing agents and purchasers.

Using the **top-down approach** data was collected from the government expenditure statements and donor expenditure reports. This included:

- From Government Accounting and Budgetary System (GAABS) for the MoHW, NAHPA, Ministry of Local Government and Rural Development (MLGRD), Ministry of Tertiary Education (MOTE), Ministry of Basic Education (MOBE), and also directly from Ministry of Justice, Defence and Security's departments of Prisons, Defence and Police. At the time of writing the report, the department of defence had not provided data.
- PEPFAR Expenditure Reporting (ER) datasets which provided the breakdown of United States Government (USG) expenditure. Data collected directly from USAID did not provide spending breakdown by production factors, but by implementing partners. A decision was made to use the data set obtained from the PEPFAR Panorama website, which provided the breakdown by production factors but not the implementing entities, because of the importance of production factors for undertaking efficiency analysis.
- Global Fund data were collected from the two Principal Recipients in the country, in the form of expenditure reports submitted to the Global Fund annually.

The NASA/SHA Task Team developed the crosswalks to map the Global Fund and the PEPFAR ER spending classifications to the NASA classifications in a format required by the NASA Resource Tracking Tool (RTT) - the software developed by UNAIDS to consolidate the NASA data.

Using the **bottom-up approach**, data were collected from service providers' expenditure records. These services providers included NGOs, CBOs, parastatals, the private sector (for-profit and not-for-profit), universities and research institutions, Medical Aid Schemes and UN agencies. Data collection questionnaires were administered virtually due to COVID-19 restrictions. The data collectors/ research assistants guided the respondents in completing the questionnaires or collected the detailed expenditure reports and captured the health and/or HIV expenditure in the questionnaire/ data collection tool.

There was a secondary data collection through a review of published expenditure reports including annual financial records for targeted entities, expenditure reviews previously done by NAHPA (e.g., Analysis of HIV Investment in Botswana, 3 May 2019). In addition, performance indicators for key interventions were collected to enable the efficiency analysis as an additional exercise.

Data Cleaning

The Task Team ensured the completeness and accuracy of the collected data, and triangulated data from the different respondents (representing FE, FAP and PS), so that the full transactions could be recreated with the nine NASA vectors. In this way, double counting was minimized and incomplete transactions were avoided. The team captured all data in the Excel® Data Consolidation Tool (DCT) which were then imported into the NASA Resource Tracking Tool (RTT). For those data captured in the joint SHA-NASA tools, the tool automatically cross-walked the responses into the NASA classifications and structured the data as per the DCT, which could then be imported into RTT.

The process of data cleaning was meant to be a joint process for both the NASA and SHA with the different consultants for the NASA and SHA working closely together to ensure data consistency. However, the MOHW had not recruited the SHA consultant by the time of the NASA data cleaning and analysis process.

Data Analysis

The imported data were consolidated by the RTT, which also identified coding or data errors that were corrected. The data were then exported to Excel® where they were analyzed. Draft findings were presented to the RTTWG and key stakeholders for review and validation.

The findings are presented in Botswana Pula (BWP), with some of the key tables and matrices converted to United States dollars (USD), in order to allow for international comparison. The annual average exchange rates were obtained from the Bank of Botswana website[vii].

Foreign currency exchange rates applied:

1BWP to Foreign Currency			
Average Rates	**USD**	**Pound Sterling**	**Euro**
April 1, 2018 to March 31, 2019	0.0959	0.0730	0.0828
April 1, 2019 to March 31, 2020	0.0919	0.0723	0.0827

[vii] Botswana Financial Statistics, https://www.bankofbotswana.bw/publications

2.4. Overview of the data included in NASA

The table below summarises the response rate from the organisations sampled. It provides a window into the completeness of data included in the NASA. There was a very poor response from the parastatals and profit-making businesses. This reflects the challenges with virtual data collection as a result of limited face-to-face interactions due to COVID-19 related restrictions. Added to which, there was no incentive for these organisations to provide the requested data. There was also a poor response rate from medical aid schemes (MAS), although two of the three largest MAS, representing about 70% of PLHIV on the private ART program, provided data. Given that private funding sources, which include private businesses and MAS have in the previous NASAs and SHAs contributed 5% or less to spending, the missing data should not have a significant impact on the reported national HIV spending.

Table 2: Overview of Data Collected and Included in the NASA

ENTITY TYPE	Revised Sample Size	Number Responded	Number with data Received	Response Rate	% Data Received from Responders
Government entities	9	8	8	89%	100%
Medical Aid Schemes	5	4	2	80%	50%
Development Partners /Donors (including PEPFAR and GFATM)	13	13	10	100%	77%
NGOs	56	54	50	96%	93%
Parastatals	49	3	1	6%	33%
Private for-Profit Companies	205	49	16	24%	33%
Training/Research Institutions	8	6	6	75%	100%
Total	**345**				

Table 3 provides a summary of the quality of data reported in the NASA. The measure of quality relates to the source of information for every transaction captured in the RTT, and for specific vectors within each transaction. Firstly, the overall data quality measures the degree to which every transaction reported is based on actual expenditure reports as opposed to budgets, or estimates (using a price multiplied by quantity approach). Therefore, *every transaction* is labelled as either an expense report (best quality of data possible), based on budgets, or as estimations (considered the lowest quality of data). Thereafter, each of the following vectors are measured as either based on primary sources, adjusted from primary sources, or estimated, which refers to the degrees to which data were obtained and coded by the entities providing the data instead of being based on estimates or adaptation of the data by the resource tracking team: transaction, ASC, BP and PF.

As shown in table 3 below, all transactions captured in the Botswana NASA in 2018/19 and all but a small portion (0.03%) of the 2019/20 data were based on actual expenditure reports – showing the best possible quality of the data presented in this NASA. The table shows that every transaction came from the primary source of data (optimal quality), and that for the vectors ASC, BP, and PF the sources of about two-thirds of the data were primary, one-third of the provided data had some adjustments applied, and less than 1% were based on estimations, again, showing good quality data. When the SHA estimates of the MOH shared overheads and personnel costs are ready to be captured, these would be labelled as estimations.

Table 3: Data Quality

Botswana NASA	2018/19	2019/20
Overall type of NASA data:		
Expense reports	100%	99.97%
Based on budgets	0%	0.03%
Transaction source type:		
Primary source certificate	100%	100%
ASC source type:		
Primary source certificate	67%	65%
Adaption of primary source	33%	35%
Estimation or imputation	0.1%	0.1%
BP source type:		
Primary source certificate	67%	65%
Adaption of primary source	33%	35%
Estimation or imputation	0.03%	0%
PF source type:		
Primary source certificate	99%	100%
Adaption of primary source	1%	0%

2.5. Limitations and assumptions applied

i. Implementing the harmonized approach to data collection presented some challenges. Data collectors / research assistants were new to both the NASA and SHA methods. It was difficult for them to have a comprehensive understanding of both frameworks after only a week of training. This sometimes resulted in respondents being asked to recomplete the data collection tools, or answer subsequent questions of clarification from the data supervisors, and this slowed down the NASA progress.

ii. Due to COVID-19, face-to-face interactions with the respondents were limited. Most of the data collection was done virtually, limiting the opportunity for direct verification of data with respondents. In addition, response rate was slow and particularly poor for the profit-making businesses, parastatals and MAS.

iii. Different organizations have different fiscal years for reporting expenditure. As far as possible data were aligned with the GoB's fiscal year (FY). However, this was not always possible.
   a. For PEPFAR, the expenditures are reported annually according to the USG fiscal year, and could not be split into quarters to be matched exactly to the GoB FY. Therefore, for the 2018/19 Botswana fiscal year (1 April 2018 – 31 March 2019), the PEPFAR 2019 expenditure report (for 1 Oct 2018 to 30 Sept 2019) was used. The same approach was used for all organisations with similar FYs.
   b. For those organisations whose financial reports are Jan to December each year, the expenditure for the year ended 31 December 2018 was reported in the 2018/19 NASA database (GoB FY) and for the year ended 31 December 2019 in the FY 2019/20 NASA database.

   This approach has been used in all the previous expenditure tracking efforts, and hence over time, the mismatch becomes insignificant.

iv. At the time of writing, there had been no estimation and allocation to the NASA of other 'shared' or embedded costs of service delivery covered by the general health budgets, such as human

resources used for HIV and other services. Hence these important contributions of the public health care system are under-represented. These estimations were expected to come from the SHA process, that uses distribution keys to split between disease and levels of care. However, the delayed contracting of a supporting SHA expert to lead the process of making these estimations has meant that at the time of the NASA analysis and writing, such information was unavailable.

v. The absence of a comprehensive up to date register of health and HIV services organisations meant that some entities sampled did not have any health or HIV interventions (especially private profit-making entities), resulting in wasted time spent following up on their responses. Some of the NGOs and CSOs sampled had ceased operations or where no longer operating in Botswana. In future, sampling of private profit-making entities should be based on the size of the organisation. A starting point could be Stock Exchange listed companies that are likely to also have significant social investments that could be related to health and HIV.

vi. The NASA framework requires that the matching concept be applied when dealing with procurement of major HIV program medicines and commodities like ARVs, laboratory reagents and HIV test kits. This means that commodities' expenditure should be captured/ reported in the year they were consumed, not in the year in which the expenditure was incurred (accrued or paid). However, challenges with consumption records meant that in some cases, actual expenditure incurred was captured in NASA – however, due to the fast roll-out of ARVs and testing, this would have been only for large stocks procured towards the end of the FY, and therefore may not be significant amounts. To avoid distortions, units of expenditures for ARVs and other commodities have also been calculated based on the average expenditure and average program outputs for the two-year assessment period, as well as for each year separately.

vii. The scope of this NASA did not include the expenditures of individuals and households (out-of-pocket (OOP) payments). With public health services, and specifically public ART, provided free of charge to the Botswana citizens and assuming that the majority of people accessing private health do so by contributing to MAS (whose data have been captured in NASA), the missing OOP should be immaterial to the reported spending.

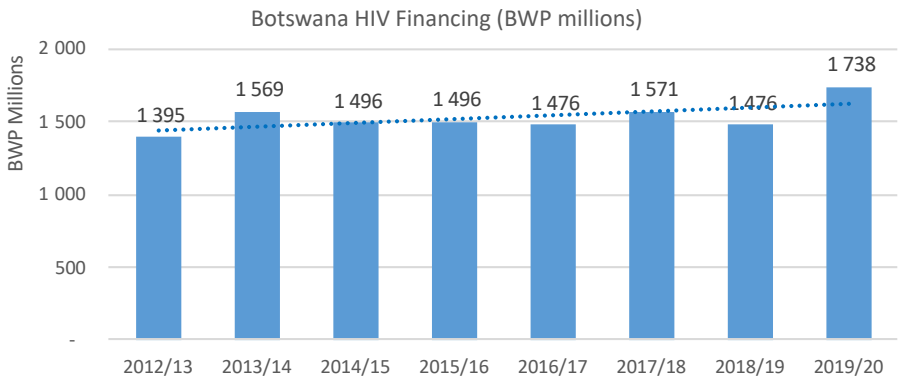
3. Findings of the NASA component of the SHA/NASA

3.1. Total Spending on HIV in Botswana

This NASA found that spending on Botswana's national response to HIV was BWP1.505 billion during 2018/19 and BWP1.770 during 2019/20, an increase of 18% between the two years. In United States dollars (USD) terms, $144,3 million was spent in 2018/19 and $162.7 million in 2019/20, also an 18% increase, reflecting a fairly stable USD to BWP exchange rate between the two years.

Considering historic trends in HIV expenditure, the last Botswana NASA was undertaken in 2012 for the years 2008/09 to 2011/12. For the period 2012/13 to 2017/18, NAHPA, in collaboration with UNAIDS and the World Bank conducted an HIV/AIDS investment analysis[14] in order to enable Government of Botswana (GoB) to estimate key HIV/AIDS spending indicators. The investment analysis concentrated on collecting data from the three main sources of HIV financing in Botswana, i.e., GoB, PEPFAR and Global Fund, who at the time were estimated to contribute about 95% to total HIV spending in Botswana. The figure below captures the trends in HIV investment from 2012/13 to 2019/20, after removing from the 2018/19 and 2019/20 figures the private domestic spending on HIV (for comparability). Spending fluctuated from year to year, but there was an overall increase from BWP1.395 billion in 2013/14 to BWP1.738 billion in 2019/20, representing an annual average increase of 3% over the 8 years.

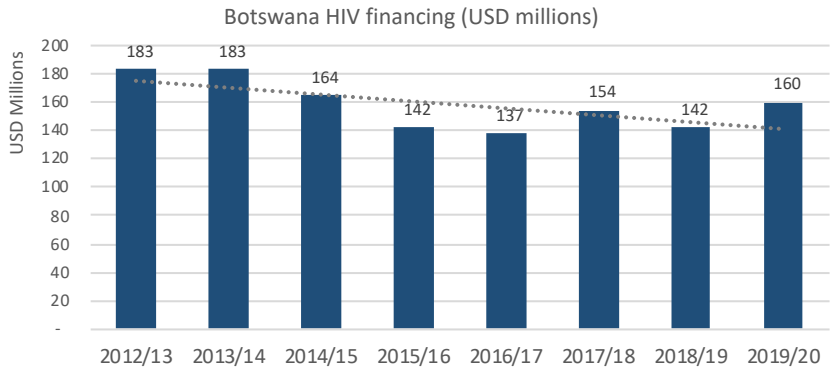
Figure 1: Trends in HIV Spending in Botswana (2012/13 to 2019/20, BWP m) (excluding Private domestic spending)



Source of data for 2012/13 to 2017/18: An Analysis of HIV Investment in Botswana 2012/13 to 2017/18. The 2018/19 and 2019/20 figures exclude domestic private financing (for comparability with previous years' data). For all years, the MOH **shared operational** costs attributable to HIV were not included.

In USD terms, HIV spending is estimated to have decreased from $183 million in 2012/13 to $160 million in 2019/20, representing an annual average decrease of 1.6% over the eight-year period, as reflected in figure 2, below.

Figure 2: Trends in HIV Spending in Botswana (2012/13 to 2019/20, USD m) (excluding Private domestic spending)



Source of data for 2012/13 to 2017/18: An Analysis of HIV Investment in Botswana 2012/13 to 2017/18. The 2018/19 and 2019/20 figures exclude domestic private financing (for comparability with previous years' data).

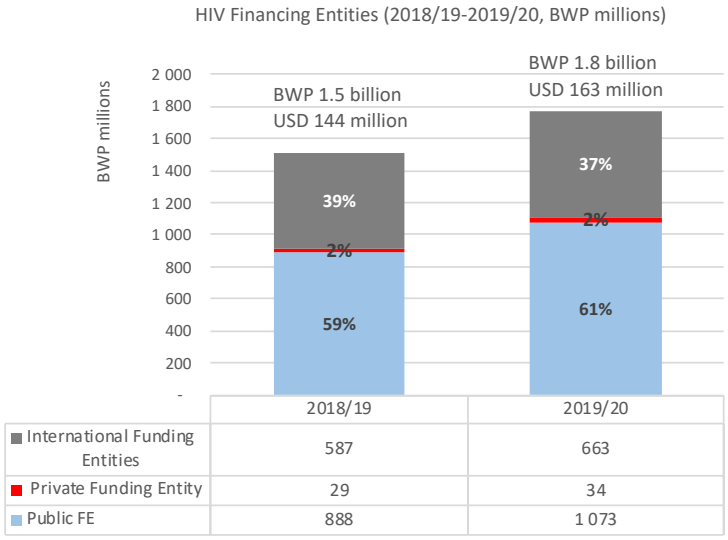
3.2. HIV Financing in Botswana

3.2.1. HIV Financing Entities

Figure 3 summarises spending on HIV by type of financing entity. There was an increase in HIV spending across all types of financing entities from 2018/19 to 2019/20. The biggest increase occurred in public spending. In terms of proportions, the share of public spending increased from 59% in 2018/19 to 61% in 2019/20. International financing proportion decreased from 39% to 37%. Private domestic financing sources' contribution remained small, at 2% each year. There was generally a poor response by the private business to the survey. Similarly, in the last full NASA, private sector spending averaged only 2% between 2008/19 and 2011/12[24]. Private sector spending captured here was mainly the Medical Aid Schemes (MAS) spending on ART, which represented about 70% of patients on the private ART program (since some MAS did not provide data). As in the previous NASAs and investment analysis, out of pocket (OOP) expenditure was not included. Given that HIV treatment is provided free to PLHIV in Botswana, except those opting to use MAS, the missing OOP should be immaterial to the total picture.

Of the international financing entities, PEPFAR was the largest donor to Botswana's national HIV program, with contributions of 32% in 2018/19 and 33% in 2019/20. The Global Fund was the second largest donor, contributing 5% in 2018/19 and 3% in 2019/20. Table 4 below provides the detailed breakdown of financing entities. The small OOP reflects co-payments and value-add tax (VAT) that members of MAS pay when accessing services, as reported by the MAS that provided data.

Figure 3: Botswana's HIV Financing Sources by Type of Funding Entity (2018/19 and 2019/20, BWP m)



* NB. Some public financing for the MOH **shared operational** costs attributable to HIV services are still to be estimated by the SHA team and inserted here.

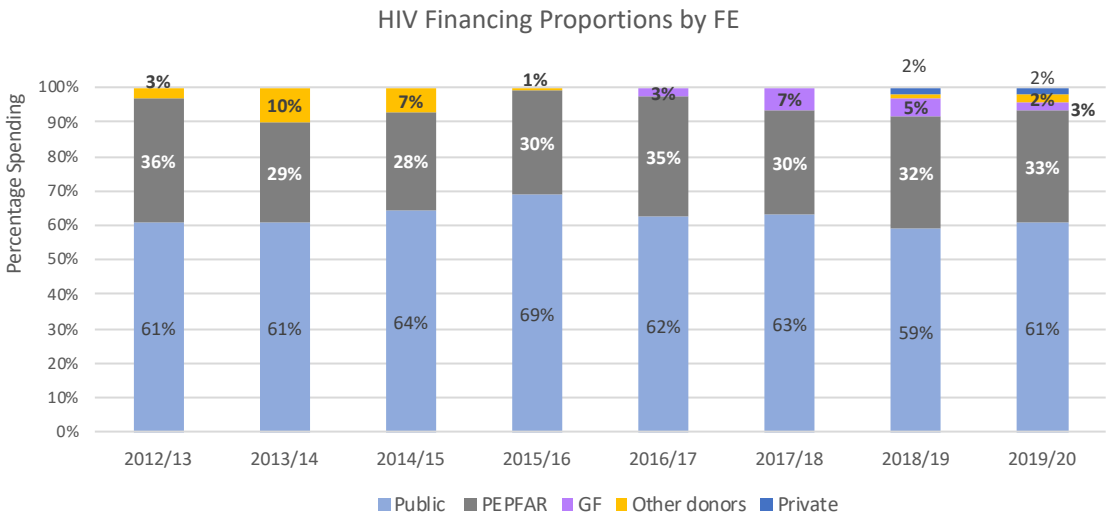
Table 4: HIV Financing Entities (2018/19 and 2019/20, BWP)

Funding Entities (BWP)	BWP 2018/19	BWP 2019/20	% 2018/19	% 2019/20
Public FE (including parastatals)	888,097,963	1,072,803,826	59%	61%
PEPFAR	488,184,803	576,357,216	32%	33%
Global Fund	82,508,566	47,051,941	5%	3%
Other multilateral FE	1,530,270	1,581,680	0%	0%
INGOs and Foundations	14,709,917	38,500,327	1%	2%
Local NGOs	546,538	1,551,216	0%	0%
Private medical insurance	24,750,737	25,901,046	2%	1%
Businesses	275,879	18,000	0%	0%
Households (OOP)	3,924,133	6,433,206	0%	0%
Total BWP	**1,504,528,806**	**1,770,198,459**	**100%**	**100%**
Total USD	**$ 144,287,892**	**$ 162,686,812**		

* NB. Some public financing for the MOH **shared operational** costs attributable to HIV services are still to be estimated by the SHA team and inserted here.

Figure 4 below shows the proportional funding by financing entity between 2012/13 and 2019/20, reflecting the GoB and PEPFAR as consistent funders for HIV in Botswana, and together accounted for 90% of spending in 2013/14 and 99% in 2015/16 as the Bill and Melinda Gates and Merk and Company foundations' funding came to an end. GoB and PEPFAR percentage contributions reduced slightly from 2016/17 with the entrance of the Global Fund, and their New Funding Model which provides for pre-determined guaranteed funding for eligible countries (unlike the previously competitive round-based funding mechanism which had no guaranteed funding).

Figure 4: Trends in FE Financing (2012/13 to 2019/20, %)



3.2.2. Flow of Financial Resources

This section looks at the sources of Revenue (REV) for the Financing Entities (FE) and how these were pooled into Financing Schemes (SCH) by the Financing Agents and Purchasers (FAPs) for financing HIV spending in 2018/19 and 2019/20. The FAPs are discussed further in the following sections. As can be seen in the table below, HIV spending in 2018/19 and 2019/20 was mainly funded from the GoB budget (transfers from domestic revenue), followed by direct foreign transfers (from PEPFAR, Global Fund and other international donors). The transfers distributed by the government from foreign origin were made up of Global Fund resources that were managed by MOHW as PR and PEPFAR resources that were managed by NAHPA. Voluntary prepayments are those to MAS.

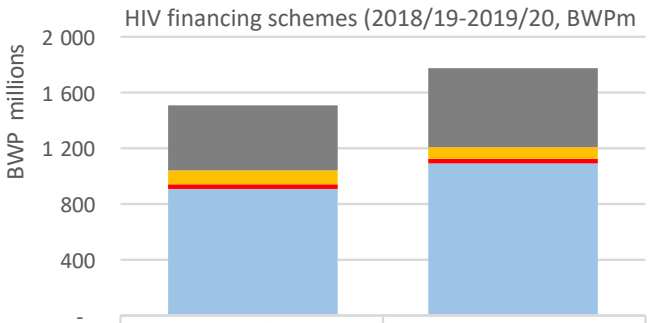
Table 5: Revenues for HIV financing (2018/19 and 2019-20, BWP)

REVENUE (BWP)	Transfers from government domestic revenue	Transfers distributed by government from foreign origin	Other domestic revenue	Voluntary prepayment	Direct foreign transfers	Total BWP
2018/19	887,810,556	46,446,956	1,109,824	28,674,870	540,486,599	1,504,528,806
2019/20	1,072,448,251	42,837,173	1,924,791	32,334,252	620,653,992	1,770,198,459

* NB. Some public financing for the MOH **shared operational** costs attributable to HIV services are still to be estimated by the SHA team and inserted here.

Figure 5 shows the types of financing schemes (SCH) through which revenues are pooled by the financing agents. As can be seen, the pattern closely mirrors the nature of Revenues, with the majority being GoB schemes, followed by foreign agencies schemes.

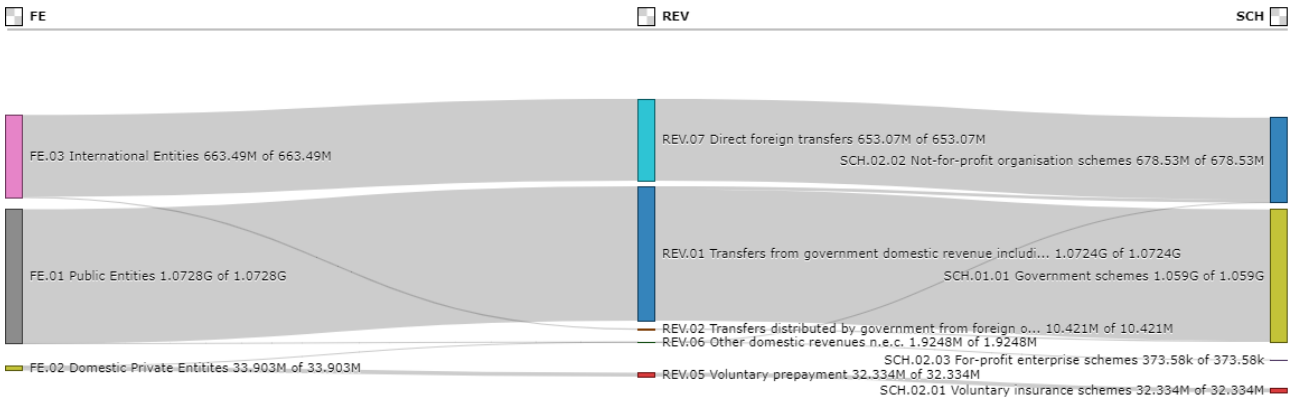
Figure 5: Spending by Financing Schemes (2018/19 and 2019/20, BWP millions)



	2018/19	2019/20
Resident foreign agencies schemes	458645 767	568112 057
Not-for-profit organisation schemes (resident)	101097 685	78003 669
Voluntary private insurance schemes	28674 870	32334 252
Government schemes	915593 077	1091374 906

The figure below illustrates the link between funding entities (FE), revenue (REV) and financing schemes (SCH) in 2019/20. The thickness of lines showing the flow of resources are proportional to the amounts flowing through each channel. The diagram illustrates the dominance of public (governmental) revenue for HIV in Botswana, and being channeled via government schemes, which is important for ensuring the response is aligned to the national priorities and is sustainable in future years.

Figure 6: Financial Flows for 2019/20

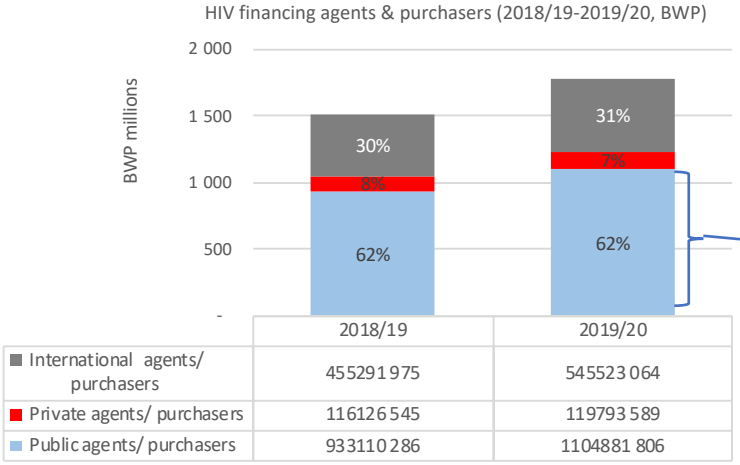


3.2.3. HIV Financing Agents and Purchasers

Financing agents and purchasers (FAPs) are the entities that collect and pool financial resources, take programmatic decisions (allocation and purchase modalities), and pay for service provision. Similar to financing entities, FAPs fall under three broad categories of public, international and private (domestic). In Botswana, the flow of resources through the FAPs is closely aligned with type of financing entity. Government financial resources fully flow through public FAPs, with the MoHW, MLGRD and NAHPA as the main public FAPs. In addition to public resources, international entities like PEPFAR and the Global Fund, also fund the national response through public FAPs: namely NAHPA and MoHW respectively. Public FAPs therefore managed 62% of all resources for the national response in

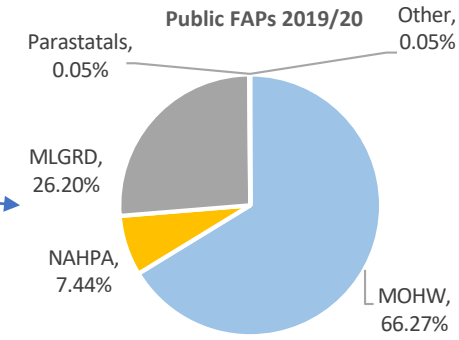
2018/19 and 2019/20. The rest of PEPFAR resources have been classified under international financing agents as the Botswana-based USG agencies (USAID, CDC) are considered the FAPs. The private FAPs include not just private profit-making businesses, but also any local NGOs that act in the role of agent (such as the local NGO PR for the Global Fund resources). Figure 5 shows spending by type of FAP, while figure 6 shows the proportional breakdown of public FAPs by entity, with the MoHW managing the bulk (66.3%) of the public FAP financing.

Figure 7: HIV Financing Agents and Purchasers (2018/19-2019/20, BWP)



	2018/19	2019/20
International agents/ purchasers	455291975	545523064
Private agents/ purchasers	116126545	119793589
Public agents/ purchasers	933110286	1104881 806

Figure 8: Public Financing Agents (2019/20, %)



3.3. HIV Service Provision

This section of the report analyses HIV spending for 2018/19-2019/20 by the entities that engaged in the production, provision, and delivery of HIV services (service providers).

The HIV services were mainly provided through public sector providers (PS), which accounted for 61% of spending in 2018/19 and 62% in 2019/20, demonstrating that public FAPs hardly contract service providers outside of the public sector. The service providers with the second biggest share of spending, with 30% in 2018/19 and 31% in 2019/20, were the PEPFAR Implementing Partners (PEPFAR IPs), excluding the NAHPA which was captured under public providers. Lumping together the other PEPFAR IPs was necessitated by the fact that PEPFAR spending data used for the assessment did not identify the entities providing the services. The non-profit and international service providers have therefore been understated, since some of them are included in the aggregated PEPFAR IP category.

Table 6 also providers a more detailed breakdown of the public services providers by type: public clinics reflect mainly spending on the provision of ART and other facility-based services, while public laboratory spending reflects spending on HIV laboratory reagents and test kits. The Ministry of Local Government and Rural Development (MLGRD) spending was for the Orphan Care programme using resources earmarked for HIV.

Table 6: HIV Service Providers (2018/19-2019/20, BWP, %)

HIV service providers (BWP)	2018/19	2019/20	% 2018/19	% 2019/20
PEPFAR IPs and SRs (excl. NAHPA funds)	453,761,705	543,941,385	30%	31%
INGOs and Foundations (providing services)	-	-	0%	0%
Bilateral / multilateral agencies	1,530,270	1,581,680	0%	0%

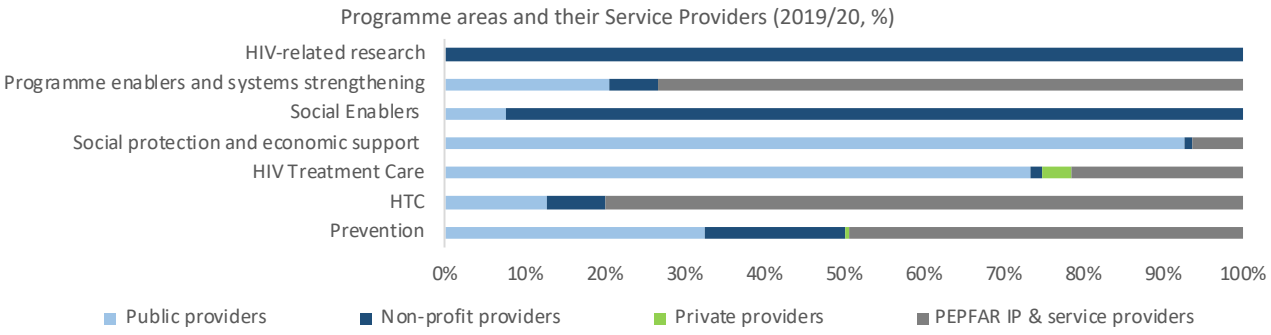
Private for-profit providers	30,173,980	33,598,100	2%	2%
Non-profit organisations	103,821,547	99,781,978	7%	6%
Public providers:	**915,241,304**	**1,091,295,316**	**61%**	**62%**
MOHW	*67,171,284*	*58,313,622*		
Public clinics	*336,576,861*	*459,334,373*		
Public laboratories	*190,036,523*	*214,610,550*		
Schools and higher education centres	*42,375*	-		
NAHPA's IPs & SRs (incl. PEPFAR funds via MFED)	*62,297,772*	*68,654,224*		
MLGRD	*258,538,102*	*289,490,223*		
MOE	*61,200*	*35,500*		
MDJS	*229,780*	*501,250*		
Parastatals	*287,407*	*355,575*		
Total (BWP)	**1,504,528,806**	**1,770,198,459**		

* NB. Some public financing for the MOH **shared operational** costs attributable to HIV services are still to be estimated by the SHA team and inserted here.

The figure below shows the programme areas on which each type of service provider spent in 2019/20. Provision of HIV related research was 100% by non-profit providers (NGOs). The non-profit providers also dominated provision of social enablers. The public providers dominated provision of treatment and care and social protection and economic support. PEPFAR IPs dominated provision of programme enablers and systems strengthening and on HIV testing and counseling and prevention.

The details of the interventions under each of these programme areas are discussed in subsequent sections of this report.

Figure 9: Programme Area by their Service Providers (2019/20, %)



3.4. HIV spending by Programme Area (ASC), Service Delivery Modality and Beneficiaries

This section provides an analysis of spending by programme area, the modalities used to deliver the services and the populations that benefited from the services. The section also analyses programme area spending by financing entities, as in indication of areas which were more reliant on external support.

3.4.1. HIV Programme Area Spending

Care and treatment spending, at 34% in 2018/19 and 49% in 2019/20, dominated HIV spending. This was followed by social protection and economic support (majority of which was for orphan and vulnerable children (OVC) care). Prevention spending at 12% in 2018/19 and 11% in 2019/20, was below the target rate of 25% allocation for prevention recommended by the Global Prevention Coalition (GPC) of which Botswana is a member[viii].

Table 7: Spending by Programme Area (2018/19 and 2019/20, BWP, %)

HIV Programme Area	2018/19 BWP	2019/20 BWP	% 2018/19	% 2019/20	% Change
Prevention	186,434,355	197,136,445	12%	11%	6%
HTC	79,546,680	79,063,834	5%	4%	-1%
Care and treatment	664,916,305	865,936,747	44%	49%	30%
Social protection & econ.support	297,976,719	311,943,396	20%	18%	5%
Social enablers	9,452,807	5,033,980	0.63%	0.3%	-47%
Programme enablers & system strengthening	262,601,947	288,495,065	17%	16%	10%
Development synergies	246,200	-	0.0%	0.0%	-100%
Research	3,353,792	22,588,992	0.2%	1.3%	574%
Total (BWP)	**1,504,528,806**	**1,770,198,459**	**100%**	**100%**	**18%**

* NB. Some public financing for the MOH **shared operational** costs attributable to HIV services are still to be estimated by the SHA team and inserted under the Care and treatment programme area.

3.4.2. Service Delivery Modalities (SDM)

With treatment and care dominating HIV spending, facility-based service delivery was the dominant modality, accounting for 51% and 55% of spending in 2018/19 and 2019/20 respectively. It was followed by home- and community-based care, which was primarily for the spending on social protection and economic support. Spending on interventions with no specific SDM, accounted for 19% and 8% of spending in 2018/19 and 2019/20 respectively, and included spending on programme enablers and systems strengthening and research and development synergies.

Table 8: Spending by Service Delivery Modalities (SDMs) (2018/19 and 2019/20, BWP, %)

Service delivery modality (BWP)	2018/19	2019/20	% 2018/19	% 2019/20
Facility-based service modalities	765,508,077	967,189,003	51%	55%
Home and community-based service modalities	406,674,991	407,452,307	27%	23%
Modalities not disaggregated	51,320,711	70,148,982	3%	4%
Non applicable (ASC which does not have a specific SDM)	279,027,960	320,795,965	19%	18%
Modalities n.e.c.	1,997,067	4,612,201	0%	0%
Total spending by SDM	**1,504,528,806**	**1,770,198,459**	**100%**	**100%**

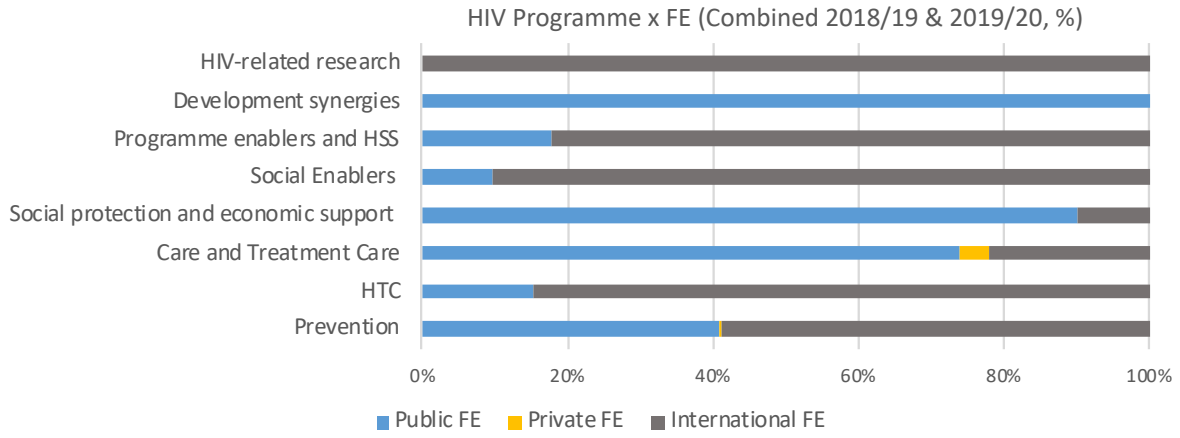
3.4.3. HIV programme area spending by financing entity

The figure below illustrates in percentage terms, the proportion of the total two-year spending (2018/19 and 2019/20) financed by each type of financing entity. HIV research was fully financed by

viii The Global HIV Prevention Coalition, formed in 2017, aims to strengthen and sustain political commitment for primary prevention by setting a common agenda among key policy makers, funders, and programme implementers.

international entities, with development synergies fully financed through public financing entities. International financing entities were the major financiers of; programme enables and health systems strengthening (82%), social enablers (90%), HIV testing and counseling (85%) and prevention (59%). International FE spending contribution to prevention increased from 54% to 64% over the two-year period, fueled by Global Fund funding. The Global Fund resources in the country were focused on prevention interventions for adolescent girls and young women (AGYW) and their partners, key populations and on voluntary medical male circumcision (VMMC). The public financing entities mainly supported care and treatment (74%), social protection and economic support (90%). Private financing entities only contributed towards care and treatment (less than 1%).

Figure 10: Programme Area Spending by Type of Financing Entity (2018/19 and 2019/20, %)



* NB. Some public financing for the MOH **shared operational** costs attributable to HIV services are still to be estimated by the SHA team and inserted under the Care and treatment programme area.

3.4.4. Beneficiary Populations

At 47% of total spending over the two-year assessment period, people living with HIV benefitted the most from HIV spending. Vulnerable and accessible populations, accounted for 24.6% of spending, mainly made up of spending on orphans and vulnerable children (18.5%). Included in vulnerable and accessible populations are AGYW, who accounted for 2.87% of spending. Interventions that are not targeted, like HIV related research, development synergies, programme enablers and health systems strengthening accounted for 18% of spending. Spending on key populations accounted for 1.22%, on average over the two period, decreasing from 1.5% to 1% of total HIV spending.

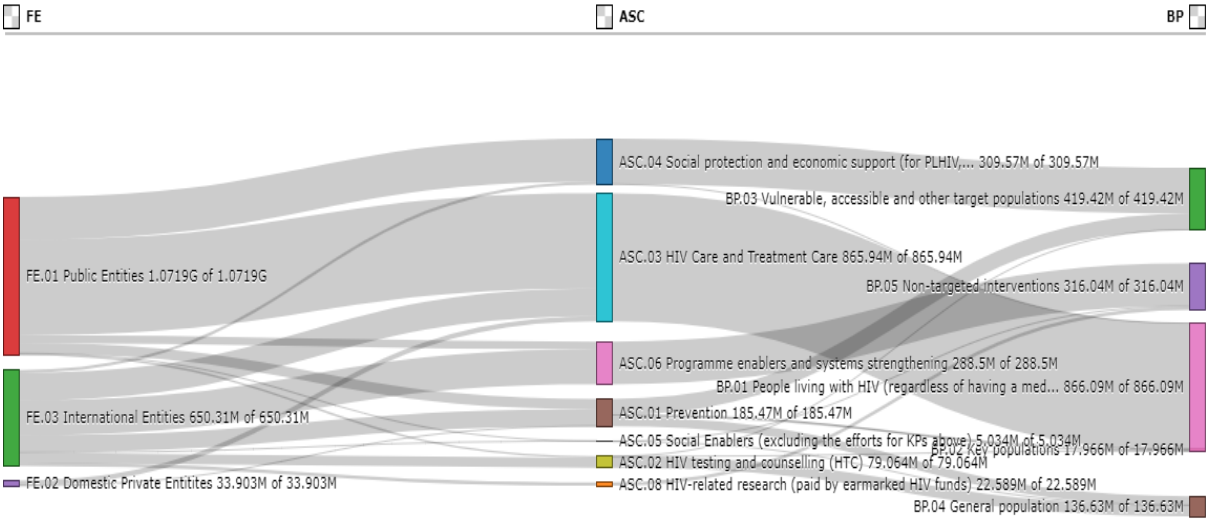
Table 9: Spending by Beneficiary Populations (2018/19 and 2019/20, BWP million, %)

Spending per Beneficiary Population (BWPm)	2018/19	2019/20	Total (BWP)	%
People living with HIV	**673.69**	**866.09**	**1,539.78**	**47.02%**
Adult and young people (aged 15 and over) living with HIV	3.67	11.98	15.65	0.48%
Children (aged under 15) living with HIV	11.92	9.02	20.94	0.64%
People living with HIV not broken down by age or gender	658.09	845.10	1,503.19	45.90%
Key populations	**21.88**	**17.97**	**39.84**	**1.22%**
Sex workers (SW) and their clients	10.66	8.21	18.86	0.58%
Gay men and other men who have sex with men (MSM)	4.98	5.89	10.87	0.33%
"Key populations" not broken down by type	6.24	3.87	10.11	0.31%
Vulnerable, accessible and other target populations	**381.49**	**424.23**	**805.72**	**24.60%**

Orphans and vulnerable children (OVC)	297.83	308.00	605.83	18.50%
Pregnant and breastfeeding HIV-positive women (not on ART) and their children to be born (un-determined HIV status)	44.43	42.00	86.42	2.64%
AGYW in countries with high HIV prevalence	33.54	60.60	94.14	2.87%
Children and youth out of school	0.76	0.50	1.26	0.04%
Junior high/high school students	0.04	-	0.04	0.00%
Military	1.17	0.53	1.70	0.05%
Police and other uniformed services (other than the military)	0.23	0.50	0.73	0.02%
Employees (e.g., for workplace interventions)	1.96	4.61	6.57	0.20%
Vulnerable, accessible and other target populations not broken down by type	0.88	3.18	4.06	0.12%
Other vulnerable, accessible and other target populations n.e.c.	0.62	4.28	4.90	0.15%
University students	0.04	0.03	0.07	0.00%
General population	**154.45**	**145.87**	**300.32**	**9.17%**
General adult population (aged older than 24)	0.36	1.16	1.52	0.05%
Youth (aged 15 to 24)	37.65	41.82	79.47	2.43%
General population not broken down by age or gender.	116.43	102.89	219.32	6.70%
Non-targeted interventions	**273.02**	**316.04**	**589.06**	**17.99%**
Total (BWP million)	**1,505**	**1,770**	**3,275**	**100.00%**

The flow of finances from the financing entities to the HIV programme areas and their beneficiaries are shown visually in figure 11 below.

Figure 11: Financial flow from Financing Entity (FE) to HIV programme areas (ASC) to beneficiaries (BP) (2019/20)



3.5. HIV spending on interventions (ASC) per programme area – deeper dive

This section provides a detailed breakdown of each programme area, providing a closer look at interventions funded in the Botswana HIV response.

3.5.1. Prevention activities

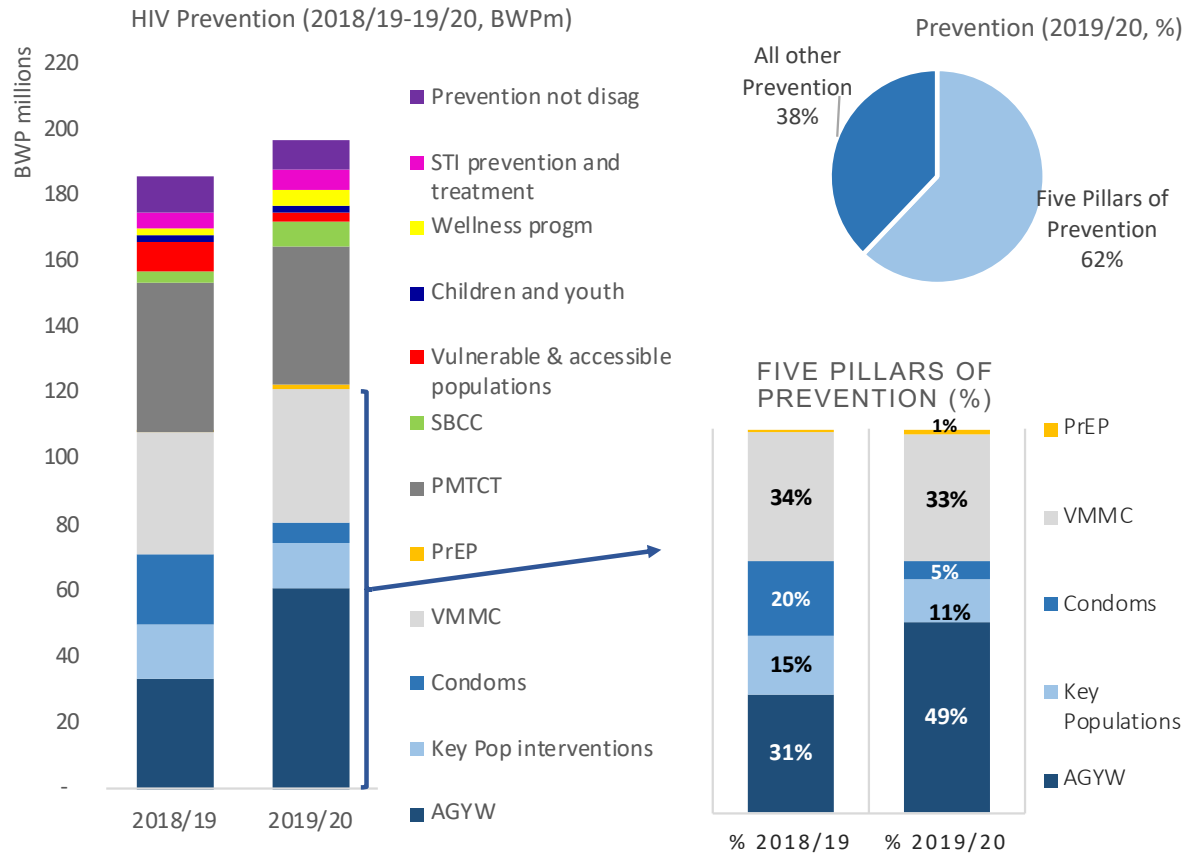
Spending on prevention grew by 6% from BWP 186 million to BWP 197 million, between 2018/19 and 2019/20. The prevention interventions with the most spending were; PMTC (24% in 2018/19 and 21%

in 2019/20), VMMC (20% in 2018/19 and 21% in 2019/20) and interventions for AGYW (18% in 2018/19 and 31% in 2019/20). Spending on condoms decreased BWP21.2 million (11% in 2018/19) to BWP6.0 million (3% in 2019/20), because the GoB second order for plain condoms delayed and overlapped to 2020/21 while there was still an excess stock of flavoured condoms. Expenditure on VMMC, PrEP, PMTCT, HTC, condoms and STI prevention and treatment, have been understated here due to the exclusion of MoHW shared or embedded costs of service delivery at public health facility level (pending the SHA estimates).

Spending on the five GPC high-impact prevention pillars made up 58% in 2018/19 (BWP108m) and 62% in 2019/20 (BWP122m) of total spending on prevention. The five prevention pillars are; i) HIV prevention programmes addressing key populations (KPs), ii) HIV prevention programmes addressing AGYW and their male partners in high burden settings, iii) VMMC for adolescent boys and men in high burden settings, iv) comprehensive condom programming, and v) pre-exposure prophylaxis (PrEP) programmes for populations with substantial HIV risk.

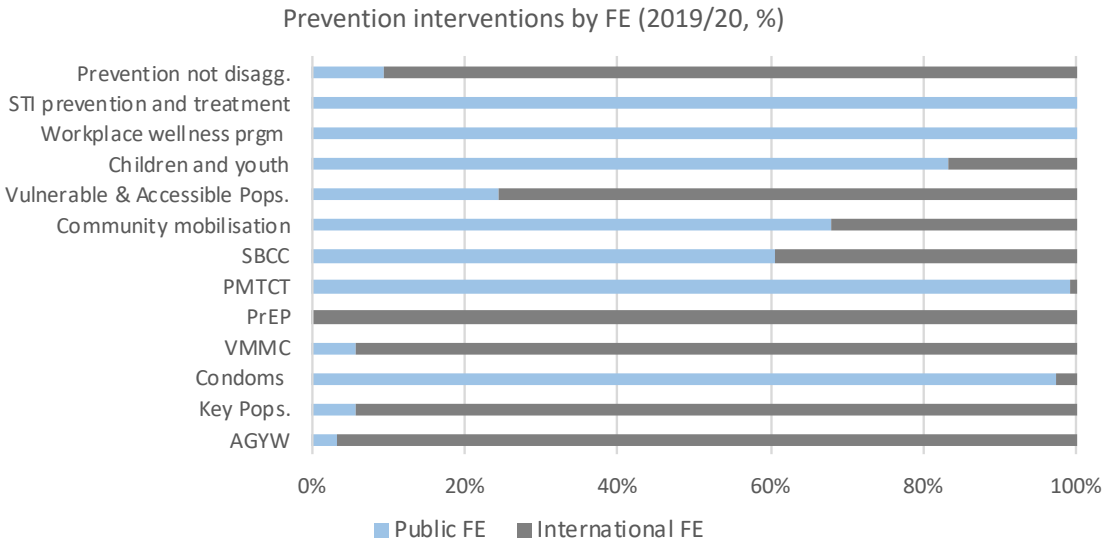
Figure 11 provides a breakdown of prevention spending in the 2018/19 and 2019/20 and an analysis of spending on the five prevention pillars in proportion to each other.

Figure 12: Spending on Prevention by Intervention (2018/19 and 2019/20, BWPm, %)



In terms of which financing entities are financing which prevention interventions, figure 13 indicates that the bulk of the interventions for AGYW and KPs, VMMC, PrEP and other vulnerable populations were funded by international entities in 2019/20. Public entities financed entirely condoms, PMTCT, workplace wellness programmes, and mostly: children and youth, SBCC and community mobilization.

Figure 13: Spending on Prevention by Financing Entities (2019/20, %)



3.5.2. HIV testing and counselling

Spending on HIV testing and counseling (HTC) was constant over the two years, with the majority spending was on HTC for the general population. Unlike in the previous NASAs, there was specific spending on sex workers, and other key and vulnerable populations (including the blind and hearing impaired).

Table 10: Spending on HTC (2018/19 and 2019/20, BWP)

HTC (BWP)	2018/19	2019/20
HIV testing for sex workers	2,135,868	2,554,574
HIV testing for MSM	436,283	194,799
HIV testing for TG	-	579,698
HIV testing for vulnerable & accessible pops	1,068,764	532,887
HIV testing for general pop	72,880,418	71,353,510
HIV testing not disagg.	3,025,347	3,848,366
Total HIV testing & counselling spend (BWP)	**79,546,680**	**79,063,834**

3.5.3. Care and treatment activities

Anti-retroviral therapy made up 51% in 2018/19 and 54% in 2019/20 of care and treatment spending, with laboratory monitoring making up 31% and 28% in each year respectively. Year on year, spending increased by 36% on ART and by 18% on laboratory monitoring. In the absence of consumption records from the Central Medical Stores, these figures represent mainly payments made during each year, not consumption, and hence those procured towards the end of the financial year, might not have been consumed in that year. They are therefore not exactly representative of the increase in the number of people on ART, but rather the timing of the expenditure. The number of people on ART increased by 4% from the end of 2018/19 to 317,021 by end of 2019/20

As figure 12 shows, 75% of care and treatment was financed by the GoB. The reported GoB spending suffers from the limitations of missing the MoHW shared or embedded costs of service delivery at

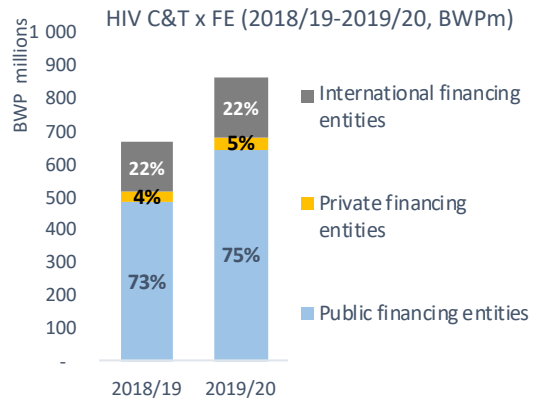
public health facility level, hence the public financed portion would be greater than 75% - which is important for the sustainability of the care and treatment programme.

Table 11: Spending on Care & Treatment Interventions (2018/19 and 2019/20, BWP)

Care & Treatment (BWP)	2018/19	2019/20	% 2018/19	% 2019/20
Anti-retroviral therapy	342,428,576	465,091,392	51%	54%
Adherence and retention on ART	1,525,255	1,400,000	0.2%	0.2%
Specific ART-related laboratory monitoring	203,489,383	239,225,113	31%	28%
Co-infections and OIs	15,925,543	11,404,357	2%	1%
Psychological treatment and support	742,593	307,775	0.1%	0.0%
Palliative care	15,781,765	21,842,119	2%	3%
C&T services not disaggregated	85,023,191	126,665,992	13%	15%
Total treatment and care spend (BWP)	**664,916,305**	**865,936,747**	**100%**	**100%**

* NB. Some public financing for the MOH **shared operational** costs attributable to HIV services are still to be estimated by the SHA team and inserted under the Care and treatment programme area.

Figure 14: Spending on Care & Treatment Interventions by FE (2018/19 and 2019/20, BWPm, %)



3.5.4. Social Protection and Economic Support

Spending on social protection and economic support interventions over the period of assessment was almost entirely for OVC care and support, and were 93% funded by public financing entities. The number of OVCs benefiting from the Orphan care program under the MLGRD department of Social Protections was 27,641 in 2018/19, equating to BWP 9,400 per OVC in that year.

Table 12: Spending on OVC Interventions (2018/19 and 2019/20, BWP, %)

Social protection and economic support (BWP)	2018/19	2019/20	% 2018/19	% 2019/20
OVC Social protection and economic support	297,830,842	307,999,679	100%	99%
Other social protection and economic support	145,878	3,943,717	0%	1%
Total Social Protection & Economic Support (BWP)	**297,976,719**	**311,943,396**	**100%**	**100%**

3.5.5. Social Enablers

Social enablers' spending was mainly on human rights programmes funded mostly (92%) by international financing entities.

Table 13: Spending on Social Enablers by Interventions (2018/19 and 2019/20, BWP, %)

Social enablers	2018/19	2019/20	% 2018/19	% 2019/20
Human rights programmes	9,387,321	4,915,196	99%	98%
Social enablers not disaggregated.	65,486	118,784	1%	2%
Total Enablers spend (BWP)	**9,452,807**	**5,033,980**	**100%**	**100%**

3.5.6. Programme Enablers and Systems Strengthening

Of all the resources going to programme enablers and systems strengthening, the spending on programme management and administration consumed 58% and 62% in 2018/19 and 2019/20, respectively. This was followed by spending on strategic planning (15% and 16%) and strategic information (12% in both years). Strategy information includes M&E, operations and implementation research and HIV drug resistance surveillance.

Figure 15: Spending on Programme Enablers and Systems Strengthening by Interventions (2018/19 and 2019/20, BWP million)

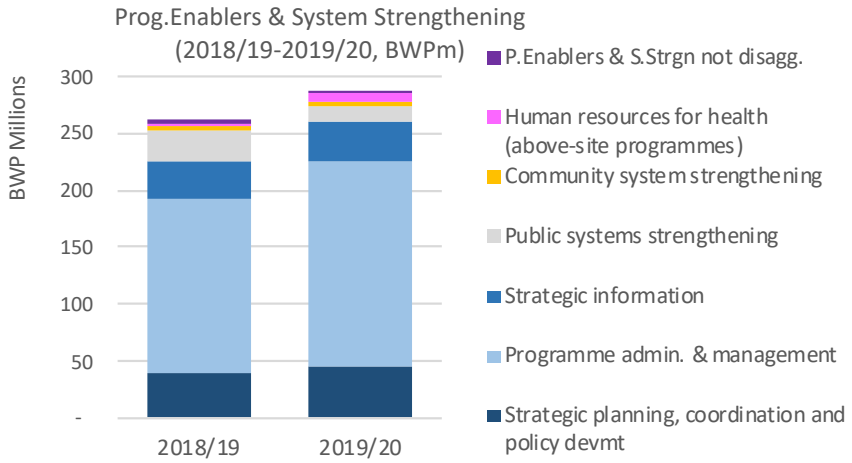
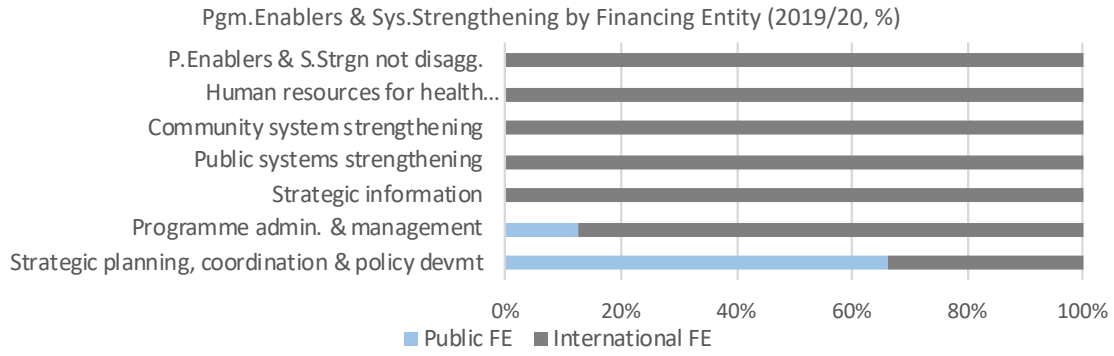


Table 14: Spending on Programme Enablers and Systems Strengthening by Interventions (2018/19 and 2019/20, BWP, %)

Programme enablers and systems strengthening	2018/19	2019/20	% 2018/19	% 2019/20
Strategic planning, coordination and policy development	40,281,536	45,545,366	15%	16%
Programme admin. & management	152,814,624	179,126,155	58%	62%
Strategic information	31,761,593	35,425,673	12%	12%
Public systems strengthening	27,329,084	14,484,980	10%	5%
Community system strengthening	5,330,231	3,845,301	2%	1%
Human resources for health (above-site programmes)	767,989	6,516,284	0%	2%
P.Enablers & S.Strgn not disagg.	4,316,889	3,551,306	2%	1%
Total P.Enablers & S.Strengthening (BWP)	**262,601,947**	**288,495,065**	**100%**	**100%**

International financing entities accounted for 82% of spending for programme enablers and systems strengthening. As figure 13 below shows, public funds reportedly only financed programme administration and management, strategic planning, coordination and policy development. Due to limited data disaggregation, GoB spending on other interventions may have been understated.

Figure 16: Programme Enablers and Systems Strengthening Proportions by FE (2019/20, %)



3.5.7. HIV-related research spending

Reported spending on HIV related research was 100% donor funded in both years and was reportedly mainly for clinical research. However, there was a poor response rate from universities.

Table 15: HIV Related Research Interventions (2018/19 and 2019/20, BWP, %)

Research	2018/19	2019/20	% 2018/19	% 2019/20
Clinical research	3,353,792	21,969,132	100%	97%
Biomedical research	-	485,067	0%	2%
HIV-related research n.e.c.	-	134,793	0%	1%
Total Research spend (BWP)	**3,353,792**	**22,588,992**	**100%**	**100%**

3.6. Production Factors

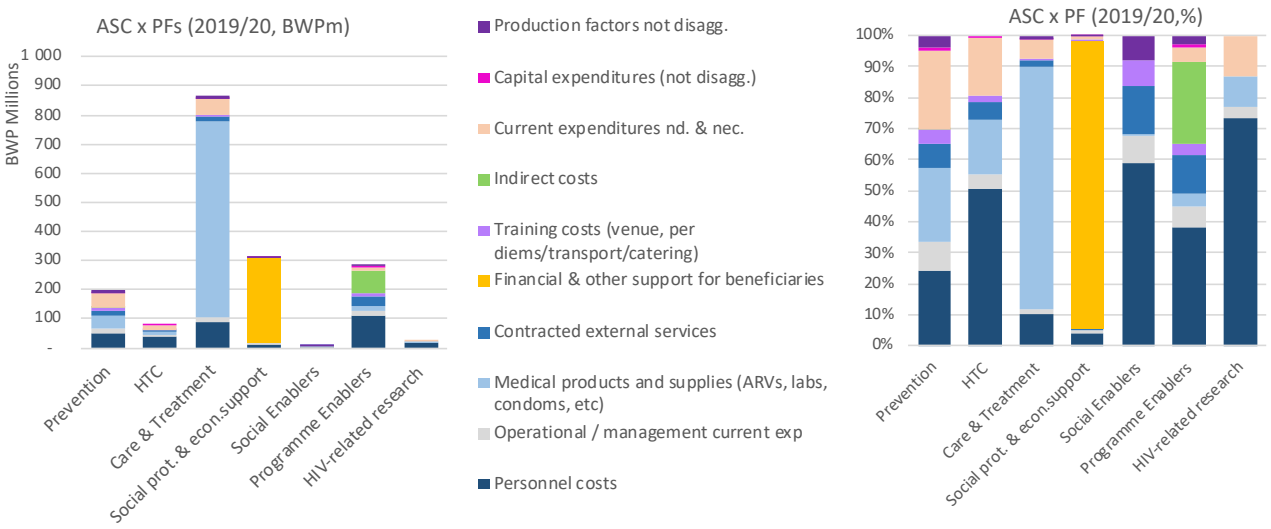
Production factors (PF) are inputs/resources (labour, capital, natural resources, "know-how," and entrepreneurial resources) used to produce interventions and activities. The table below summaries the key production factors in 2018/19 and 2019/20. ARVs, personnel costs and laboratory costs make up 51% and 56% of spending in 2018/19 and 2019/20 respectively, while other recurrent spending was 39% in both years. Capital investments were very small (1% or less).

Table 16: Summary of Key Production Factors (2018/19 and 2019/20, BWP, %)

Key production factors	2018/19	2019/20	% 2018/19	% 2019/20
ARVs	329,197,826	439,768,344	22%	25%
Personnel	247,610,277	318,688,078	16%	18%
Laboratory & reagents	195,548,125	228,836,677	13%	13%
Operational/ management current exp.	50,917,393	58,746,226	3%	3%
All other recurrent spending (see detailed table)	588,549,014	691,067,554	39%	39%

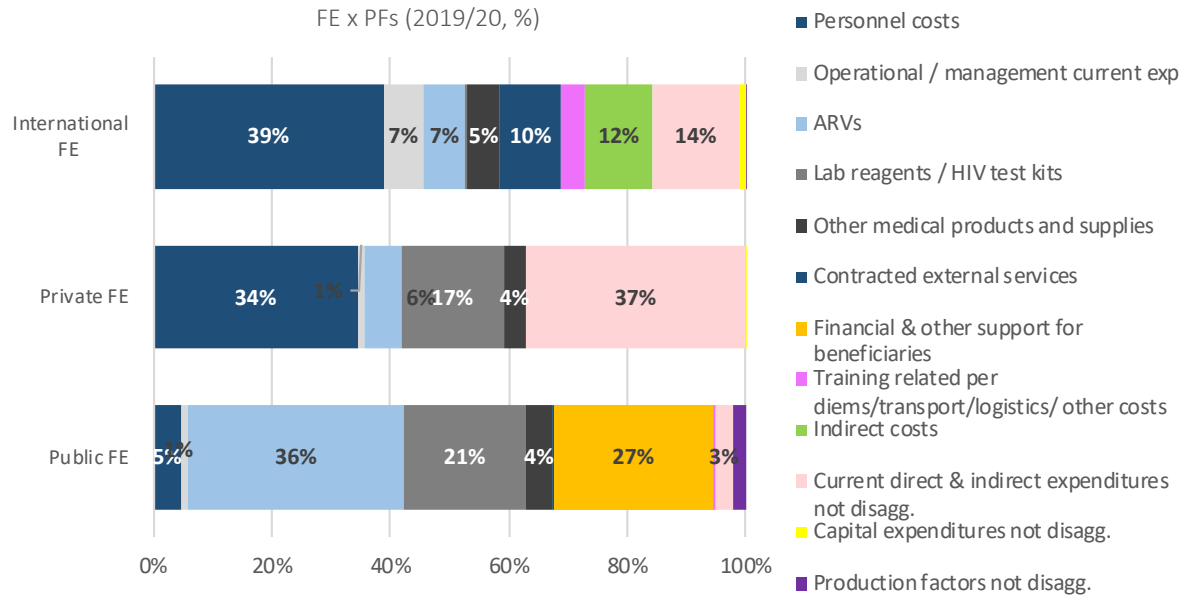
Capital expenditure	12,557,999	7,640,397	1%	0%
Production factors not disagg.	80,148,172	25,451,184	5%	1%
Total	**1,504,528,806**	**1,770,198,459**	**100%**	**100%**

Figure 17: Spending by Production Factors and Programme Area (2018/19 and 2019/20, BWPm)



Considering the production factor spending by the financing entity, figure 16 indicates that, in 2019/20, 39% of international financing went towards personnel costs, while only 5% of public financing went to personnel. However, as explained, the MoHW shared personnel and other operation costs that might be attributed to HIV are still to be estimated by the SHA process – hence they are under-represented here. Of the public financing, 36% went to ARVs and 21% to laboratory reagents (reflecting the public ART programme costs), while 27 went towards support for beneficiaries – this was for the OVC support programme.

Figure 18: Financing Entities' Spending by Production Factors (2019/20, %)



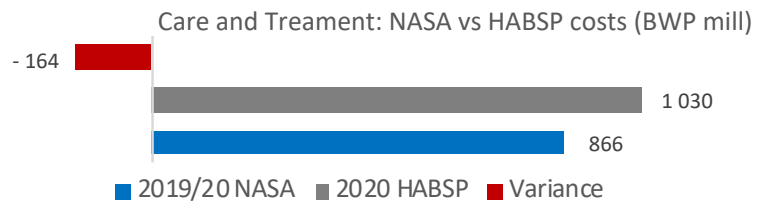
3.7. Adequacy of HIV spending in Botswana and allocative and technical efficiency considerations

3.7.1. Adequacy of financing of the HIV response in Botswana

To determine if the amounts spent on HIV in Botswana were adequate to meet the national strategic objectives and targets, the NASA findings for each study year could be compared with the estimated resources needed for the matching years in the NSF. NASA covered 2018/19 which was in the previous NSF period, and 2019/20 which is covered in the current NSF (2019-2023). Since the cost estimates for the national operational plan (NOP) were not available at the time of writing, the NASA findings for 2019/20 have been compared with the estimated costs of the HIV/AIDS Basic Service Package (HABSP[ix]) for 2020 (which was the base/actual year of the costing before the dramatic scale-up of targets in the HABSP, therefore somewhat comparable).

Firstly, comparing the Care and Treatment spending with costs (which is more than just the ART programme), figure 19 below implies the spending in 2019/20 was BWP 164 million less than anticipated as needed in 2020. However, as noted in the previous section, the NASA has not yet been able to capture the MOHW's expenditure on shared personnel and overhead costs for the HIV treatment services in the health facilities – which will be estimated for the SHA and will be added to the NASA HIV expenditure. This might account for this difference, since the HABSP costing definitely estimated these cost components. Figure 22 under the technical efficiency section (5.3) provides a regional comparison of the production factors spending per person on ART compared with those estimated in the HABSP costing (in USD), and it can be clearly seen that the HABSP service delivery portion was estimated as much higher (USD 95 per ART client) than the NASA's underestimated spend (USD 14 per ART client). Additionally, it can be seen that the actual spending on laboratory tests and investigations (USD 65 per ART client) was USD 20 less than had been included in the HABSP costing (USD 85 per client). The HABSP included an extensive list of optimal investigations, and hence this is a key driver in the difference between the estimated HABSP costs and the actual NASA expenditures. Some difference would also be expected between the actual number of persons on ART in 2019/20 and that were assumed covered in the HABSP base year (2020).

Figure 19: NASA 2019/20 care & treatment expenditure compared to HABSP (2020) cost estimates (BWP millions)

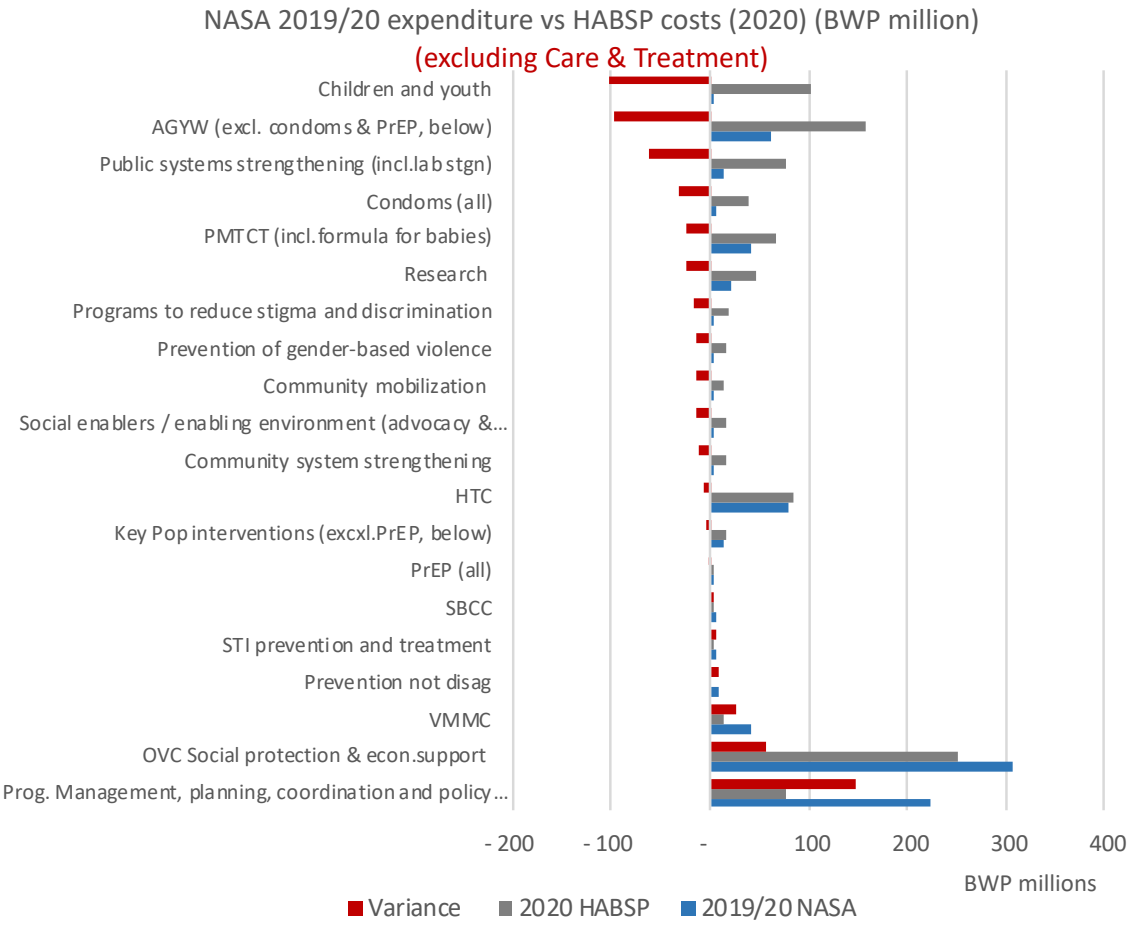


* NB. Some public financing for the MOH **shared operational** costs attributable to HIV services are still to be estimated by the SHA team and inserted under the Care and treatment programme area.

[ixix] NAHPA 2021. HIV/AIDS Basic Service Package, Costs Estimates and Funding Landscape. V12, September 2021.

Considering the spending on the other (non-care and treatment) interventions, Figure 20 compares the NASA spending (blue bars) per intervention with their HABSP estimated costs (grey bars), and their difference is shown in red. Note that the red bars on the right side on the middle axis are positive and reflect spending that was above the estimated need, while the red bars on the left side are negative amounts indicate where the spending was less than needed. Again, many factors must be considered in this simple comparison – slightly different time periods covered, different targets/ performance, some cost components possibly omitted in the NASA figures – but the figure nevertheless gives some indication of where there might be need to redirect greater resources. For example, financing seemed below the estimated need for AGYW, children and youth, condoms, PMTCT (possibly due to the missing shared MoHW service delivery costs in the NASA data),and several of the social enablers: reducing stigma and discrimination, prevention of gender-based violence, community mobilization and advocacy. Both community and public systems strengthening may require greater prioritisation – although these interventions are difficult to both cost and track spending against.

Figure 20: NASA 2019/20 expenditure compared to HABSP (2020) cost estimates (BWP millions) – excluding care & treatment



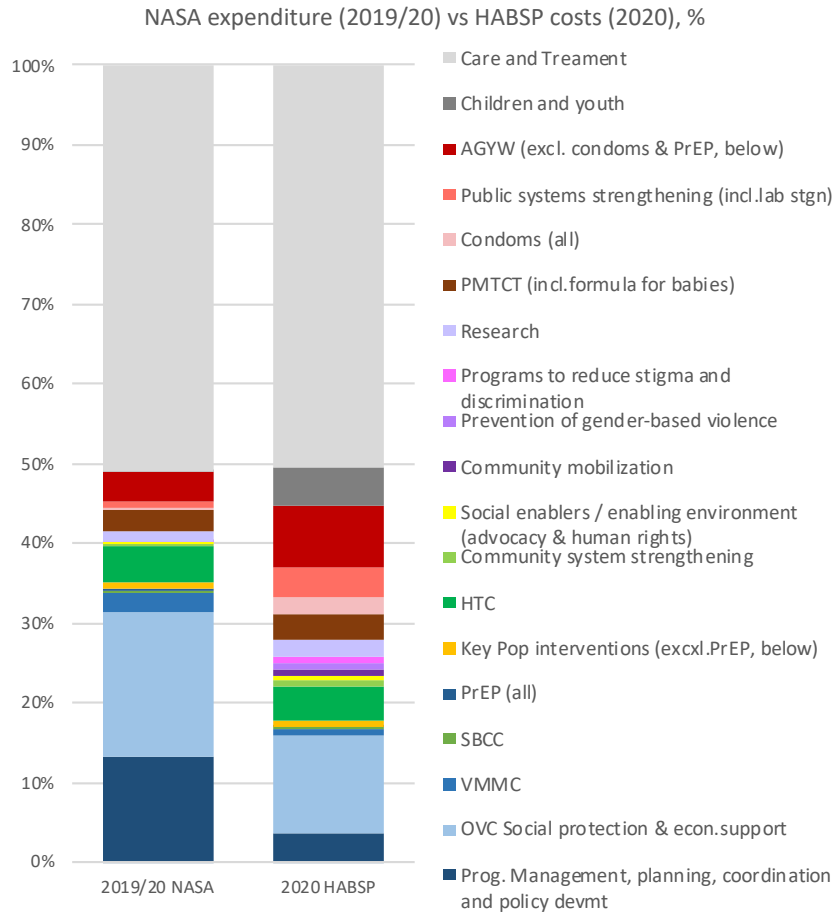
Importantly, figure 20 also shows a number of interventions that appear to have had adequate financing (where there are small variances in the red bars), such as: HTC, key populations, PrEP (although the programme was in its early stages in 2019/20), SBCC, and STI prevention and treatment. There appears to have been overspending on VMMC, OVC and programme management,

coordination and policy development. The later analysis (section 5.3) of the unit of expenditure for VMMC indeed confirms that due to reducing volume of circumcisions performed, the cost per procedure increased resulting in higher expenditures with lower performance.

3.7.2. Allocative efficiencies in prioritisation of spending

It is useful to also consider the *proportional* prioritisation of spending for interventions within the available financing ceiling, compared to the prioritisation indicated in the HABSP costing, which provides some indication of allocative efficiency – that is, whether the available funds have been channelled to the high impact and prioritised services. Figure 21 shows that equal prioritisation (around 50%) of total spending and estimated costs went to care and treatment, as well as for most other interventions, except where spending was proportionally greater for programme management, planning and coordination, OVC care and support, and VMMC – reflecting the discussion above of the nominal amounts. There appears to have been less prioritisation of AGYW, condoms, children and youth, and the social enablers, again, as discussed above. Apart from these, aspects, there seems to have been some allocative efficiencies achieved by aligning available resources to the intended HABSP priorities.

Figure 21: Comparison of NASA proportional spending (2019/20) per intervention and costed HABSP proportional estimates (2020), %



The next section considers technical efficiency aspects of certain interventions in the HIV response in Botswana.

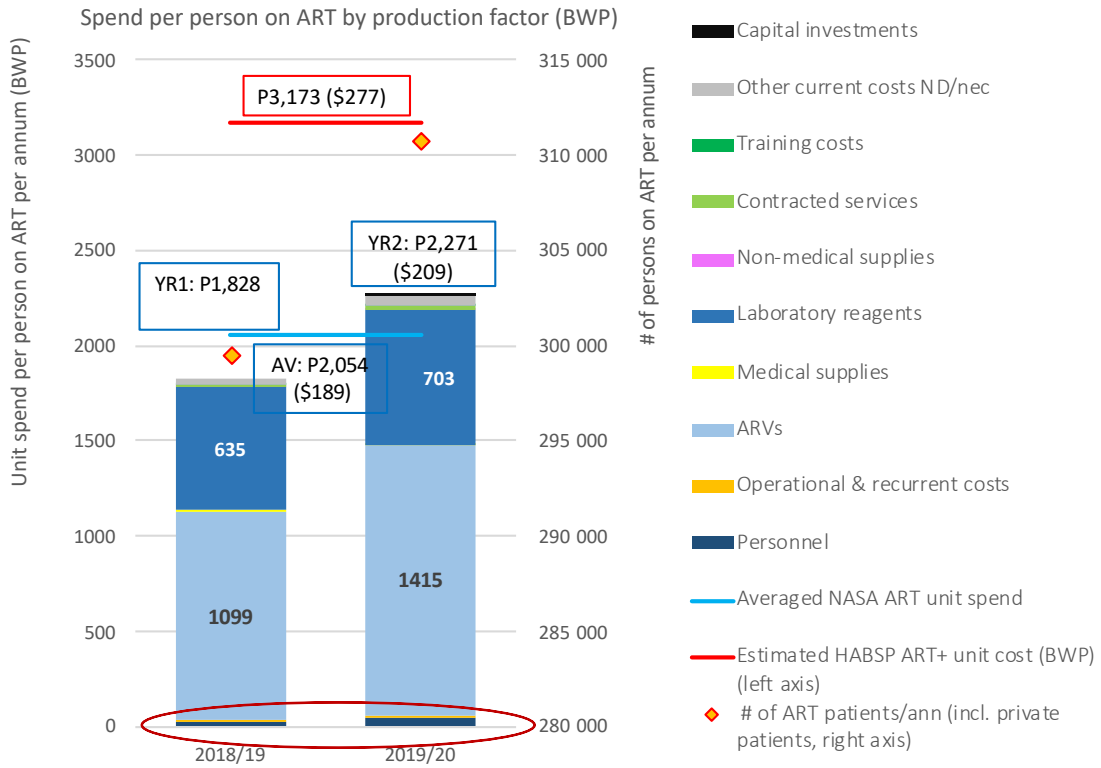
3.7.3. Technical efficiency of a few key programmes – has there been Value for Money (input versus output)?

NASA cannot provide an in-depth evaluation of programmatic technical efficiencies, which is beyond the study's scope. However, it can provide an initial, simple measure of value for money (VfM) by calculating the spending per output or person reached – units of expenditure broken into production factors and compared with the HABSP unit cost (to explore their main cost drivers). This can only be done for interventions with discrete outputs that can be directly attributed to specific expenditures, such as ART, VMMC, HTC, AGYW, PrEP and so on – where performance targets were available for the NASA study years.

i. Units of expenditure on anti-retroviral therapy (ART)

Figure 22 indicates the annual expenditure per client on ART increased from BWP 1,828 (USD175) in 2018/19 to BWP 2,271 (USD209) in 2019/20, while the numbers on ART (adults and paediatrics) increased by 4% from 299,483 to 310,743 in 2020 (right axis in figure 22). This might imply that economies of scale were not achieved in the ART programme with greater patient volumes. However, it was also possible that ARV procurements made at the end of 2017/18 were consumed in 2018/19 (resulting in the lower unit/spend in 2018/19), and/or that ARV procurements made at the end of 2019/20 were consumed in 2020/21 (resulting in the higher unit/spend in 2019/20). The latter possibility is illustrated by the spending on the per person **ARV portion** increasing from P1,099 (USD105) to P1,415 (USD130). The ARV expenditure per client would normally be expected to remain constant, or reduce with the roll-out of cheaper Dolutegravir (DTG) formulations (estimated at USD85 per client). Therefore, the averaged unit of expenditure over the two-year period may provide a better indication of actual spend per ART patient – calculated at BWP 2,054 (USD 189) per annum.

Figure 22: Spending (PWB) per client on ART per annum (2018-2019), by production factor compared to HABSP unit cost (2020)

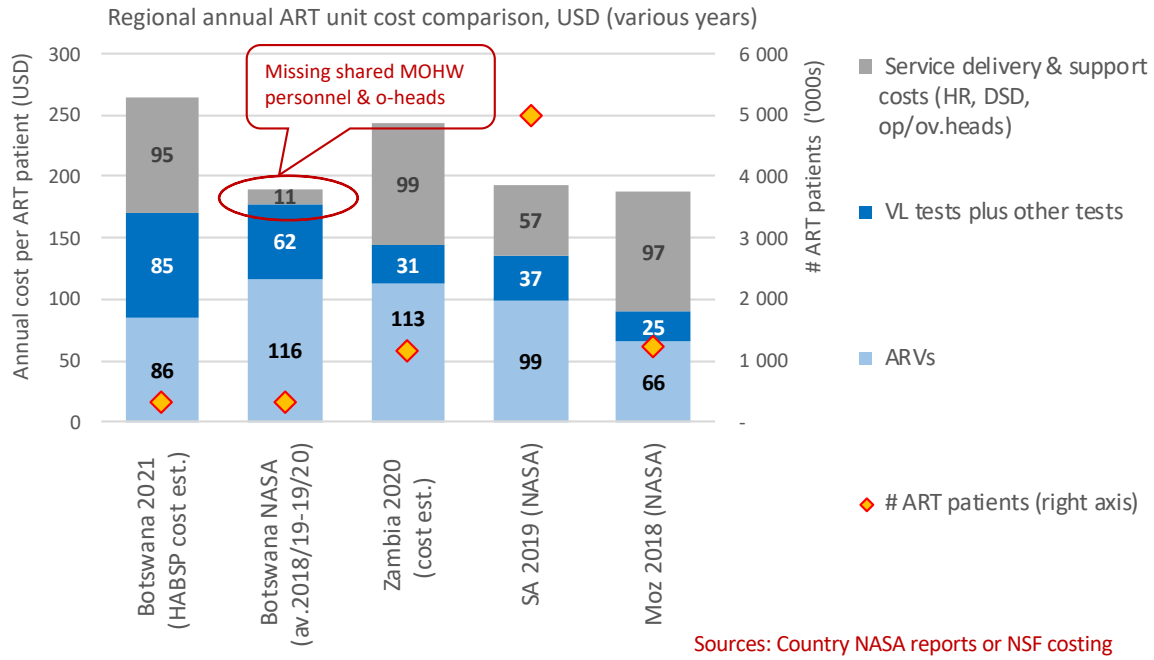


* NB. Some public financing for the MOH **shared operational** costs attributable to HIV care and treatment services are still to be estimated by the SHA team and inserted – *however they might not be able to attribute them to ART specifically*.

Although the average annual ART per patient (USD 189) was lower than was used for the HABSP unit cost (USD 277), this merely highlights the missing shared MOHW spending on personnel and overheads costs for ART service delivery in the NASA data (pending the SHA estimation of these expenditures shared across different diseases and services).

Figure 23 compares the NASA average ART unit of expenditure with the HABSP unit cost components (far left bar) as well as with those from other countries in the region. The Botswana annual average ARV spending per patient (USD 116) appeared to be the highest (and higher than the DTG estimated prices of USD86), but is influenced by the patient mix (adults vs pediatrics, and per regimen) as these influence the average across all patients. Further analysis of the spending per regimen per patient compared with the regional procurement prices could indicate areas of potential efficiency gains, and appropriate action taken. For example, GoB could explore cheaper procurement arrangements through pooled procurement mechanisms, such as Global Fund's, CHAI's, or by partnering with countries in the region that procure greater volumes, such as South Africa. Botswana's laboratory spending per ART patient (USD 62) was also higher than other countries – possibly due to the more comprehensive battery of tests required (not just viral load monitoring).

Figure 23: Regional comparison of cost/ spend per patient/client on ART (various years, USD and %)



Sources: Mozambique & South Africa NASA reports, Zambia NSF costing, Botswana: HABSP costing and NASA findings.

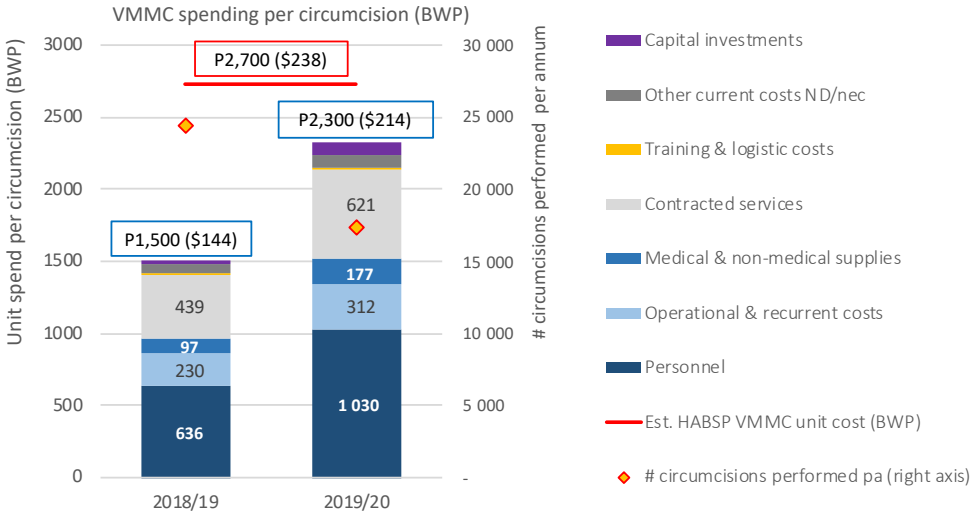
ii. *Units of expenditure on voluntary male medical circumcision (VMMC)*

The calculation of the spending per circumcision performed in Botswana (Figure 24) found an increase of 55% from P1,500 (USD144) in 2018/19 to P2,300 (USD214) in 2019/20, while the numbers of circumcisions decreased by 28% (right axis). This may be due to diseconomies of scale as the demand

for VMMC decreased but service delivery sites had some fixed personnel and overhead costs that could not be reduced, and these therefore increased per circumcision. The contracted services spending also increased, possibly due to fixed contractual amounts for service delivery. The supplies (medical and non-medical) component formed a very small portion of the spending per procedure in both years.

Although the unit of expenditure in both years remained under the estimated HABSP cost (of P2,700, USD238), this was because the latter included the comprehensive costs for a VMMC project implemented by an NGO. The NASA spending did not include the shared health facility costs (supplies, personnel and other overheads) for circumcisions at public health facilities. Since the majority of circumcisions are performed in public facilities, the NASA unit of expenditure for VMMC has been understated.

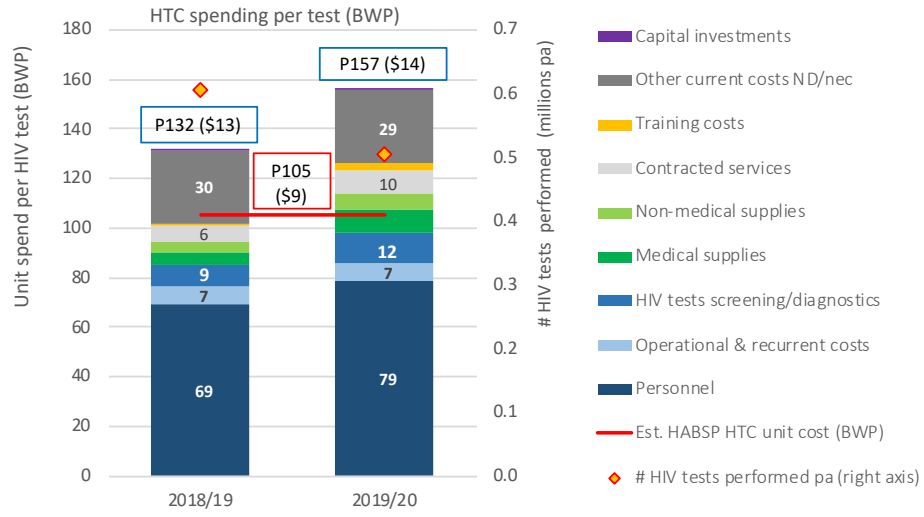
Figure 24: Unit of expenditure per circumcision performed (2018/19-2019/20, BWP)



iii. Units of expenditure on HIV testing and counselling (HTC)

The reducing number of HIV tests performed (by 16% between the two years) similarly appeared to have slightly increased the unit of expenditure per test from P132 (USD13) in 2018/19 to P157 (USD14) in 2019/20 (figure 25). This was mostly driven by increased personnel spend per test and cost per HIV test kit (14% and 35% increases respectively) – both of which may have been partially inflation-related. The HABSP estimated HTC unit cost was based on one project providing testing services to the general population. The NASA expenditures included KPs' testing services, which are more expensive because they are harder to reach. This could partially explain the HABSP unit cost being lower than the NASA unit of expenditure.

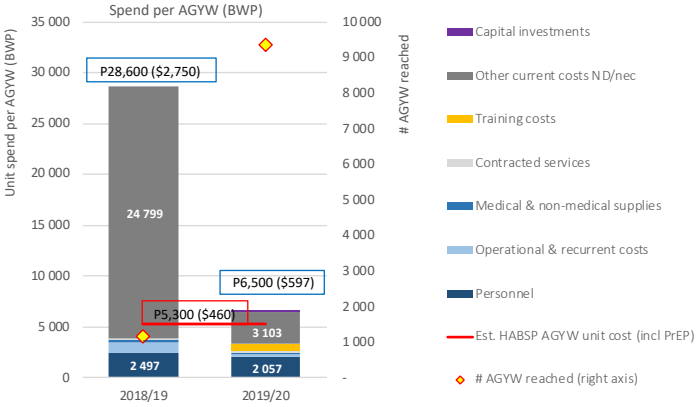
Figure 25: Unit of expenditure per HIV test (2018/29-2019/20, BWP)



iv. Units of expenditure on interventions for AGYW

The calculated *average* unit of expenditure per AGYW reached by prevention package (which may vary depending on their implementers) displayed clear economies of scale (figure 26), with a dramatic reduction of 78% in the unit of expenditure as the numbers reached dramatically increased (almost seven-fold). The AGYW spending in 2018/29 occurred in the early stages of the programe and was likely driven by the high set-up costs and initial low reach. Further economies of scale could be realized as the numbers of AGYW and ABYM reached are increased further, and brought below the estimated HABSP unit cost of P5,300 (USD460).

Figure 26: Unit of expenditure per AGYW reached (2018/29-2019/20, BWP)



In summary, the Botswana HIV response appears to have achieved some allocative efficiencies, despite lower amounts of spending than were anticipated as needed for the HABSP. However, certain programmes may need greater prioritization in terms of funding allocations if the HABSP goals are to be achieved. As far as technical efficiencies, the units of expenditure for specific programmes, as simple indicators of value for money, show that some economies of scale were reached in the AGYW programme, while diseconomies were evidenced in VMMC and HTC programmes. The ART programme, given its largest share of overall HIV spending in Botswana, could realise greater savings through reduced ARV and laboratory prices – possibly through pooled procurement mechanisms.

4. Summary and Recommendations

This NASA found that spending on Botswana's national response to HIV was at BWP1.505 billion (USD 144.3 million) in 2018/19 and BWP1.770 in 2019/20 (USD 162.7 million), an increase of 18% between the two years. Public financing entities contributed the majority, and increasing (59% and 61%), of financial resources followed by international entities.

These resources were mainly channeled through the public financing agents and purchasers (FAPs) (62% in both years). The international FAPs managed 30% and 31% in 2018/19 and 2019/20 respectively, with the remaining balance managed by private FAPs. In terms of service provision, 61% and 62% of 2018/19 and 2019/20, respectively, was spent through public sector providers. PEPFAR's non-governmental implementers spent 30% and 31% in 2018/19 and 2019/20 respectively. Non-profit (NGOs) spent 7% of 2018/19 and 6% of 2019/20, respectively, with private for-profit service providers accounting for 2% of spending in each year.

Care and treatment accounted for most of the spending during the assessment period (44% and 49%), followed by social protection and economic support (20% and 18%) and prevention, taking 12% of spending in 2018/19 and 11% in 2019/20, which was below the target rate of 25% by the Global Preventing Coalition[x].

Over the two-year assessment period, PLHIV benefitted the most from HIV spending, accounting for 47% of spending, on average. Vulnerable and accessible populations, accounted for 24.6% of spending, mainly made up of spending on orphans and vulnerable children (18.5%). Included in vulnerable and accessible populations are adolescent girls and you women (AGYW), who accounted for 2.87% of spending. Interventions that are not targeted, like HIV related research, development synergies, programme enablers and health systems strengthening accounted for 18% of spending. Spending on key populations accounted for 1.22% on average, having declined from 1.5% in 2018/19 to 1% in 2019/20.

The comparison of the NASA findings for 2019/20 with the estimated costs of the HABSP for 2020 found that care and treatment reflected the biggest gap, with spending in 2019/20 of BWP 164 million less than anticipated as needed in 2020, which can be mostly explained by the fact that NASA had not yet been able to capture the MoHW's expenditure on shared personnel and overhead costs for the HIV treatment services in the health facilities – which will be estimated for the SHA and will be added to the NASA HIV expenditure. There also appeared to be financial shortfalls for AGYW interventions, condoms and VMMC.

A simple measure of value for money (VfM) was determined by calculating the spending per output or person reached – units of expenditure broken into production factors and compared with the HABSP unit cost (to explore their main cost drivers). These calculations showed that some economies of scale were reached in the AGYW programme, while diseconomies were evidenced in VMMC and HTC programmes. The ART programme, given its largest share of overall HIV spending in Botswana, could realise greater savings through reduced ARV and laboratory prices – possibly through pooled

[x] The Global HIV Prevention Coalition, formed in 2017, aims to strengthen and sustain political commitment for primary prevention by setting a common agenda among key policy makers, funders, and programme implementers.

procurement mechanisms. Further analysis of the spending per regimen per patient compared with regional procurement prices could indicate areas of potential efficiency gains, and appropriate action taken.

Key recommendations:

- To improve the representation of the total GoB contribution, the MoHW shared personnel and operational costs attributable to HIV services should be estimated by the SHA, with updated distribution keys and agreement on the assumptions applied.
- Undertaking activity-based costing (ABC) studies would assist with providing insight into the share of human resource time and costs per HIV activity.
- To improve the inclusion of the private sector contributions, NAHPA should design a system to more routinely and comprehensively collect their HIV expenditures, possibly with mandated annual reporting requirements.
- SHA should collect or estimate the out-of-pocket payments and allocate the HIV-related OOP.
- Although prevention spending increased by 6% between the two study years, the proportional amount of total HIV spending for prevention decreased from 12% to 11%, and would need concerted commitments to increase it to 25% of total HIV spending (especially with treatment costs continuing to rise).
- Key prevention interventions were mainly donor funded and therefore face greater sustainability uncertainty if donors reduce their support – therefore public funds for prevention should be increased and directed towards the high impact prevention interventions (the Five Pillars of Prevention).
- Spending on condoms, AGYW and VMMC (with demand creation) needs to be increased to match the NSF resource needs and prioritisation.
- Regarding its ART programme, Botswana could realise greater efficiencies especially in the ARV and laboratory prices. Further analysis on the spending per regimen per patient compared with regional procurement prices could indicate areas of potential efficiency gains, and appropriate action taken.
- Further efficiency gains might be achieved through the expansion of differentiated service delivery modalities.
- Increased joint planning to determine where to direct public and donor funds could minimize duplication of funding and parallel planning processes, with consideration of improving the sustainability of key interventions.

Appendices

Appendix 1: Financing Entities and Schemes

i) Financing Entities (BWP)

Financing Entities	2018/19	2019/20
FE.01.01 Governmental	**887 810 556**	**1 072 448 251**
FE.01.01.01 Central government	887 810 556	1 072 448 251
FE.02.01 Domestic corporations	**275 879**	**18 000**
FE.02.02 Households	**3 924 133**	**6 433 206**
FE.03.02 Multilateral Organizations	**84 038 836**	**48 633 621**
FE.03.02.07 The Global Fund to Fight AIDS, Tuberculosis and Malaria	82 508 566	47 051 941
FE.03.02.08 UNAIDS Secretariat	850 673	860 384
FE.03.02.09 United Nations Children's Fund (UNICEF)	570 097	611 796
FE.03.02.20 World Health Organization (WHO)	109 500	109 500
FE.03.03 International not-for-profit organizations and foundations	**14 709 917**	**38 500 327**
FE.03.03.34 International Planned Parenthood Federation	1 314 964	1 734 412
FE.03.03.99 Other International not-for-profit organizations and foundations n.e.c.	13 394 953	36 765 916
FE.02.03 Domestic not-for-profit institutions (other than social insurance)	**546 538**	**1 551 216**
FE.03.01 Governments providing bilateral aid	**488 184 803**	**576 357 216**
FE.03.01.30 Government of United States	488 184 803	576 357 216
FE.02.99 Other Private financing n.e.c.	**24 750 737**	**25 901 046**
FE.01.99 Other public n.e.c.	**287 407**	**355 575**
Grand Total	**1 504 528 806**	**1 770 198 459**

ii) Financing Schemes and Financing Entities (BWP)

SCHEMES AND Financing Entities (BWP)	2018/19	2019/20
SCH.01.01.01 Central government schemes	**880 320 971**	**1 058 523 910**
FE.01 Public Entities	868 297 113	1 048 102 569
FE.01.01 Governmental	868 297 113	1 048 102 569
FE.03 International Entities	12 023 858	10 421 341
FE.03.02 Multilateral Organizations	12 023 858	10 421 341
SCH.02.02.02 Resident foreign agencies schemes	**493 068 865**	**600 527 888**
FE.03 International Entities	493 068 865	600 527 888
FE.03.02 Multilateral Organizations	1 530 270	1 581 680
FE.03.03 International not-for-profit organizations a	3 353 792	22 588 992
FE.03.01 Governments providing bilateral aid	488 184 803	576 357 216
SCH.02.03.01 Enterprises (except health care providers	**50 000**	
FE.02 Domestic Private Entitites	50 000	
FE.02.01 Domestic corporations	50 000	
SCH.02.02.01 Not-for-profit organisation schemes (excl	**101 097 685**	**78 003 669**
FE.01 Public Entities	18 664 436	23 910 518
FE.01.01 Governmental	18 664 436	23 910 518
FE.02 Domestic Private Entitites	592 417	1 551 216
FE.02.01 Domestic corporations	45 879	
FE.02.03 Domestic not-for-profit institutions (other th	546 538	1 551 216
FE.03 International Entities	81 840 833	52 541 935
FE.03.02 Multilateral Organizations	70 484 708	36 630 600
FE.03.03 International not-for-profit organizations an	11 356 125	15 911 335
SCH.01.01.98 Government schemes not dissagregated	**639 180**	**435 164**
FE.01 Public Entities	639 180	435 164
FE.01.01 Governmental	639 180	435 164
SCH.02.03.98 For-profit enterprise schemes not dissagr	**467 407**	**373 575**
FE.01 Public Entities	287 407	355 575
FE.01.99 Other public n.e.c.	287 407	355 575
FE.02 Domestic Private Entitites	180 000	18 000
FE.02.01 Domestic corporations	180 000	18 000
SCH.02.01.01 Primary/substitutory health insurance sc	**28 674 870**	**32 334 252**
FE.02 Domestic Private Entitites	28 674 870	32 334 252
FE.02.02 Households	3 924 133	6 433 206
FE.02.99 Other Private financing n.e.c.	24 750 737	25 901 046
SCH.01.01.02 State/regional/local government scheme	**209 828**	
FE.01 Public Entities	209 828	
FE.01.01 Governmental	209 828	
Total (BWP)	**1 504 528 806**	**1 770 198 459**

iii) Financing Schemes and HIV programme area (ASC) (BWP)

SCH x ASC	BWP 2018/19	BWP 2019/2
SCH.01.01.01 Central government schemes	**880 320 971**	**1 058 523 910**
ASC.01 Prevention	74 488 875	63 645 125
ASC.02 HIV testing and counselling (HTC)	8 481 262	10 009 796
ASC.03 HIV Care and Treatment Care	485 486 846	635 629 531
ASC.04 Social protection and economic support (for PLHIV, their	258 538 102	289 490 223
ASC.05 Social Enablers (excluding the efforts for KPs above)		381 011
ASC.06 Programme enablers and systems strengthening	53 325 886	59 368 224
SCH.01.01.98 Government schemes not dissagregated	**639 180**	**435 164**
ASC.01 Prevention	109 000	66 420
ASC.05 Social Enablers (excluding the efforts for KPs above)	38 600	7 980
ASC.06 Programme enablers and systems strengthening	245 380	360 764
ASC.07 Development synergies	246 200	
SCH.02.01.01 Primary/substitutory health insurance schemes	**28 674 870**	**32 334 252**
ASC.03 HIV Care and Treatment Care	28 674 870	32 334 252
SCH.02.02.01 Not-for-profit organisation schemes (excluding SCH.	**101 097 685**	**78 003 669**
ASC.01 Prevention	52 421 110	35 602 132
ASC.02 HIV testing and counselling (HTC)	5 036 170	5 826 901
ASC.03 HIV Care and Treatment Care	7 561 722	12 119 705
ASC.04 Social protection and economic support (for PLHIV, their	672 696	2 727 570
ASC.05 Social Enablers (excluding the efforts for KPs above)	4 874 581	4 635 377
ASC.06 Programme enablers and systems strengthening	30 531 406	17 091 983
SCH.02.02.02 Resident foreign agencies schemes	**493 068 865**	**600 527 888**
ASC.01 Prevention	58 897 963	97 449 192
ASC.02 HIV testing and counselling (HTC)	66 029 248	63 227 137
ASC.03 HIV Care and Treatment Care	143 192 867	185 853 258
ASC.04 Social protection and economic support (for PLHIV, their	38 765 920	19 725 603
ASC.05 Social Enablers (excluding the efforts for KPs above)	4 539 627	9 612
ASC.06 Programme enablers and systems strengthening	178 289 447	211 674 094
ASC.08 HIV-related research (paid by earmarked HIV funds)	3 353 792	22 588 992
SCH.02.03.01 Enterprises (except health care providers) schemes	**50 000**	
ASC.01 Prevention	50 000	
SCH.02.03.98 For-profit enterprise schemes not dissagregated	**467 407**	**373 575**
ASC.01 Prevention	467 407	373 575
SCH.01.01.02 State/regional/local government schemes	**209 828**	
ASC.06 Programme enablers and systems strengthening	209 828	
Grand Total	**1 504 528 806**	**1 770 198 459**

iv) Financing Schemes and Beneficiary Populations (BWP)

SCH x BP (BWP)	2018/19	2019/20
SCH.01.01.01 Central government schemes	**880 320 971**	**1 058 523 910**
BP.01 People living with HIV (regardless of having a medical/clinical diagnosis of AIDS)	485 486 846	635 629 531
BP.02 Key populations		79 935
BP.03 Vulnerable, accessible and other target populations	301 901 429	335 296 694
BP.04 General population	39 606 810	27 768 515
BP.05 Non-targeted interventions	53 325 886	59 749 235
SCH.02.02.02 Resident foreign agencies schemes	**493 068 865**	**600 527 888**
BP.01 People living with HIV (regardless of having a medical/clinical diagnosis of AIDS)	143 291 926	185 934 866
BP.02 Key populations	11 209 232	10 494 287
BP.03 Vulnerable, accessible and other target populations	45 361 179	65 806 283
BP.04 General population	109 218 300	104 019 755
BP.05 Non-targeted interventions	183 988 228	234 272 698
SCH.02.03.01 Enterprises (except health care providers) schemes	**50 000**	
BP.03 Vulnerable, accessible and other target populations	50 000	
SCH.02.02.01 Not-for-profit organisation schemes (excluding SCH.02.02.02)	**101 097 685**	**78 003 669**
BP.01 People living with HIV (regardless of having a medical/clinical diagnosis of AIDS)	16 231 979	12 195 579
BP.02 Key populations	10 669 015	7 391 360
BP.03 Vulnerable, accessible and other target populations	33 604 972	22 685 464
BP.04 General population	5 622 874	14 080 470
BP.05 Non-targeted interventions	34 968 845	21 650 796
SCH.01.01.98 Government schemes not dissagregated	**639 180**	**435 164**
BP.03 Vulnerable, accessible and other target populations	109 000	66 420
BP.05 Non-targeted interventions	530 180	368 744
SCH.02.03.98 For-profit enterprise schemes not dissagregated	**467 407**	**373 575**
BP.03 Vulnerable, accessible and other target populations	467 407	373 575
SCH.02.01.01 Primary/substitutory health insurance schemes	**28 674 870**	**32 334 252**
BP.01 People living with HIV (regardless of having a medical/clinical diagnosis of AIDS)	28 674 870	32 334 252
SCH.01.01.02 State/regional/local government schemes	**209 828**	
BP.05 Non-targeted interventions	209 828	
Grand Total	**1 504 528 806**	**1 770 198 459**

Appendix 2: Financing Entities and their Agents and Purchasers (BWP)

FE x FAP (2018/19 BWP)	Public FAP	Private FAP	International FAP	Total BWP	% FE share
Public funding entity	886,663,330	1,434,633	-	888,097,963	59%
Private funding entity	-	29,497,287	-	29,497,287	2%
International funding entity	46,446,956	85,194,625	455,291,975	586,933,556	39%
Total	**933,110,286**	**116,126,545**	**455,291,975**	**1,504,528,806**	
% FAP share	62%	8%	30%		
				-	
FE x FAP (2019/20 BWP)	**Public FAP**	**Private FAP**	**International FAP**	**Total BWP**	**% FE share**
Public funding entity	1,062,044,633	10,759,193	-	1,072,803,826	61%
Private funding entity	-	33,903,468	-	33,903,468	2%
International funding entity	42,837,173	75,130,927	545,523,064	663,491,165	37%
Total	**1,104,881,806**	**119,793,589**	**545,523,064**	**1,770,198,459**	
% FAP share	62%	7%	31%		

Appendix 3: Spending by Service Providers (BWP)

i) Service providers totals (BWP)

Spending by Service Providers (BWP)	2018/19	2019/20
PS.01.01 Governmental organizations	**880 530 799**	**1 058 523 910**
PS.01.01.02 Ambulatory care (public)	**336 576 861**	**459 334 373**
PS.01.01.09 Schools and training facilities (public)	**42 375**	
PS.01.01.09.03 Higher education (public)	42 375	
PS.01.01.13 Government entities (public)	**353 875 040**	**384 578 987**
PS.01.01.13.01 National AIDS Coordinating Authority (NACs)	27 874 673	36 238 392
PS.01.01.13.02 Departments inside the Ministry of Health or equivalent	67 171 284	58 313 622
PS.01.01.13.04 Departments inside the Ministry of Social Development or equivalent	258 538 102	289 490 223
PS.01.01.13.05 Departments inside the Ministry of Defence or equivalent	229 780	501 250
PS.01.01.13.03 Departments inside the Ministry of Education or equivalent	61 200	35 500
PS.01.01.04 Laboratory and imaging facilities (public)	**190 036 523**	**214 610 550**
PS.01.02 Parastatal organizations	**287 407**	**355 575**
PS.01.02.98 Parastatal organizations not disaggregated	**287 407**	**355 575**
PS.02.01 Non-profit providers	**103 821 547**	**99 781 978**
PS.02.01.01 Non-profit non-faith-based providers	**101 079 334**	**97 230 762**
PS.02.01.01.14 Civil society organizations (private non-profit non-faith based)	89 830 453	65 623 280
PS.02.01.01.02 Ambulatory care (private non-profit non-faith based)	7 895 089	9 018 490
PS.02.01.01.12 Research institutions (private non-profit non-faith based)	3 353 792	22 588 992
PS.02.01.02 Non-profit faith-based providers	**2 742 213**	**2 551 216**
PS.02.01.02.13 Civil society organizations (private non-profit faith based)	2 148 913	2 551 216
PS.02.01.02.03 Mental health and substance abuse facilities (private non-profit faith based)	593 300	
PS.02.02 Profit-making private sector providers	**28 904 870**	**32 352 252**
PS.02.02.02 Ambulatory care (profit-making private)	**11 889 060**	**11 348 705**
PS.02.02.12 Research institutions (profit-making private)	**50 000**	
PS.02.02.98 Profit-making private sector providers not disaggregated	**180 000**	**18 000**
PS.02.02.04 Laboratory and imaging facilities (profit-making private)	**7 312 795**	**9 393 870**
PS.02.02.01 Hospitals (profit-making private)	**6 016 506**	**6 437 186**
PS.02.02.07 Pharmacies and providers of medical goods (profit-making private)	**3 456 509**	**5 154 491**
PS.03.02 Multilateral agencies	**1 530 270**	**1 581 680**
PS.02.99 Private sector providers n.e.c.	**1 269 110**	**1 245 848**
PS.03.99 Bilateral, multilateral entities, international NGOs and foundations – in country offices n.e.c.	**488 184 803**	**576 357 216**
Grand Total	**1 504 528 806**	**1 770 198 459**

ii) Financing Agents and their Service providers (BWP)

FAP x PS (BWP)	2018/19	2019/20
FAP.01 Public sector	**898 687 188**	**1 072 465 974**
PS.01.01 Governmental organizations	880 530 799	1 058 523 910
PS.01.02 Parastatal organizations	287 407	355 575
PS.02.01 Non-profit providers	16 599 872	12 340 641
PS.02.99 Private sector providers n.e.c.	1 269 110	1 245 848
FAP.02 Private sector	**116 126 545**	**119 793 589**
PS.02.01 Non-profit providers	87 221 675	87 441 337
PS.02.02 Profit-making private sector providers	28 904 870	32 352 252
FAP.03 International purchasing organizations	**489 715 073**	**577 938 896**
PS.03.02 Multilateral agencies	1 530 270	1 581 680
PS.03.99 Bilateral, multilateral entities, international N	488 184 803	576 357 216
Total (BWP)	**1 504 528 806**	**1 770 198 459**

Appendix 4: Spending by Service Delivery Modalities (BWP)

Service delivery modality (BWP)	2018/19	2019/20	Total (BWP)
SDM.01 Facility-based service modalities	**765,508,077**	**967,189,003**	**1,732,697,080**
SDM.01.01 Facility-based: Outpatient	498,453,763	673,745,584	1,172,199,346
SDM.01.98 Facility-based not disaggregated	261,037,808	287,006,234	548,044,041
SDM.01.02 Facility-based: Inpatient	6,016,506	6,437,186	12,453,692
SDM.02 Home and community based service modalities	**406,674,991**	**407,452,307**	**814,127,299**
SDM.02.01 Community-based: center	922,384	2,659,914	3,582,298
SDM.02.04 Community-based: mobile unit	775,169	75,873	851,042
SDM.02.05 Community-based: outreach	14,732,287	18,361,514	33,093,801
SDM.02.06 Community-based: home-based (including door-to-door)	16,837,602	21,290,903	38,128,505
SDM.02.98 Home and community based not disaggregated	368,180,703	357,627,534	725,808,236
SDM.02.99 Home and community based n.e.c.	5,226,846	6,930,470	12,157,316
SDM.02.02 Community-based: pick up points (CPUP)		506,100	506,100
SDM.98 Modalities not disaggregated	**51,320,711**	**70,148,982**	**121,469,693**
SDM.03 Non applicable (ASC which does not have a specific SDM)	**279,027,960**	**320,795,965**	**599,823,925**
SDM.99 Modalities n.e.c.	**1,997,067**	**4,612,201**	**6,609,268**
Total (BWP)	**1,504,528,806**	**1,770,198,459**	**3,274,727,265**

Appendix 5: Programme Area Spending by Interventions (BWP)

i) ASC totals (BWP)

Spending by ASC BWP	2018/19	2019/20	Total BWP
ASC.01 Prevention	**186,434,355**	**197,136,445**	**383,570,800**
ASC.01.01 Five Pillars of Prevention	**108,211,005**	**122,458,501**	**230,669,506**
ASC.01.01.01 Prevention for adolescent girls and young women (AGYW) and their male partners in settings with high HIV prevalence	33,478,751	60,602,490	94,081,240
ASC.01.01.01.02 Youth-friendly SRH services for AGYW - only if earmarked HIV funds are spent	2,751,226	2,145,618	4,896,843
ASC.01.01.01.04 Cash transfers, social grants and other economic empowerment as part of programmes for AGYW - only if earmarked HIV funds are spent		3,548	3,548
ASC.01.01.01.98 Programmatic activities for AGYW not disaggregated by type	19,315,037	48,637,749	67,952,786

ASC.01.01.01.03 Behaviour change communication (BCC) as part of programmes for AGYW and their male partners - only if earmarked HIV funds are spent	11,412,488	6,298,068	17,710,556
ASC.01.01.01.01 Condom promotion and distribution as part of dedicated programmes for AGYW - only if earmarked HIV funds are spent		99,855	99,855
ASC.01.01.01.99 Other activities for AGYW n.e.c.		3,417,652	3,417,652
ASC.01.01.02 Services for key populations	16,373,241	13,729,804	30,103,044
ASC.01.01.02.01 Programmatic activities for sex workers and their clients	8,519,260	5,625,605	14,144,864
ASC.01.01.02.02 Programmatic activities for gay men and other men who have sex with men (MSM)	4,193,154	5,643,304	9,836,458
ASC.01.01.02.98 Services for key populations not disaggregated (exclusively for the five populations here described)	3,660,827	2,460,895	6,121,722
ASC.01.01.03 Condoms (for HIV prevention) for the general population (excluding KPs and AGYW above)	21,215,174	6,018,554	27,233,729
ASC.01.01.03.04 Sale of condoms (purchased by individuals)	172,614	150,734	323,349
ASC.01.01.03.98 Condom activities (for HIV prevention) not disaggregated	21,042,560	5,361,720	26,404,280
ASC.01.01.03.01 Provision of free condoms for HIV prevention (excluding for KPs and AGYW)		506,100	506,100
ASC.01.01.04 Voluntary medical male circumcision (VMMC) for HIV prevention	36,699,913	40,621,248	77,321,162
ASC.01.01.04.98 VMMC activities (for HIV prevention) not disaggregated	36,699,913	40,621,248	77,321,162
ASC.01.01.05 Pre-Exposure Prophylaxis (PrEP)	443,926	1,486,405	1,930,331
ASC.01.01.05.01 PrEP as part of programmes for AGYW	59,556		59,556
ASC.01.01.05.98 PrEP not disaggregated by key population	384,370	1,406,470	1,790,840
ASC.01.01.05.02 PrEP as part of programmes for sex workers and their clients		29,655	29,655
ASC.01.01.05.03 PrEP as part of programmes for gay men and other men who have sex with men (MSM)		50,280	50,280
ASC.01.02 Other Prevention activities	**78,223,350**	**74,677,944**	**152,901,294**
ASC.01.02.01 Prevention of vertical transmission of HIV infection (PMTCT)	45,202,996	42,072,226	87,275,223
ASC.01.02.01.03 Reproductive health and family planning services as part of PMTCT programmes	775,169	75,873	851,042
ASC.01.02.01.98 PMTCT not disaggregated by activity	44,427,828	41,996,353	86,424,181
ASC.01.02.02 Social and behavioural communication for change (SBCC) for populations other than key populations	3,228,502	6,970,938	10,199,441
ASC.01.02.03 Community mobilization for populations other than key populations	701,780	437,228	1,139,008
ASC.01.02.04 Programmatic activities for vulnerable and accessible populations	9,108,989	3,265,699	12,374,688
ASC.01.02.04.01 Condom and lubricant promotion and provision as part of programmes for vulnerable and accessible populations	35,926	44,447	80,373
ASC.01.02.04.03 Behaviour change communication (BCC) as part of programmes for vulnerable and accessible populations	8,703,280	509,189	9,212,469
ASC.01.02.04.98 Programmatic activities for vulnerable and accessible population not disaggregated by type	369,783	2,712,064	3,081,847
ASC.01.02.05 Prevention for children and youth (excluding for AGYW in countries with high HIV prevalence)	1,962,136	1,833,047	3,795,182
ASC.01.02.05.01 Prevention activities implemented in school	40,000		40,000
ASC.01.02.05.02 Prevention activities implemented out-of-school	761,550	500,000	1,261,550
ASC.01.02.05.98 Prevention activities for children and youth not disaggregated by type	1,160,585	1,333,047	2,493,632
ASC.01.02.07 Prevention and wellness programmes in the workplace	2,186,847	5,179,871	7,366,718

ASC.01.02.10 STI prevention and treatment programmes for populations other than key populations - only if funded from earmarked HIV budgets	4,859,572	5,888,319	10,747,891
ASC.01.02.98 Prevention activities not disaggregated	10,972,528	7,868,282	18,840,810
ASC.01.02.99 Other prevention activities n.e.c.		1,162,334	1,162,334
ASC.02 HIV testing and counselling (HTC)	**79,546,680**	**79,063,834**	**158,610,514**
ASC.02.01 HIV testing and counselling for sex workers	**2,135,868**	**2,554,574**	**4,690,442**
ASC.02.02 HIV testing and counselling for MSM	**436,283**	**194,799**	**631,082**
ASC.02.08 HIV testing and counselling for vulnerable and accessible populations	**1,068,764**	**532,887**	**1,601,651**
ASC.02.09 Voluntary HIV testing and counselling for general population	**72,880,418**	**71,353,510**	**144,233,929**
ASC.02.98 HIV testing and counselling activities not disaggregated	**3,025,347**	**3,848,366**	**6,873,713**
ASC.02.03 HIV testing and counselling for TG		**579,698**	**579,698**
ASC.03 HIV Care and Treatment Care	**664,916,305**	**865,936,747**	**1,530,853,052**
ASC.03.01 Anti-retroviral therapy	**342,428,576**	**465,091,392**	**807,519,967**
ASC.03.01.01 ART for adults	58,062,355	50,985,827	109,048,182
ASC.03.01.01.98 Adult antiretroviral therapy not disaggregated by line of treatment	58,062,355	50,985,827	109,048,182
ASC.03.01.02 ART for paediatrics		9,018,490	9,018,490
ASC.03.01.02.98 Paediatric antiretroviral therapy not disaggregated by line of treatment		9,018,490	9,018,490
ASC.03.01.98 Antiretroviral therapy not disaggregated neither by age nor by line of treatment nor for PMTCT	284,366,220	405,087,076	689,453,296
ASC.03.02 Adherence and retention on ART - support (including nutrition and transport) and monitoring	**1,525,255**	**1,400,000**	**2,925,255**
ASC.03.03 Specific ART-related laboratory monitoring	**203,489,383**	**239,225,113**	**442,714,495**
ASC.03.04 Co-infections and opportunistic infections: prevention and treatment for PLHIV and KPs	**15,925,543**	**11,404,357**	**27,329,900**
ASC.03.04.01 TB prevention, case finding, screening, diagnosis, treatment and adherence for PLHIV and KPs	1,547,411	305,163	1,852,574
ASC.03.04.01.99 Other TB activities n.e.c	1,547,411	305,163	1,852,574
ASC.03.04.98 Other OI prophylaxis and treatment not disaggregated by type (excluding TB and hepatitis)	14,378,132	11,099,194	25,477,326
ASC.03.05 Psychological treatment and support service	**742,593**	**307,775**	**1,050,368**
ASC.03.06 Palliative care	**15,781,765**	**21,842,119**	**37,623,884**
ASC.03.98 Care and treatment services not disaggregated	**84,978,191**	**126,620,992**	**211,599,182**
ASC.03.99 Care and treatment services n.e.c.	**45,000**	**45,000**	**90,000**
ASC.04 Social protection and economic support (for PLHIV, their families, for KPs and for Orphans and Vulnerable Children) (where HIV ear-marked funds are used)	**297,976,719**	**311,943,396**	**609,920,115**
ASC.04.01 Social protection and economic support for OVC	**297,830,842**	**307,999,679**	**605,830,520**
ASC.04.01.01 OVC Basic needs (health, education, housing)	20,239,472	10,270,078	30,509,550
ASC.04.01.98 OVC Services not disaggregated by activity	266,558,289	293,354,377	559,912,667
ASC.04.01.03 OVC Social Services (including financial benefits)	563,392	1,061,026	1,624,418
ASC.04.01.99 OVC services n.e.c.	10,469,688	3,314,198	13,783,886
ASC.04.02 Other social protection and economic support (non-OVC)	**145,878**	**3,943,717**	**4,089,594**
ASC.04.02.03 HIV-specific income generation projects	99,059	81,608	180,667
ASC.04.02.98 Social protection services and social services not disaggregated by type	46,818	3,862,109	3,908,928
ASC.05 Social Enablers (excluding the efforts for KPs above)	**9,452,807**	**5,033,980**	**14,486,787**
ASC.05.02 Human rights programmes	**9,387,321**	**4,915,196**	**14,302,517**
ASC.05.02.02 HIV-related legal services	1,220,763	1,674,997	2,895,760

ASC.05.02.03 Monitoring and reforming laws, regulations and policies relating to HIV	2,149,915	385,504	2,535,419
ASC.05.02.06 Capacity building in human rights	382,958		382,958
ASC.05.02.98 Human rights programmes not disaggregated by type	4,893,474	95,226	4,988,700
ASC.05.02.04 Sensitization of law-makers and law enforcement agents	63,616	85,504	149,120
ASC.05.02.05 Reducing discrimination and violence against women in the context of HIV	676,595	1,547,600	2,224,195
ASC.05.02.01 Stigma and discrimination reduction		1,126,365	1,126,365
ASC.05.01 Advocacy	**65,486**	**118,784**	**184,271**
ASC.06 Programme enablers and systems strengthening	**262,601,947**	**288,495,065**	**551,097,012**
ASC.06.01 Strategic planning, coordination and policy development	**40,281,536**	**45,545,366**	**85,826,902**
ASC.06.03 Programme administration and management costs (above service-delivery level)	**152,814,624**	**179,126,155**	**331,940,779**
ASC.06.04 Strategic information	**31,761,593**	**35,425,673**	**67,187,266**
ASC.06.04.01 Monitoring and evaluation	1,101,666	93,900	1,195,566
ASC.06.04.98 Strategic information not disaggregated by type	29,916,818	31,711,133	61,627,951
ASC.06.04.05 HIV drug-resistance surveillance	18,650		18,650
ASC.06.04.99 Strategic information n.e.c.	724,459	3,569,560	4,294,019
ASC.06.04.02 Operations and implementation science research		51,080	51,080
ASC.06.05 Public Systems Strengthening	**27,329,084**	**14,484,980**	**41,814,065**
ASC.06.05.01 Procurement and supply chain	3,118,286	4,915,961	8,034,247
ASC.06.05.02 Laboratory system strengthening	24,210,798	9,569,019	33,779,818
ASC.06.06 Community system strengthening	**5,330,231**	**3,845,301**	**9,175,532**
ASC.06.06.01 Civil society institutional and NGO development	3,122,065	2,534,534	5,656,599
ASC.06.06.99 Community system strengthening n.e.c.	2,208,166	1,024,403	3,232,569
ASC.06.06.98 Community system strengthening not disaggregated		286,364	286,364
ASC.06.07 Human resources for health (above-site programmes)	**767,989**	**6,516,284**	**7,284,273**
ASC.06.07.98 Health and community workforce intervention(s) not disaggregated	767,989	6,516,284	7,284,273
ASC.06.98 Programme enablers and systems strengthening not disaggregated	**3,349,767**	**2,184,836**	**5,534,603**
ASC.06.99 Programme enablers and systems strengthening not disaggregated	**967,123**	**1,366,470**	**2,333,593**
ASC.08 HIV-related research (paid by earmarked HIV funds)	**3,353,792**	**22,588,992**	**25,942,784**
ASC.08.02 Clinical research	**3,353,792**	**21,969,132**	**25,322,924**
ASC.08.01 Biomedical research		**485,067**	**485,067**
ASC.08.99 HIV and AIDS-related research activities n.e.c.		**134,793**	**134,793**
ASC.07 Development synergies	**246,200**		**246,200**
ASC.07.01 Formative education to build-up an HIV workforce and other trainings not related to any specific activity (e.g., pre-service) using HIV earmarked resources	**246,200**		**246,200**
Grand Total	**1,504,528,806**	**1,770,198,459**	**3,274,727,265**

ii) FE X programme areas (BWP)

FE x ASC (2018/19, BWP)	Public FE	Public %	Private FE	Private %	International FE	International %	Total (BWP)
Prevention	85 947 107	46.1%	275 879	0.1%	100 211 369	53.8%	186 434 355
HTC	10 945 281	13.8%	-	0.0%	68 601 399	86.2%	79 546 680
Care and Treatment Care	486 092 990	73.1%	29 221 408	4.4%	149 601 907	22.5%	664 916 305
Social protection and economic support	259 210 799	87.0%	-	0.0%	38 765 920	13.0%	297 976 719
Social Enablers	985 747	10.4%	-	0.0%	8 467 060	89.6%	9 452 807
Programme enablers and HSS	44 669 839	17.0%	-	0.0%	217 932 108	83.0%	262 601 947
Development synergies	246 200	100.0%	-	0.0%	-	0.0%	246 200
HIV-related research	-	0.0%	-	0.0%	3 353 792	100.0%	3 353 792
Total	**888 097 963**	**59.0%**	**29 497 287**	**2.0%**	**586 933 556**	**39.0%**	**1 504 528 806**

FE x ASC (2019/20, BWP)	Public FE	Public %	Private FE	Private %	International FE	International %	Total (BWP)
Prevention	71 361 083	36.2%	18 000	0.0%	125 757 361	63.8%	197 136 445
HTC	13 087 324	16.6%	-	0.0%	65 976 510	83.4%	79 063 834
Care and Treatment	645 424 368	74.5%	33 885 468	3.9%	186 626 911	21.6%	865 936 747
Social protection & economic support	289 840 223	92.9%	-	0.0%	22 103 173	7.1%	311 943 396
Social Enablers	407 980	8.1%	-	0.0%	4 626 000	91.9%	5 033 980
Programme enablers & HSS	52 682 848	18.3%	-	0.0%	235 812 217	81.7%	288 495 065
Research	-	0.0%	-	0.0%	22 588 992	100.0%	22 588 992
Total	**1 072 803 826**	**60.6%**	**33 903 468**	**1.9%**	**663 491 165**	**37.5%**	**1 770 198 459**

iii) FE X programme areas (USD)

FE x ASC (2018/19, USD)	Public FE	Public %	Private FE	Private %	International FE	International %	Total (US$)
Prevention	8 242 532	46.1%	26 457	0.1%	9 610 509	53.8%	17 879 498
HTC	1 049 678	13.8%	-	0.0%	6 579 037	86.2%	7 628 716
Care and Treatment Care	46 617 474	73.1%	2 802 403	4.4%	14 347 179	22.5%	63 767 055
Social protection and economic support	24 858 932	87.0%	-	0.0%	3 717 744	13.0%	28 576 676
Social Enablers	94 535	10.4%	-	0.0%	812 011	89.6%	906 547
Programme enablers & HSS	4 283 944	17.0%	-	0.0%	20 900 208	83.0%	25 184 151
Development synergies	23 611	100.0%	-	0.0%	-	0.0%	23 611
HIV-related research	-	0.0%	-	0.0%	321 637	100.0%	321 637
Total	**85 170 708**	**59.0%**	**2 828 860**	**2.0%**	**56 288 324**	**39.0%**	**144 287 892**

FE x ASC (2019/20, USD)	Public FE	Public %	Private FE	Private %	International FE	International %	Total (US$)
Prevention	6 558 308	36.2%	1 654	0.0%	11 557 497	63.8%	18 117 460
HTC	1 202 766	16.6%	-	0.0%	6 063 449	83.4%	7 266 215
Care and Treatment Care	59 316 532	74.5%	3 114 181	3.9%	17 151 601	21.6%	79 582 314
Social protection and economic support	26 637 229	92.9%	-	0.0%	2 031 351	7.1%	28 668 580
Social Enablers	37 495	8.1%	-	0.0%	425 144	91.9%	462 639
Programme enablers & HSS	4 841 720	18.3%	-	0.0%	21 671 885	81.7%	26 513 605
Development synergies	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-
HIV-related research	-	0.0%	-	0.0%	2 076 000	100.0%	2 076 000
Total	**98 594 050**	**60.6%**	**3 115 835**	**1.9%**	**60 976 927**	**37.5%**	**162 686 812**

iv) Prevention interventions (BWP)

Prevention (BWP)	2018/19 BWP	2019/20 BWP	% 2018/19	% 2019/20
AGYW	33 478 751	60 602 490	18%	31%
Key Pop interventions	16 373 241	13 729 804	9%	7%
Condoms	21 215 174	6 018 554	11%	3%
VMMC	36 699 913	40 621 248	20%	21%
PrEP	443 926	1 486 405	0%	1%
PMTCT	45 202 996	42 072 226	24%	21%
SBCC	3 228 502	6 970 938	2%	4%
Community mobilization	701 780	437 228	0%	0%
Vulnerable & accessible populations	9 108 989	3 265 699	5%	2%
Children and youth	1 962 136	1 833 047	1%	1%
Wellness progm	2 186 847	5 179 871	1%	3%
STI prevention and treatment	4 859 572	5 888 319	3%	3%
Prevention not disag	10 972 528	7 868 282	6%	4%
Total prevention spend	**186 434 355**	**195 974 111**	**100%**	**100%**

Five Pillars of Prevention	2018/19 BWP	2019/20 BWP	% 2018/19	% 2019/20
AGYW	33 478 751	60 602 490	31%	49%
Key Populations	16 373 241	13 729 804	15%	11%
Condoms	21 215 174	6 018 554	20%	5%
VMMC	36 699 913	40 621 248	34%	33%
PrEP	443 926	1 486 405	0%	1%
Total spend on 5 pillars of prevention	**108 211 005**	**122 458 501**	**100%**	**100%**

Prevention (US$)	2018/19 BWP	2019/20 BWP	% 2018/19	% 2019/20
Five Pillars of Prevention	108 211 005	122 458 501	58%	62%
All other Prevention	78 223 350	73 515 610	42%	38%
Total Prevention	**186 434 355**	**195 974 111**	100%	100%

v) Prevention interventions by FE (2018/19, BWP)

Prevention Intervention (2018/19, BWP)	Public FE	International FE	Private FE	Public % share	International % share	Private % share
AGYW	3 254 732	30 224 019	-	4%	30%	0%
Key Pops.	307 500	16 065 741	-	0%	16%	0%
Condoms	21 042 560	172 614	-	24%	0%	0%
VMMC	1 994 914	34 704 999	-	2%	35%	0%
PrEP	-	398 047	45 879	0%	0%	17%
PMTCT	44 175 803	1 027 193	-	51%	1%	0%
SBCC	3 228 502	-	-	4%	0%	0%
Community mobilisation	544 245	157 535	-	1%	0%	0%
Vulnerable & Accessible Pops.	1 546 575	7 562 414	-	2%	8%	0%
Children and youth	1 601 224	360 912	-	2%	0%	0%
Workplace wellness prgm	1 956 847	-	230 000	2%	0%	83%
STI prevention and treatment	4 859 572	-	-	6%	0%	0%
Prevention not disagg.	1 434 633	9 537 895	-	2%	10%	0%
Total Prevention Spending (BWP)	**85 947 107**	**100 211 369**	**275 879**	**100%**	**100%**	**100%**

vi) Prevention interventions by FE (2019/20, BWP)

Prevention Intervention (2019/20, BWP)	Public FE	International FE	Private FE	Public % share	International % share	Private % share
AGYW	1 951 013	58 651 477	-	3%	47%	0%
Key Pops.	763 130	12 966 674	-	1%	10%	0%
Condoms	5 867 820	150 734	-	8%	0%	0%
VMMC	2 279 439	38 341 809	-	3%	30%	0%
PrEP	-	1 486 405	-	0%	1%	0%
PMTCT	41 733 904	338 322	-	58%	0%	0%
SBCC	4 229 241	2 741 697	-	6%	2%	0%
Community mobilisation	296 895	140 333	-	0%	0%	0%
Vulnerable & Accessible Pops.	801 705	2 463 995	-	1%	2%	0%
Children and youth	1 527 149	305 898	-	2%	0%	0%
Workplace wellness prgm	5 161 871	-	18 000	7%	0%	100%
STI prevention and treatment	5 888 319	-	-	8%	0%	0%
Prevention not disagg.	860 599	8 170 017	-	1%	6%	0%
Total Prevention Spending (BWP)	**71 361 083**	**125 757 361**	**18 000**	**100%**	**100%**	**100%**

vii) Key Population interventions (testing and prevention) (2018/19-19/20, BWP)

KP intervention (BWP)	2018/19	2019/20	2019 % of each KVP sub-total	2019 % of total KVP
Sex workers sub-total:	**10 655 128**	**8 180 179**		**47%**
SW STI/SRH services	24 093	-	0%	
SW Community empowerment	3 265 373	3 921 459	48%	
HIV testing for SW	2 135 868	2 554 574	31%	
SW interventionnot disagg. & n.e.c	5 229 794	1 704 146	21%	
MSM sub-total:	**4 629 437**	**5 838 103**		**33%**
MSM Condoms & lub	72 080	64 933	1%	
MSM Behaviour change	3 571 348	4 797 635	82%	
HIV testing for MSM	436 283	194 799	3%	
MSM STI/SRH services	306 970	381 164	7%	
MSM empowerment	-	99 572	2%	
MSM interventions not disagg.	242 756	300 000	5%	
HIV testing for TG	-	579 698		**3%**
Services for key populations not disaggg.	3 660 827	2 460 895		**14%**
HIV testing for vulnerable & accessible pops.	1 068 764	532 887		**3%**
Total KP spending (prevention + HTS)	**20 014 156**	**17 591 761**		**100%**

Appendix 6: Spending by Beneficiaries (BWP)

Spending per Beneficiary Population (BWP)	2018/19	2019/20
BP.01 People living with HIV (regardless of having a medical/clinical diagnosis of AIDS	**673 685 621**	**866 094 228**
BP.01.01 Adult and young people (aged 15 and over) living with HIV	3 673 418	11 976 804
BP.01.02 Children (aged under 15) living with HIV	11 923 498	9 018 490
BP.01.98 People living with HIV not broken down by age or gender	658 088 706	845 098 934
BP.02 Key populations	**21 878 247**	**17 965 581**
BP.02.02 Sex workers (SW) and their clients	10 655 128	8 209 834
BP.02.03 Gay men and other men who have sex with men (MSM)	4 983 284	5 888 383
BP.02.98 "Key populations" not broken down by type	6 239 835	3 867 365
BP.03 Vulnerable, accessible and other target populations	**381 493 987**	**424 228 436**
BP.03.01 Orphans and vulnerable children (OVC)	297 830 842	307 999 679
BP.03.02 Pregnant and breastfeeding HIV-positive women (not on ART) and their chil	44 427 828	41 996 353
BP.03.03 Adolescent girls and young women in countries with high HIV prevalence	33 538 307	60 602 490
BP.03.11 Children and youth out of school	761 550	500 000
BP.03.17 Junior high/high school students	40 000	
BP.03.21 Military	1 168 678	532 887
BP.03.22 Police and other uniformed services (other than the military)	229 780	501 250
BP.03.24 Employees (e.g. for workplace interventions)	1 957 067	4 612 201
BP.03.98 Vulnerable, accessible and other target populations not broken down by typ	876 617	3 179 932
BP.03.99 Other vulnerable, accessible and other target populations n.e.c.	623 118	4 278 645
BP.03.18 University students	40 200	25 000
BP.04 General population	**154 447 985**	**145 868 740**
BP.04.01 General adult population (aged older than 24)	362 452	1 162 334
BP.04.03 Youth (aged 15 to 24)	37 653 982	41 815 682
BP.04.98 General population not broken down by age or gender.	116 431 551	102 890 724
BP.05 Non-targeted interventions	**273 022 966**	**316 041 474**
Total (BWP)	**1 504 528 806**	**1 770 198 459**

Appendix 7: Spending by Production Factors

Spending by Production Factors (BWP)	2018/19	2019/20	Total BWP
PF.01 Current direct and indirect expenditures	**1,411,822,635**	**1,737,106,878**	**3,148,929,513**
PF.01.01 Personnel costs	**247,610,277**	**318,688,078**	**566,298,354**
PF.01.01.01 Direct service providers	*111,842,011*	*159,080,756*	*270,922,767*
PF.01.01.01.01 Labour costs - Direct service providers	*59,626,793*	*81,761,769*	*141,388,562*
PF.01.01.01.02 Fringe Benefits - Direct service providers	*34,666,345*	*46,907,392*	*81,573,737*
PF.01.01.01.04 Consultants (external)	*81,869*	*2,968,803*	*3,050,672*
PF.01.01.01.98 Direct service providers not disaggregated	*17,467,003*	*27,442,792*	*44,909,795*
PF.01.01.02 Program management personnel costs	*135,115,062*	*159,600,271*	*294,715,333*
PF.01.01.02.01 Labour costs - Program management	*117,205,366*	*141,571,322*	*258,776,688*
PF.01.01.02.04 Program Management Consultants (external)	*528,105*		*528,105*
PF.01.01.02.99 Program management personnel n.e.c.		*283,995*	*283,995*
PF.01.01.02.98 Program management personnel not disaggregated	*17,381,591*	*17,744,954*	*35,126,545*
PF.01.01.98 Personnel not disaggregated	*490,568*	*7,051*	*497,619*
PF.01.01.99 Personnel n.e.c.	*162,636*		*162,636*
PF.01.02 Other operational and programme management current expenditures	**50,917,393**	**58,746,226**	**109,663,619**
PF.01.02.01 Office rental costs	*3,415,248*	*3,696,749*	*7,111,997*

PF.01.02.02 Office utilities costs (electricity, water, heating, etc.)	*1,037,958*	*3,533,798*	*4,571,755*
PF.01.02.03 Travel expenditure	*30,081,875*	*37,222,418*	*67,304,293*
PF.01.02.04 Administrative and programme management costs	*13,690,758*	*8,792,542*	*22,483,300*
PF.01.02.98 Other current costs not disaggregated	*2,691,217*	*4,222,519*	*6,913,735*
PF.01.02.99 Other current costs n.e.c.	*338*	*1,278,200*	*1,278,538*
PF.01.03 Medical products and supplies	**610,791,200**	**753,839,741**	**1,364,630,942**
PF.01.03.01 Pharmaceuticals	*330,871,484*	*442,473,304*	*773,344,788*
PF.01.03.01.01 Antiretrovirals	*329,197,826*	*439,768,344*	*768,966,171*
PF.01.03.01.98 Pharmaceuticals not disaggregated	*1,673,658*	*2,704,959*	*4,378,617*
PF.01.03.02 Medical supplies	*29,230,907*	*20,742,328*	*49,973,235*
PF.01.03.02.02 Condoms	*21,042,560*	*5,361,720*	*26,404,280*
PF.01.03.02.98 Medical supplies not disaggregated	*8,188,347*	*15,320,966*	*23,509,313*
PF.01.03.02.99 Medical supplies n.e.c.		*59,642*	*59,642*
PF.01.03.03 Laboratory reagents and materials	*195,548,125*	*228,836,677*	*424,384,801*
PF.01.03.03.01 HIV tests screening/diagnostics	*5,455,915*	*6,161,430*	*11,617,345*
PF.01.03.03.98 Reagents and materials not disaggregated	*190,092,210*	*222,675,247*	*412,767,456*
PF.01.03.04 non-medical supplies	*54,316,532*	*59,915,478*	*114,232,010*
PF.01.03.04.01 Food and nutrients	*35,924,898*	*34,703,674*	*70,628,571*
PF.01.03.04.02 Promotion and information materials	*1,980,546*	*2,235,805*	*4,216,351*
PF.01.03.04.98 non-medical supplies not disaggregated	*16,411,088*	*22,976,000*	*39,387,088*
PF.01.03.05 Office Supplies	*769,222*	*1,147,365*	*1,916,587*
PF.01.03.98 Medical products and supplies not disaggregated	*54,930*	*612,215*	*667,145*
PF.01.03.99 Medical products and supplies n.e.c.		*112,375*	*112,375*
PF.01.04 Contracted external services	54,500,013	71,727,661	126,227,674
PF.01.07 Financial support for beneficiaries	258,573,795	289,490,223	548,064,018
PF.01.08 Training- Training related per diems/transport/other costs	19,204,110	28,452,269	47,656,379
PF.01.09 Logistics of events, including catering services	1,881,316	1,605,333	3,486,649
PF.01.10 Indirect costs	45,918,957	76,930,543	122,849,499
PF.01.98 Current direct and indirect expenditures not disaggregated	109,086,166	125,961,690	235,047,856
PF.01.99 Current direct and indirect expenditures n.e.c.	13,339,408	11,665,116	25,004,524
PF.02 Capital expenditures	**12,557,999**	**7,640,397**	**20,198,396**
PF.02.01 Building	**4,207,821**		**4,207,821**
PF.02.01.02 Construction and renovation	*4,207,821*		*4,207,821*
PF.02.03 Other capital investment	**8,350,178**	**7,640,397**	**15,990,575**
PF.02.03.01 Information technology (hardware and software)	*4,545,787*	*2,738,140*	*7,283,927*
PF.02.03.02 Laboratory and other medical equipment	*652,506*	*166,722*	*819,229*
PF.02.03.03 Non medical equipment and furniture	*3,126,106*	*4,549,169*	*7,675,275*
PF.02.03.98 Other capital investment not disaggregated	*25,779*	*186,365*	*212,144*
PF.98 Production factors not disaggregated	80,148,172	25,451,184	105,599,356
Grand Total	**1,504,528,806**	**1,770,198,459**	**3,274,727,265**

Appendix 8: HIV Programme Spending by FE (BWP)

i) 2018/19

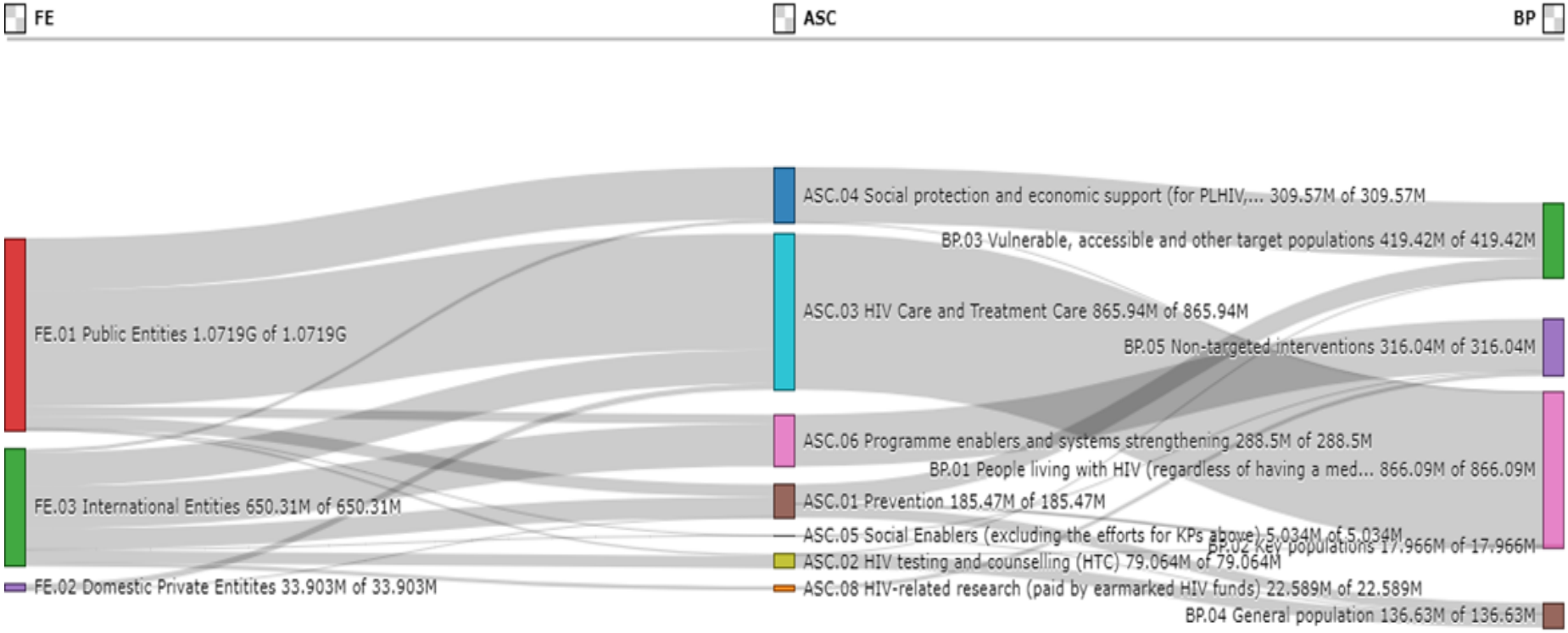
FE x ASC (2018/19, BWP)	Public FE	Public %	Private FE	Private %	nternational FE	nternational %	Total (BWP)
Prevention	85,947,107	46.1%	275,879	0.1%	100,211,369	53.8%	186,434,355
HTC	10,945,281	13.8%	-	0.0%	68,601,399	86.2%	79,546,680
Care and Treatment Care	486,092,990	73.1%	29,221,408	4.4%	149,601,907	22.5%	664,916,305
Social protection and economic support	259,210,799	87.0%	-	0.0%	38,765,920	13.0%	297,976,719
Social Enablers	985,747	10.4%	-	0.0%	8,467,060	89.6%	9,452,807
Programme enablers and HSS	44,669,839	17.0%	-	0.0%	217,932,108	83.0%	262,601,947
Development synergies	246,200	100.0%	-	0.0%	-	0.0%	246,200
HIV-related research	-	0.0%	-	0.0%	3,353,792	100.0%	3,353,792
Total	**888,097,963**	**59.0%**	**29,497,287**	**2.0%**	**586,933,556**	**39.0%**	**1,504,528,806**

ii) 2019/20

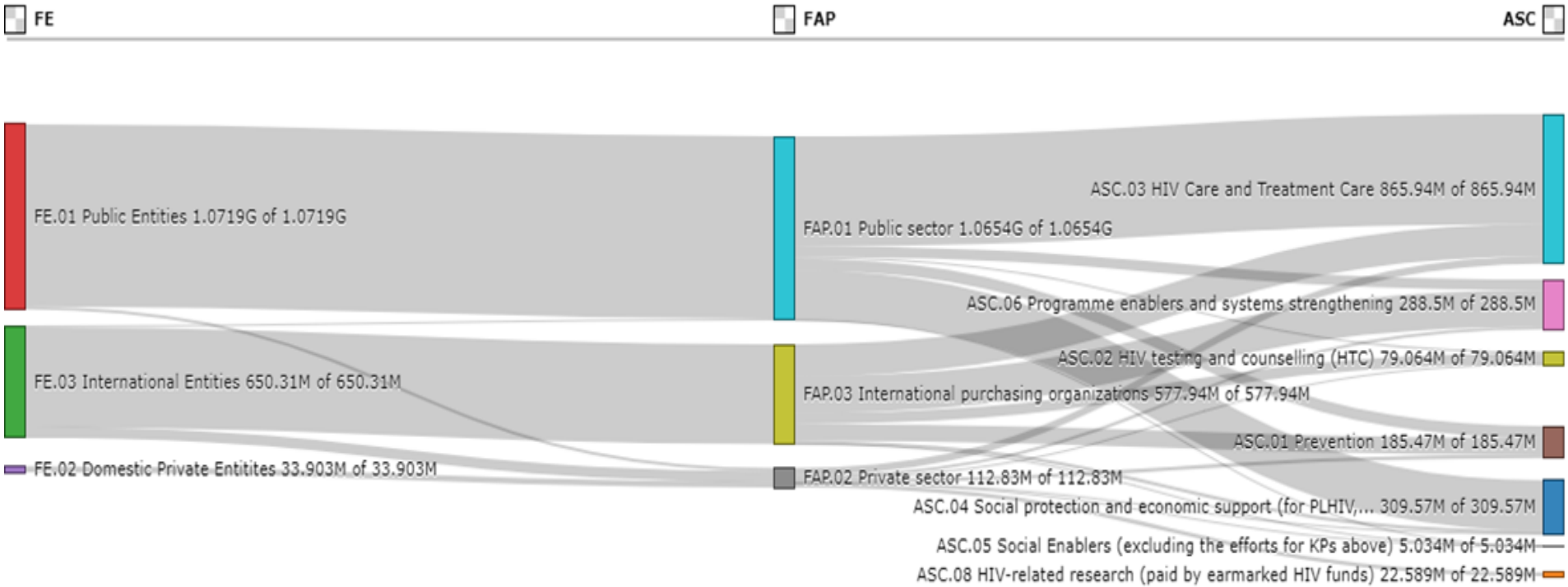
FE x ASC (2019/20, BWP)	Public FE	Public %	Private FE	Private %	nternational FE	nternational %	Total (BWP)
Prevention	71,361,083	36.2%	18,000	0.0%	125,757,361	63.8%	197,136,445
HTC	13,087,324	16.6%	-	0.0%	65,976,510	83.4%	79,063,834
Care and Treatment	645,424,368	74.5%	33,885,468	3.9%	186,626,911	21.6%	865,936,747
Social protection & economic support	289,840,223	92.9%	-	0.0%	22,103,173	7.1%	311,943,396
Social Enablers	407,980	8.1%	-	0.0%	4,626,000	91.9%	5,033,980
Programme enablers & HSS	52,682,848	18.3%	-	0.0%	235,812,217	81.7%	288,495,065
Research	-	0.0%	-	0.0%	22,588,992	100.0%	22,588,992
Total	**1,072,803,826**	**60.6%**	**33,903,468**	**1.9%**	**663,491,165**	**37.5%**	**1,770,198,459**

Appendix 9: Diagrams of Flow of Financial Resources

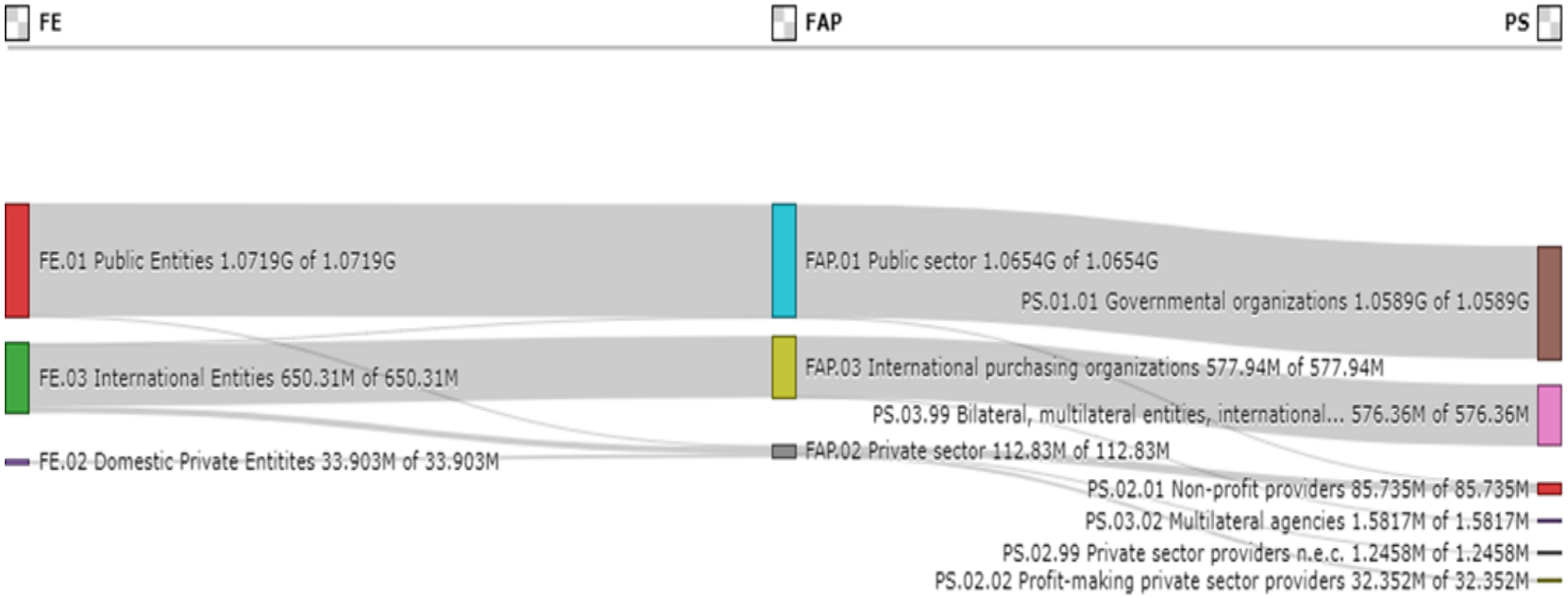
i) FE-ASC-BP (2019)



ii) FE-FAP-ASC (2019)



iii) FE-FAP-PS (2019)



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