PAKISTAN NATIONAL AIDS SPENDING ASSESSMENT

REPORT

NASA (2020/21 - 2022/23)

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Produced by:
UNAIDS Country Office - Pakistan

Consultants:

International
Joshua Karume
joshuamushkar@gmail.com

National
1. Dr. Muhammad Khalid
dr_khalid_m@hotmail.com
2. Wahaj Zulfiqar
sonuwahaj@gmail.com

For more information, please visit
Web: http://www.nhsrc.gov.pk/
Mobile app: SDG3 Pakistan

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LIST OF ACRONYMS

AEM	AIDS Epidemic Model
AIDS	Acquired Immune Deficiency Syndrome
APLHIV	Association of People Living with HIV
ART	Anti-retro viral Treatment/therapy
ARV	Anti Retro Viral
ASC	AIDS spending categories
BACP	Baluchistan AIDS Control Programme
BCC	Behavioural Change Communication
BP	Beneficiary populations
CBO	Community Based Organisation
CHE	Current Health Expenditure
CPMU	Common programme management unit for HIV, TB and Malaria
CSO	Civil Society Organisation
DCT	Data Consolidation Tool
DOH	Department of Health
EHACP	Enhanced HIV/AIDS Control Project
FAP	The Financing Agents and Purchasers
FATA	Federal Administered and Tribal Areas
FCC	Family Care and Treatment Centre
FE	Financing Entity
FE	Financing entities
FGD	Focus Group Discussion
FSW	Female Sex Workers
FY	Financial Year
GDP	Gross Domestic Product
GF	Global Fund
GoP	Government of Pakistan
HDI	Human Development Index
HICs	High Income Countries
HIV	Human Immunodeficiency Virus
HIVST	HIV Self-Testing
HMC	Hayatabad Medical Complex
HSW	Hijra (Transgender) Sex Workers
HTC	HIV testing and counselling services
IBBS	Integrated Behavioural and Biological Surveillance
IBBS	Integrated Bio-behavioural study
IHHTCP	HIV Hepatitis and Thalassemia Control Program
IHS	Integrated Health Services
IMF	International Monitory Fund
KP	Key Population
KPK	Khyber Pakhtunkhwa
LFA	Local Fund Agent
LMICs	Low Middle Income Countries
M&E	Monitoring and Evaluation
MIS	Management Information System

MOH	Ministry of Health Services, Regulation and Coordination
MSM	Men having Sex with Men
MSW	Male Sex Worker
NACP	National AIDS Control Program
NGO	Non-Governmental Organization
NHA	National Health Accounts
NSEP	Needles and Syringes Exchange Program
NZT	Nai Zindagi Trust
OAT	Opioid Agonist Therapy
OVC	Orphans and Vulnerable Children
PACP	Punjab AIDS Control Programme
PACP	Provincial AIDS Control Programme
PAS IV	Pakistan Aids Strategy IV
PC-1	Planning Commission Proforma 1
PEP	Post-Exposure Prophylaxis
PF	Production factors
PKR	Pakistan Rupee
PLWH	People Living with HIV/AIDS
PM	Programme Manager
PMU	Programme Management Unit
PPTCT	Prevention of parent to child transmission
PR	Principle recipient (for Global Fund grant)
PrEP	Pre-Exposure Prophylaxis for HIV Prevention
PS	Providers of services
PSEs	population size estimates
PWID	People who inject drug
REV	Financing revenues
RSSH	Resilient Systems for Health
RTT	Resource Tracking Tool
SACP	Sindh AIDS Control Programme
SCH	Financing schemes
SDM	Service Delivery Modality
SR	Sub recipient
STI	Sexual Transmitted Infection
SW	Sex worker
TB	Tuberculosis
TG	Transgender
TG-SW	Transgender Sex Worker
UMICs	Upper Middle-Income Countries
UN	United Nations
UNODC	United Nations Office on Drugs and Crime
USD	US Dollar
USD	United States Dollar
VCCT	Voluntary Confidential Counselling and Testing
VL	Viral Load
WHO	World Health Organisation

EXECUTIVE SUMMARY

In an effort to ensure a coordinated and adequately resourced HIV and AIDS response, the Pakistani government, in partnership with UNAIDS, embarked on a National AIDS Spending Assessment (NASA) to track actual expenditures related to HIV from public, international, and private financing entities for the fiscal years 2020/21 through 2022/23.

NASA employs a methodology aimed at systematically collecting, analyzing, and reporting data on the origins, flows, and allocation of resources for HIV/AIDS response within a country. This structured analysis serves several objectives, including aiding in the assessment and evaluation of HIV response efforts, identifying funding gaps and inefficiencies, and offering insights to inform policymaking and strategic planning.

Despite the significant economic challenges Pakistan has faced in recent years, the government, development partners, and non-profit organizations have remained steadfast in their commitment to combat HIV. This ongoing dedication is evidenced by the substantial financial resources allocated by the government and development partners, alongside the efforts of non-profit organizations and healthcare providers, to deliver essential HIV services in alignment with the National Strategic Plan.

1 METHODOLOGY

The data collection for the assessment was mainly based on a top-down approach. The sampling included all major HIV financing entities in Pakistan, from public, private, and international sectors. The top-down approach obtained sources of expenditure data from government and donor reports. The bottom-up approach was applied when the financing entities did not have disaggregated data on HIV spending, and then the implementing partners were interviewed, and their data were triangulated to prevent double-counting.

The primary data were collected using the traditional NASA Excel-based template. Disaggregated data were captured in the Data Consolidation Tool developed by UNAIDS and exported into the Resource Tracking Tool for analysis. Quality control was assured through data triangulation by cross-checking multiple data sources to avoid duplication. Consultants reviewed the classification of different variables against recognized standards and best practices, identified gaps or deviations, and advised on alignment to comply with NASA guidelines. The Resource Tracking Tool control board also detected discrepancies or inconsistencies in the analysis that needed to be corrected or fixed.

Data related to out-of-pocket payment for HIV/AIDS was estimated from the National Health Accounts (NHA) for 2019-20, which provided data on Out-of-Pocket Payments (OOPP) by disease. Leveraging this

dataset, the team extracted OOP expenditure related to HIV/AIDS and applied projection techniques to estimate OOP expenditure for HIV/AIDS from 2020-21 to 2022-23. Due to a lack of intervention-specific breakdown of HIV OOPP, the entire OOPP was attributed to care and treatment. Provincial allocation of OOP expenditure relied on the proportion of People Living with HIV (PLHIV) in each province relative to the national total. A sensitivity analysis assessed variations in critical assumptions' impact on projected OOP expenditure, culminating in a comprehensive report on estimated OOP expenditure for HIV/AIDS at both national and provincial levels.

The methodology also includes estimating spending for community-led responses, following the UNAIDS guidelines. This involved CLO mapping, screening, data collection, cleaning, and analysis. Additionally, it outlines the estimation of Pakistan Government's indirect spending on human resources for HIV and health systems strengthening costs. The methodology for estimating hospital support for ART centers covered various cost categories, including human resources, space, incineration, and utilities. Data collection, calculation, and allocation methods were employed, with in-depth interviews providing insights into hospital operational costs. Procedures included estimating human resources costs, space costs, incineration costs, and utilities costs. These are new estimates that were not included in the previous NASA (2016/17-2018/19) and provide a more comprehensive understanding of the financial contributions and costs associated with supporting ART centers.

2 LIMITATIONS

The study encountered several limitations that impact the interpretation and generalization of its findings. Firstly, comparisons with previous NASAs are hampered by methodological differences in estimating Out-of-Pocket Payments (OOPP) and government costs, making some comparisons between the two NASAs inappropriate.

The reliance on NHA data for HIV-related OOPP led to attributing the entire OOPP for HIV to care and treatment due to a lack of intervention-specific breakdown, indicating a need for a comprehensive study on OOPP related to HIV services.

Due to methodological constraints, all treatment interventions for Key Population groups were categorized under People Living with HIV (PLWHIV) as beneficiaries, underestimating funding for Key Populations.

Government’s human resources and shared hospital costs for ART Centres estimations made up 72%, with only 28% representing actual governments’ expenditures, highlighting the need for an integrated accounting system for comprehensive recording.

Lack of programmatic data on key performance indicators, such as ART patients or test volumes, prevented technical efficiency analysis during the assessment period.

3 KEY FINDINGS

3.1 Total HIV spending by financing entities in Pakistan

The NASA report provides a comprehensive overview of HIV spending in Pakistan, analyzing data from 2020/21 to 2022/23. Total HIV spending in the country experienced fluctuations, with an increase from 5.6 billion PKR in 2020/21 to 7.3 billion PKR in 2022/23, albeit with a slight decrease to 4.8 billion PKR in 2021/22. The rise in 2022/23 was mainly attributed to increased domestic funding efforts and enhanced support from international partners, notably the Global Fund. International entities play a pivotal role in financing Pakistan's HIV response, covering a substantial portion of overall HIV spending. However, there was a notable decline in external funding from 64% in 2020/21 to 48% in 2021/22, with a subsequent rebound to 55% in 2022/23. In contrast, the government of Pakistan emerged as the second-largest contributor to HIV spending, displaying a positive trend of increased commitment over the assessment period. Overall, the report underscores the importance of sustainable funding mechanisms and increased domestic commitment to ensure the effectiveness and longevity of HIV programs and services in Pakistan.

3.2 Geographic distribution of HIV expenditure in Pakistan

The report examines the distribution and trends of HIV spending across Pakistan's four provinces over the three-year period. Punjab consistently had the highest HIV spending (68%, 59% and 62%), followed by Sindh, Khyber Pakhtunkhwa, and Balochistan. Considering Punjab's larger population, its per capita spending (PKR 41) was comparable to Sindh (PKR 38) in 2022/23, indicating a somewhat equitable allocation of resources, based on population size only. However, considering the HIV burden in each province, Punjab's spending per PLHIV was almost PKS 40,000, doubled that of Sindh's PKR 20,000 in 2022/23. Khyber Pakhtunkhwa spending per PLHIV was almost PKR 29,000, while Balochistan was PKR 25,130 per PLHIV. Overall, HIV spending increased across all provinces from 2020/21 to 2022/23, with Sindh experiencing the largest percentage increase. Additionally, the report highlights fluctuations in funding from local NGOs and international sources, with varying allocations across provinces.

3.3 Revenues of financing schemes and Financing schemes

Direct financial transfers from foreign entities comprised the largest share of financing, accounting for 64% in 2020/21, 48% in 2021/22, and 57% in 2022/23. The government of Pakistan contributed through national revenues, representing 30% of total funding in 2020/21, 43% in 2021/22, and 35% in 2022/23. Other domestic revenues, mainly from households, constituted 6% of total funding in 2020/21, 9% in 2021/22, and 8% in 2022/23.

The analysis reveals a fluctuating trend in financing schemes, notably a significant decrease in central government schemes in 2021/22 due to changes in funding cycles and principal recipients. The United Nations Development Programme (UNDP Pakistan) replaced the National AIDS Control Programme (NACP) as the principal recipient for the Global Fund public sector grants in July 2021, leading to an increase in resident foreign agencies' schemes in the second and third years of the assessment. In 2022/23, 35% of

HIV financing flowed through provincial government schemes. International entities predominantly channelled their financing through resident foreign agencies' schemes (36% of total) and not-for-profit organization schemes (21%). Out-of-pocket expenditures, excluding cost-sharing, accounted for 8% of HIV financing schemes in Pakistan in 2022/23.

3.4 Financing agents and purchasers (FAP)

In Pakistan, the public sector emerges as the largest HIV financing agent and purchaser in 20220/21, managing a significant portion (73%) of total HIV spending. However, thereafter there was a notable decrease in the funds managed by the public financing agents sector from 2021/22 (44%) followed by a further decrease in 2022/23 to 35%. Not-for-profit institutions rank as the second-largest financing agent and purchaser, with their fund management increasing over the years. Multilateral agencies witnessed a substantial increase as agents and purchaser from 2% in 2020/21 to 36% in 2022/23 mainly attributed to changes in the Global Fund's principal recipient, with UNDP replacing NACP. Private households, through out-of-pocket payments, and bilateral agencies play smaller roles as agents and purchasers, with negligible proportions compared to other agents and purchasers.

3.5 Providers of HIV services in Pakistan

Public hospitals, primarily ART centers, emerge as the largest provider of HIV services, consistently accounting for a significant portion of total spending over the assessment period, 58%, 56% and 51% in 2020/21 to 2022/23 respectively. Non-profit providers, particularly community-based organizations (CBOs) and community-led organizations (CLOs), rank as the second-largest provider, with their nominal spending steadily increasing, but proportionally declining by the third year: 23%, 26% and 22%. Government entities, including the Ministry of Health (MOH), National AIDS Control Program (NACP), and Provincial AIDS Control Program (PACP), also play a substantial role in delivering HIV services, though their spending proportion slightly decreased over the years (from 28% to 19%).

The analysis of spending on different HIV interventions by providers reveals varying priorities. Public hospitals focused on HIV care and treatment, while other government entities allocated resources to program enablers and systems strengthening. Non-profit providers prioritized prevention, HIV testing and counselling (HTC), and HIV care and treatment. Although the Multilateral agencies spent so little as PS, they emphasized program enablers and systems strengthening, followed by social enablers and prevention.

3.6 AIDS spending categories (programme areas and interventions)

The HIV Care and Treatment programme area accounted for the largest share of HIV spending in Pakistan, over the years under assessment. Despite a reduction of 19% in nominal terms in 2021/22, spending on care and treatment increased notably by 52% in 2022/23, reaching 4 billion PKR, or 56% of the total HIV spending. Program enablers and systems strengthening emerged as the second-largest programme area, with spending increasing by 65% and 22% per annum, respectively. This highlights a growing emphasis on strengthening healthcare systems and support structures.

While remaining an essential component of the HIV response, spending on prevention interventions experienced a decline of 33% between 2020/21 and 2021/22, followed by a slight increase in 2022/23. Prevention spending accounted for 21%, 17%, and 13% of total HIV spending across the three years. A notable observation is that while prevention spending increased from 2021 to 2022, it did not fully offset the decline observed from 2020 to 2021. Consequently, the overall expenditure on prevention has decreased over the specified period. This trend is particularly pronounced when considering the allocation towards the five key pillars of prevention (refer to the details of spending by intervention in the report).

HIV Testing and Counselling (HTC) emerged as the fourth-largest intervention, experiencing notable expenditure growth of 71% between 2021/22 and 2022/23. This underscores a heightened focus on testing initiatives as part of the HIV response in 2022/23. The other programme areas, including social enablers, development synergies, and HIV-related research, constituted the smallest portions of HIV spending, each accounting for 2% or less of total expenditure. Notably, no spending on social protection and economic support was recorded during the assessment period.

3.7 Beneficiaries of HIV spending in Pakistan

The analysis of beneficiaries of HIV spending in Pakistan from 2020 to 2023 reveals several noteworthy trends and shifts in resource allocation across different beneficiary groups. PLHIV consistently received the largest share of HIV spending, comprising 59% of the total expenditure in 2020/21, followed by 56% in 2021/22 and 57% in 2022/23. Nominal spending on PLHIV dipped slightly in the second year of assessment, due to the overall reduction in HIV sending, but increased again in the third year reaching PKR 4.2 billion in 2022/23, indicating their sustained priority in HIV spending. The second largest share of spending went to non-targeted interventions, which aimed at overall health system strengthening and other above-site interventions which do not have direct beneficiaries, its proportion of total spending increased from 15% in 2020/21 to 23% in 2022/23, with absolute spending rising from 831 million PKR to 1.7 billion PKR. This suggests a growing importance or resource requirement for these interventions in the HIV response.

Spending on services for key populations constituted the third-largest but declining share, 21% in 2020/21 to 13% in 2022/23. In nominal terms, spending for KP decreased from 1.2 billion PKR to 983 million PKR, potentially due to increased funding for KP-related HIV testing and counselling. Vulnerable, accessible populations received 4% in 2020/21, 5% in 2021/22 then decreased to 3% of total spending in 2022/23, this category including pregnant and breastfeeding HIV+ women, healthcare workers, truck drivers, recipients of blood products, and students.

Spending on the general population increased from 1% to 3% across the three years, primarily driven by enhanced funding for HIV testing and counselling targeting this group in 2022/23.

3.8 Production factors of HIV spending in Pakistan

The analysis of production factors shaping HIV/AIDS spending in Pakistan sheds light on the cost components of the HIV response, potentially highlighting areas of potential savings. The key cost drivers were medical products and supplies, including antiretroviral drugs (ARVs), which in total accounted for a substantial portion of HIV expenditure, ranging from 23% to 36% across the three years. ARVs alone constituted approximately 10% of overall HIV spending on average, emphasizing their significance in treatment programs. Personnel expenses emerged as another major expenditure component, with a steady

rise in costs from PKR 1.5 billion to PKR 2.4 billion over the assessment period. Costs related to operational and program management witnessed prioritization, escalating from PKR 1.3 billion to PKR 2 billion, representing 28% of total spending in 2022/23.

The analysis of the production factors by their financing entities underscores a reliance on external donors, particularly for ARVs and other medical products with international entities solely funding these critical components.

4 PAS and NASA comparison

The analysis also examined the adequacy and prioritization of past expenditures on HIV interventions in Pakistan, focusing on the alignment between projected costs outlined in the Pakistan AIDS Strategy (PAS) and actual spending recorded in the National AIDS Spending Assessment (NASA) for the fiscal years 2020/21, 2021/22, and 2022/23. For the fiscal year 2020/21, the PAS total estimated cost closely matched actual spending, with a minor potential financing gap of 2.2%. However, substantial funding deficits were observed in subsequent years, with potential gaps of 52.1% and 56.2% in 2021/22 and 2022/23, respectively, raising concerns about the adequacy of resources allocated for HIV interventions. However, definitive conclusions regarding the existence of funding gaps cannot be drawn until a thorough examination of the methods and assumptions utilized in the PAS costing is conducted, including whether the cost categories are aligned (matched correctly) with the expenditure data categories. Further scrutiny into these estimates is warranted to ascertain the accuracy of the findings.

Furthermore, the analysis reveals significant discrepancies between projected costs and actual spending for various interventions outlined in the PAS, particularly in services for key populations (KP), treatment, and program enablers. KP services received very limited funding, with actual spending averaging $17 million compared to the estimated PAS costs of $38 million per annum, indicating a potential funding gap of $21 million in 2022/23 alone. Conversely, treatment interventions appeared to have greater spending than was estimated as needed in the PAS, despite underachievement in the ART coverage performance indicators, suggesting inefficiencies in resource allocation.

DEFINITION AND DESCRIPTION OF TERMS

AIDS SPENDING CATEGORY

These are HIV-related interventions and activities (Prevention, HIV testing, and counseling, HIV care and treatment, social protection, and economic support, social enablers, Program enablers and systems strengthening, Development synergies, and HIV research).

BENEFICIARY POPULATION

The populations presented here are explicitly targeted or intended to benefit from specific activities. Identification of a beneficiary population aims to quantify the resources specifically allocated to the population as part of the service delivery process of a programmatic intervention. Beneficiary populations are selected according to the intention or target of the spending in programmatic interventions. This represents an outcome linked to the resources spent, regardless of its effectiveness or effective coverage.

PRODUCTION FACTORS

This classification of cost components (budget items) uses comparable breakdowns that can easily cross over to other reports. The resource cost classification captures expenditure according to the standard economic classification of resources used to produce goods and services, such as salaries, commodities, building, equipment, etc. The classification includes two major categories: current expenditure and capital expenditure. In NASA the classification of production factors categorizes expenditure in terms of resources used for production.

CAPITAL EXPENDITURE.

The main categories in this classification are investments in buildings, capital equipment, and capital transfers. These categories may include major renovations, reconstruction, or enlargement of existing fixed assets, as these can improve and extend an asset's previously expected service life.

CURRENT EXPENDITURE

Current expenditure is expenditure on goods and services consumed within the current year, which needs to be made recurrently to sustain the production of the services by the organization.

FINANCING AGENT-PURCHASER

FAP are entities which mobilize financial resources collected from different financing sources (pools) and transfer them to pay for or to purchase health care or other services or goods. These entities directly purchase from providers or steer in full, or as co-guarantors of payment, resources earmarked for the provision of commodities (services and/or goods) to satisfy a need.

REVENUE OF THE SCHEMES

This is the mechanism (transactions) involved in providing resources to financing schemes. The classification of revenues of financing schemes is suitable for tracking the collection mechanisms of a financing framework. The new classification makes it possible to analyse the contribution of institutional units to health and social HIV and AIDS financing.

FINANCING SCHEMES

These are structural components of healthcare financing systems. They are financing arrangements through which people obtain health services. Healthcare financing schemes include direct payments by households for services and goods and third-party financing arrangements. Third-party financing schemes are distinct bodies of rules that govern the mode of participation in the scheme, the basis for entitlement to health services, and the rules on raising and pooling the revenues of the given scheme.

SERVICE DELIVERY MODALITIES

This variable indicates the modality through which the service is provided (such as facility-based or home and community-based service delivery modalities). Where the intervention is not a service delivered directly to beneficiaries, then 'SDM Non applicable' is applied.

DEVELOPMENT SYNERGIES

These are programmes necessary to enable the efficacy, equity, and rollout of basic programme activities. They encourage the sustainability of HIV and AIDS responses through integration into broader health and non-health sectors. Although development synergies can have a profound impact on HIV and AIDS outcomes, their reason for being is not typically for HIV and AIDS. Maximizing the HIV and AIDS-related benefits and minimizing the HIV and AIDS-related harms of development synergies would make them HIV and AIDS-sensitive.

1

INTRODUCTION AND BACKGROUND

The National AIDS Spending Assessment (NASA) for Pakistan encompasses a comprehensive evaluation and analysis of the financial resources allocated to the national response against HIV/AIDS. This assessment aims to provide a detailed overview of how funds are mobilized, allocated, and utilized within the country to address the multifaceted challenges posed by the HIV/AIDS epidemic. The assessment not only serves as a tool for financial transparency but also plays a crucial role in guiding policy decisions, resource allocation strategies, and programmatic interventions to enhance the overall effectiveness of the national response.

1.1 Socio-Economic and Health Indicators in Pakistan

Pakistan shares its coastline with the Arabian Sea and the Gulf of Oman to the south, and it shares borders with India to the east, Afghanistan to the west, Iran to the southwest, and China to the northeast. The country is narrowly separated from Tajikistan by Afghanistan's Wakhan Corridor in the northwest and also has a maritime border with Oman.

With a population of 241.1 million people (excluding Azad Jammu & Kashmir and Gilgit Baltistan) in 2023 (1). Pakistan ranks as the fifth most populous nation globally. Covering an area of 881,913 square kilometres, Pakistan is the 33rd largest country in the world. The nation is divided into 4 provinces: Punjab, Sindh, Khyber Pakhtunkhwa (KP), and Balochistan, along with three federating areas of Gilgit Baltistan (GB), Azad Jammu & Kashmir (AJK), and Islamabad Capital Territory (ICT). Notably, Federally Administered Tribal Area (FATA) was integrated into KP through a constitutional amendment in 2018.

Pakistan's Human Development Index (HDI) was 0.681 in 2015, categorizing it as a country with a medium level of development according to the national report's thresholds (3). However, the global HDI for Pakistan was calculated as 0.557 in the HDR Indices 2019 (4), ranking the country 154th out of 189 countries and placing it in the medium human development category. The divergence in scores arises from variations in methodology, data, and estimation criteria between the national and international levels.

Health indicators in Pakistan are closely tied to its economic landscape. The country is classified as a lower-middle income nation and has consistently invested in enhancing its healthcare system. Based on Pakistan's 2019 official report on multidimensional poverty, approximately 37 percent of its population lives in multidimensional poverty. Urban areas reflect a poverty rate of 32.1 percent, while rural areas exhibit a poverty rate of 39.3 percent. Notably, disparities are noticeable across provinces, with the lowest poverty rate in Punjab (31.6 percent) and the highest in Balochistan (56.8 percent). KP stands at 36.1 percent, and Sindh at 43.7 percent (5).

The Pakistan Maternal Mortality Survey 2019 reflected a maternal mortality ratio of 186 per 100,000 live births (199 in rural areas and 158 in urban areas) during the three years preceding the survey (6). Though there is a declining trend of maternal mortality in Pakistan, reaching the target of reducing maternal mortality by less than 70 per 100,000 live births by 2030 might not be feasible. The maternal mortality ratio reflects wide variations across provinces, being highest in Baluchistan followed by Sindh, and Khyber Pakhtunkhwa (165/100 000 live births). Pakistan has a high under-five mortality rate of 63.3 deaths per

1,000 live births and a high neonatal mortality rate of 39 deaths per 1,000 live births3. The under-five mortality rate is higher for males than for females (7).

Consistent with, IBBS 2017 for HIV, Pakistan has a concentrated HIV epidemic amongst KPs including PWIDs (8). The HIV epidemic within the country follows the Asian Epidemic Model and is driven by high HIV prevalence among PWIDs, which is more than 40% in some cities of Pakistan (9). In Pakistan, 430,000 people inject drugs (PWIDs), out of which 73% shared the syringes (10) (11). The government recently (2022) approved the implementation of Opioid Agonist Maintenance Therapy and preparations are underway at the federal and provincial levels to roll out services.

SOCIO-ECONOMIC AND HEALTH INDICATORS IN PAKISTAN

Period	Crude Birth Rate (Per Thousand Persons)	Crude Death Rate (Per Thousand Persons)	Population Growth rate (%)	Total Fertility Rate (per Woman)	Infant Mortality Rate (Per Thousand Children)	Life Expectancy Both Sexes
2019	26.1	6.7	1.9	3.3	59.5	67.5
2020	25.4	6.6	1.8	3.3	58.5	68.2

Source: Pakistan Bureau of Statistic

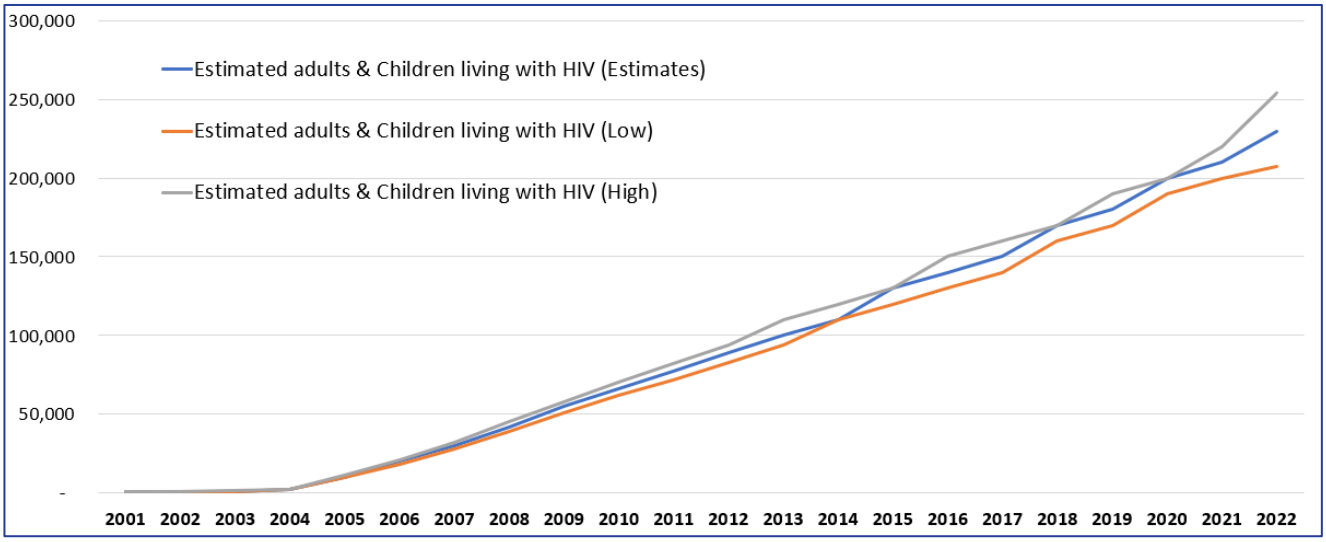
1.2 HIV Situation in Pakistan

Pakistan's HIV prevalence remains low among the general population but is concentrated at higher rates within key populations (KPs). Based on the latest estimations from 2022 using AIM and Spectrum modelling, it is projected that approximately 229,522 individuals, including both adults and children, are living with HIV in Pakistan. The estimated adult HIV prevalence among the general population stands at about 0.1%, calculated based on assumptions concerning the progression of the pandemic. The most recent Integrated Biological and Behavioural Surveillance (IBBS) study was conducted in 2016. According to this study, HIV prevalence varies among different populations: among people who inject drugs, it was 38.4%; transgender individuals, 7.1%; male sex workers, 5.6%; men who have sex with men, 5.4%; and female sex workers, 2.2%. Primarily, HIV is concentrated within these groups, although there is transmission occurring between key and general populations (13)(14).

The major drivers of the HIV epidemic include the sharing of contaminated needles, unprotected sexual activities, particularly among people who inject drugs, MSM, TG, and SW communities, and nosocomial infections. Notably, prevention and treatment coverage in the country remains among the lowest in the Asia-Pacific region. Additionally, while HIV cases have been reported in all four provinces of Pakistan, the burden is disproportionately higher in Punjab and Sindh, accounting for approximately 93% of the total cases (15).

The increasing trend of estimated PLHIV in Pakistan reflects the challenge faced by programmatic prevention and treatment strategies deployed over several years to curb the epidemic's growth. The figure below depicts the modelled projection of the population living with HIV (PLHIV), indicating a notable 3.5-fold surge by the year 2022 as compared to the data from 2010 (16).

FIGURE 1: MODELLED PREVALENCE OF HIV IN PAKISTAN



Source: Pakistan National HIV Programme / Response Review 2023 (NACP)

1.3 The National Response and HIV Funding

The Pakistan AIDS Strategy (PAS) guides the HIV response in Pakistan. The PAS IV for 2023 to 2026 examines the challenges of controlling the AIDS epidemic in Pakistan and suggests a scaled-up and revitalized response. The main goal is to reduce new infections by 63% by 2026. This will be accomplished by implementing precise interventions, testing and treating strategically, investing more efficiently and sustainably, and innovating.

The key aim of this strategy is to enhance the national AIDS response to achieve the global targets of 95% of all people living with HIV knowing their HIV status; 95% of all people diagnosed with HIV receiving continuous antiretroviral therapy; and 95% of all people on antiretroviral therapy having viral suppression.

The PAS IV was updated in 2023 and has five strategic objectives:

I. Strategic Objective 1: Enhanced HIV prevention services among key and general populations and their partners and reduce risk behaviours.

II. Strategic Objective 2: Increased testing coverage among key populations and their partners

III. Strategic Objective 3: Increased access to treatment, care and support

IV. Strategic Objective 4: Strengthened Integrated and Resilient Systems for Health (RSSH)

V. Strategic Objective 5: Environment is enabled for an effective and sustainable AIDS response.

According to the PAS IV, the current strategy is far from achieving its coverage goals, and there is no system to track and resolve this issue. It was argued that is not merely a matter of insufficient resources. A 2023 review of the HIV Programme revealed that the capacity of provinces to use the funds effectively is low in all four provinces. Various factors (such as approval and release rates) have resulted in low spending of PC-1 programmes, which finance the programmes in KP and Punjab provinces. The 2022-23 review also confirmed that the strategy implementation was hindered by many obstacles and difficulties, such as the governance and coordination mechanisms at the international, national, and provincial levels.

According to the 2022 estimate (UNAIDS), only about a quarter of PLHIV in Pakistan were aware of their status, which was far from the 95% goal for accelerating the response. The testing coverage goals (national level) were not met by a large margin, less than 25% on average for the different KP sub-groups. The prevention coverage for FSWs and MSM was below 10%, which was alarming given the size of these populations and their expected share of the disease burden as the epidemic worsened. The number of people on ART was only 34% achieved. **Error! Reference source not found.** portrays the distribution of the three 95% targets across a span of four years, spanning from 2019 to 2022, uncovering a blend of ascending and descending trends within this timeframe. The percentage of individuals possessing awareness of their HIV status experienced a minor uptick, progressing from 23.6% in 2020 to 24.9% in 2021, and further advancing to 25.8% in 2022. A cumulative 2.2% increase was evident throughout the program's assessment period. Nonetheless, it's imperative to recognize that a significant gap still endures between the current progress and the desired objective (16).

In 2022, there was a 2.4 % augmentation in the count of individuals identified as HIV-positive and accessing treatment. Nonetheless, a notable divergence persists between the targeted 95% and the existing status observed from 2019 to 2022. The ratio of people living with HIV (PLHIV) who undergo antiretroviral therapy (ART) and achieve viral load suppression remains remarkably low. Despite a moderate 0.7% upswing between 2019 and 2020, a subsequent dip of 1.2% transpired between 2020 and 2021, suggesting gaps in adequate treatment and testing. As per the most recent 2020 data, a mere 6% of PLHIV on ART attained viral load suppression. Though there was a two-fold surge between 2021 and 2022, it still significantly falls short of the aimed 95% benchmark (depicted in the figure below) (16).

1.5 Rationale for Conducting NASA in 2023

The 2001 United Nations General Assembly Special Session on HIV and AIDS urged countries to invest in monitoring and evaluation systems for their HIV and AIDS responses. This entails the institutionalization of a monitoring system that enables implementers to routinely collect financial and health service delivery data on the HIV and AIDS response.

The NASA methodology produces information that can guide decision-making to determine the level of expenditure incurred in each programme area, to measure the potential financing gap, and to improve future allocative decisions, and mobilize additional resources in an evidence-based planning process. Additionally, the NASA result informs the processes of developing or improving key national strategies such as sustainability plans and allocative or productive efficiency analyses and permits monitoring of the implementation of the National Strategic Plan.

This is particularly important when future HIV and AIDS financing is threatened by competing global priorities and economic downturns but expectations to achieve more remain high. NASA data allow for further examination of aspects of equity, efficiency, absorptive capacity, and allocative efficiency, and are critical for informing the sustainability discourse.

Pakistan faces challenges related to timely financial reporting for HIV and AIDS services, resource mobilization, allocations, and absorptive capacity at all levels. At the same time, the size of the HIV and AIDS resource envelope is unpredictable, and it is not easy to understand how these resources are used. Information on financing of the national response and spending of the public, civil society, and private

sector remains largely uncoordinated and with data deficiencies. The effective tracking of such resources is therefore an important policy issue for all stakeholders.

To answer policy questions around financial sustainability, it is vital to understand and explain the financial flows; to demonstrate how the funds are disbursed to different economic agents and the channels used to access financing; to determine the level of expenditure incurred in each programme area and the targeted beneficiary populations; and to measure the potential financing gap.

Against such a background, the National AIDS Control Programme, in collaboration with UNAIDS commissioned the third NASA for the period 2020/21 to 2022/23. Previous NASAs covered the periods: For the period 2016/17 – 2018/19.

1.6 Objectives

The overall objective behind performing the National AIDS Spending Assessment is to better understand spending patterns on national AIDS response and analyse HIV spending priorities by applying the NASA methodology for the collection, collation, and analysis of HIV expenditure data in Pakistan for the financial years 2020/21, 2021/22, and 2022/23.

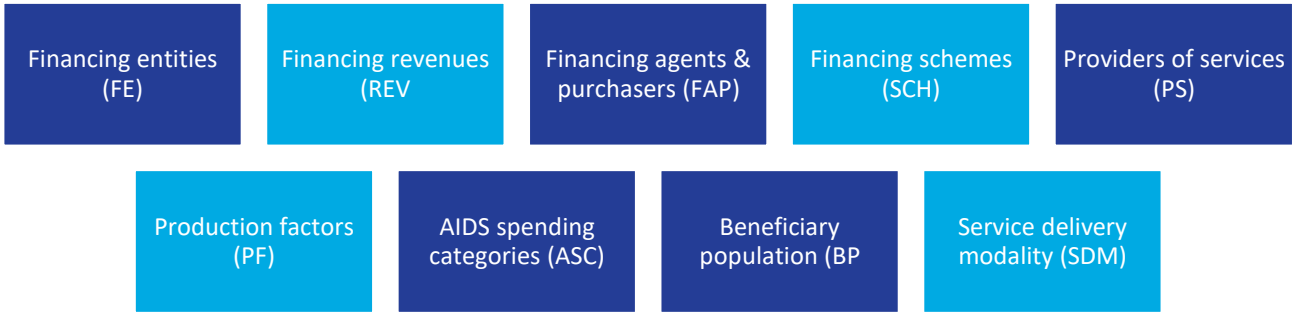
Specific objectives are:

1. To generate data on HIV/AIDS resources in Pakistan for the financial years 2020/21, 2021/22 and 2022/23.
2. To update the HIV/AIDS database of financial resources, financing agents, and service providers.
3. To strengthen in-country capacity to undertake regular NASA to inform planning and resource allocation.
4. Conduct selected additional data analysis of HIV/AIDS spending such as:
5. Estimates of domestic spending on human resources for HIV (HRH) in Pakistan, Estimates of the out of pocket payments (OOPP) on HIV services as well as an attempt to estimate the spending of the community-led response (see estimation section). The additional analysis is included in the appendices of the report.

1.7 Scope of the Assessment

The Pakistan NASA covered 3 financial years: FY 2020/21,2021/22 and 2022/23 and included funding from the public, external, and private sources for HIV, including out-of-pocket payments (OOPP) estimates that were informed by available primary data in the country. The assessment was at national and sub-national levels (provinces). The findings are presented in Pakistan Rupee and the key findings tables in United States dollars (USD) to allow for international dissemination and comparability.

The variables covered by this exercise are:



2

METHODOLOGY & CLASSIFICATION

2.1 Approach

NASA is based on standardized methods, definitions and accounting rules of the globally available and internationally accepted System of National Accounts, National Health Accounts and National AIDS Accounts. NASA follows the basic framework and templates of National Health Accounts but is not limited to health expenditure. It embraces other expenditures to track the multisectoral response to HIV and AIDS. It captures all the other spending related to HIV and AIDS, such as social mitigation, legal services, educational and life-skills activities, psychological support, care for Orphans and Vulnerable Children (OVC), and those efforts aimed at creating a conducive and enabling environment.

The NASA approach to tracking resources is a comprehensive and systematic methodology used to determine the flow of resources intended to respond to HIV and AIDS. This methodology seeks to provide answers to the following questions:

- What are the funding flows for HIV in Pakistan highlighting who pays and pools funds for HIV and what funding schemes are used?
- Who purchases HIV services and what schemes are used for payment?
- What is the service delivery landscape for HIV services, detailing the HIV services available, the providers of the services, the modes of delivery, and the beneficiaries of the services?
- What are the key cost drivers, the production factors, of the HIV spending in Pakistan?

Additionally, this NASA will be able to answer the following:

- Were adequate resources allocated to achieve the Pakistan AIDS Strategy 2021-2025 (PAS IV) compared to their estimated resources needed? Were financing gaps (or surpluses) experienced for any interventions?
- What was spent on key interventions to reach one person? How do these units of expenditure compare with the estimated unit costs applied in the costing of the PAS IV? Have economies of scale been achieved? (This is subject to data availability)
- Have technical and/ or allocative efficiencies been achieved?

To answer these questions, the NASA methodology reconstructs all the financial transactions related to the national response to HIV and AIDS. In the NASA 2020 framework, the financial flows and expenditures 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.

2.2 Classification

The three dimensions and nine vectors that constitute the NASA 2020 framework are:

2.2.1 Financing vectors:

1. Financing entities (FE)
2. Financing revenues (REV)
3. Financing schemes (SCH)
4. Financing agents & purchasers (FAP)

2.2.2 Provision vectors:

1. Providers of services (PS)
2. Production factors (PF)

2.2.3 Use / consumption vectors:

1. AIDS spending categories (ASC) are HIV-related interventions and activities.
2. Beneficiary populations (BP).
3. Service delivery modality (SDM).

2.3 Implementation phases

The NASA Core Team (UNAIDS and NACP) was involved in guiding and overseeing NASA implementation, securing the buy-in of all partners, and ensuring the process met the country's needs.

Implementation involved the following phases (see Annex 2):

1. Planning and mapping of actors.	2. NASA training.	3. Sampling and data collection.
4. Quality control and data validation.	5. Data analysis and report writing.	

Advocacy and sensitization meetings were held with partners to facilitate the process. The NASA core team obtained all necessary permissions from the national and local authorities which facilitated easy access to relevant data and conduct the assessment.

2.4 Sampling and data collection

To facilitate the sampling process, a database of all the stakeholders involved in HIV as Financing Entities, Financing Agents/purchasers, and/or providers of HIV or TB services, was developed with guidance from NACP/PACP and UNAIDS. The sampling frame included development partners, government ministries, and not-for-profit organizations (International and local). To ensure the comprehensiveness of this study, all the main sources of funds (public, private, and international), and all agents of funds in Pakistan were included in the sample (no sampling but a census approach). However, service providers were sampled using purposive sampling by strata to ensure that the different levels and sizes of providers are represented and that approximately 90% of all the HIV expenditures in the country are captured. This selection was informed by the NACP and PACP.

The major financing entities included were the Government of Pakistan (National and provincial), Global Fund, United Nations agencies, and private entities (including Community Led organizations and household out-of-pocket payments). A sampling of the ART centres was guided by the PACP.

2.5 Data collection

The assessment used both top-down and bottom-up approaches to data collection. The first phase of data collection consisted of a top-down approach that tracked sources of funds from donor expenditure reports. To achieve this, we invited key stakeholders from different organizations to participate in a training on Aids spending assessment. The training was designed and delivered by the international consultant. The training covered topics such as NASA principles, methods, and tools, as well as the best practices and examples from other countries. During the training, we also used the platform to collect HIV spending data from the stakeholders. The customized NASA data collection template was provided, and each stakeholder used the tool to populate their HIV spending with the guidance of consultants. This approach gave the data providers the opportunity to directly question and interact with the consultants which considerably improved their understanding of the data requirements.

The second phase consisted of a bottom-up approach which collected expenditures from service providers using the data collection tool. The research associates were deployed to their respective provinces to collect data through face-to-face interviews. Respondents' expenditure records were obtained as part of the primary source for NASA, and the data was captured in the data collection tool by research assistants. The NASA team also identified the community-led organizations (CLOs) in different provinces and attempted to collect their financial and non-financial expenditure as an additional exercise.

For CLO data collection, a tool was adapted from the UNAIDS tool developed for CLO resource tracking (pilot project in 6 countries), tools and analysis are presented in the appendix. For the providers of care (ART centres) a form was developed that collected information which helped in estimating the government of Pakistan support in terms of space and HR, more details can be seen in section 2.10 and appendices.

The assessment also used secondary data through a desk review of key financial reports and documents, policies, and health financing documents. The annual programme reports and performance indicators for key interventions were also collected to enable the efficiency analysis as an additional exercise. No primary data were collected for the Out-of-Pocket Expenditure (OOPP) on HIV/AIDS. The National Health Accounts data were utilized to estimate the OOPE for HIV and the approach used is described in section 2.10.

2.6 Data capturing and processing

The collected data were entered into the Data Consolidation Tool (DCT). The DCT tool is an Excel-based spreadsheet that follows the nine vectors of the NASA methodology. It translates raw data into the NASA format and organizes, cleans, and verifies data completeness so that any missing, incomplete, or contradictory data can be identified and addressed.

Data capturing and processing occurred concurrently in the field. During data processing, the transactions were triangulated by cross-checking multiple sources of data to avoid double-counting and thus the full transactions could be recreated with the nine NASA vectors. The team captured all data into the DCTs which were eventually imported into the NASA Resource Tracking Tool (RTT). The Global Fund data

included all expenditures from their PRs, so when additional data were collected from one of the sub-recipients, it was excluded from the analysis to avoid double counting. Interviewees were asked to report and share only the funds they received from sources other than the Global Fund.

2.7 DATA analysis

The imported data were consolidated by the Resource Tracking Tool (RTT), which also identified coding or data errors that were then corrected. The RTT allows the user to enter, validate, map, and classify the spending data according to the NASA framework, and to generate some tables, charts, and graphs to present the results of NASA. The RTT was also essential in aggregating and in creating financing flow diagrams. It also generated the full dataset in Excel spreadsheets that were used to undertake the bulk of the analysis, and to create graphical displays and tables.

2.8 Quality control

The consultants provided guidance and mentorship to NASA team and developed their capacity in data collection, processing, and data entry. The steps to ensure data quality and accuracy were:

2.8.1 Classification Verification:

- Conducted a thorough review of the classification of spending inputs according to specified categories.
- Cross-checked the classification against established guidelines and criteria.
- Identified any misclassifications or discrepancies and rectify them.

2.8.2 Data Mapping Validation:

- Validated the accuracy of data mapping from various sources to the appropriate categories.
- Ensured that the data mapping was consistent and followed the predefined rules and guidelines.
- Identified any deviations or mapping errors and provided recommendations for correction.

2.8.3 Standard Classification Compliance:

- Reviewed the classification of different variables against recognized standards and best practices.
- Identified gaps or deviations from the accepted standards and provided guidance on alignment.
- Recommended adjustments or improvements to ensure conformity to standard classification.

For accuracy and consistency, consultants checked the capturing of all the transactions daily from all the data collectors to troubleshoot potential inconsistencies and provided guidance on standardized data coding entries in the Resource Tracking Tool. The RTT's control board also indicated where there were discrepancies that needed to be adjusted or fixed.

Preliminary findings were presented to the key stakeholders for review and validation (NACP, PACP, GF PRs, UN agencies). Additionally, UNAIDS provided an external expert to review the completed data tools, RTT file, analysis, and report. Issues raised were addressed by the consultants, ensuring compliance with global standards.

2.9 Overview of data and quality of sources

Data were collected from Government entities (national and provincial), international agencies, and private sectors. The bulk of public HIV financing comprised the following: National AIDS Control Programme, Provincial AIDS Control Programme, ART centres, Provincial Healthcare Commissions, and Provincial Blood Transfusion Authority. Total direct Pakistan Government expenditure on HIV was obtained through primary data collection and validated by the different public entities. Costs of HIV and AIDS-related health systems strengthening and Ministry of Health human resources at the health facility level were estimated (see the estimation section).

International development partners, including the Global Fund, United Nations agencies, and other donors (bilateral organizations, international non-governmental organizations, and foundations), have shared their data using different expenditure reporting formats. Global Fund data was extracted from PUDRs verified by Local Fund Agents (LFA).

The private sector included the following: Household out-of-pocket expenditure (extracted from NHA 2019/20 report) and the private non-profit-making organizations (a few of these also generate their resources). It was noted that private for profit organisation were not involved in HIV response in Pakistan.

The assessment relied mostly on primary expenditure data and some secondary data sources. When data were unavailable, some estimates were used. The table below shows the quality control indicators for evaluating the NASA data quality. For each of the three years, most of the data came from verified primary sources, i.e. 72% in 2020/21, 60% in 2021/22, and 67% in 2022/23. The OOPP estimates based on the National Health Account data and the estimate of the government's contribution to human resources for HIV (HSH) and health system strengthening (HSH), both constituted 28% of the data in 2020/21, 40% in 2021/22, and 33% in 2022/23.

Overall type of NASA data	2020	2021	2022
Expense reports/ primary source	72%	60%	67%
PxQ / Estimation (OOPP and public HRH & HSS spending)	28%	40%	33%
Grand Total	100%	100%	100%

2.10 Estimations and assumptions

2.10.1 Out-of-Pocket Payment for HIV estimations

The estimation of Out-of-Pocket (OOP) payments for HIV/AIDS spending assessment is a crucial component of understanding the financial burden borne by individuals and households affected by HIV/AIDS. This section outlines the systematic steps and data sources used for estimating OOP expenditure using National Health Accounts (NHA) 2019-20 OOP data for HIV/AIDS and projecting it for the years 2020-21, 2021-22, and 2022-23. It's crucial to highlight that there were notably low percentages of the total out-of-pocket payments (OOPP), with two provinces registering zero percent, and overall, only 0.03% allocated to HIV.

HIV services are solely provided through public sector ART centers. These centers offer services free of charge, including laboratory tests, opportunistic infection medications, and antiretroviral drugs (ARVs). However, patients may still incur expenses such as transportation, accommodation, and opportunity costs, as they often have to travel long distances to access these ART centers, aiming to avoid stigma in their local communities. Additionally, HIV patients may occasionally need to cover expenses for treating co-infections and, in rare cases, hospitalization, resulting in out-of-pocket expenditures. It's important to note that in the context of Pakistan, patients seldom utilize private facilities for ART treatment or laboratory tests. As a result, it was challenging to determine the proportion of out-of-pocket spending that occurs at private facilities. Therefore, it has been assumed that public health facilities are the primary providers of services for these OOP payments.

A review of NHA (2019-20) was conducted, and it was found that NHA dataset provided the OOPP data by disease which allowed us to extract the OOP expenditure related to HIV/AIDS, and then the team applied an appropriate projection technique, adjusting for inflation and exchange rate variations, to estimate OOP expenditure for HIV/AIDS for the years 2020-21, 2021-22, and 2022-23. Due to the lack of intervention-specific breakdown of the HIV OOPP, the whole OOPP was attributed to care and treatment, of which all was labelled to public ART centres.

The provincial split required the number of PLHIV in each province from PAS strategy IV. These were computed by the proportion of PLHIV in each province relative to the national total and finally applied this proportion to the estimated national OOP expenditure to allocate OOP expenditure at the provincial level. A sensitivity analysis was conducted to evaluate the impact of variations in critical assumptions (e.g., Provincial Proportions, inflation rates, exchange rates) on the projected OOP expenditure. Then the consultants generated a comprehensive report that includes the estimated OOP expenditure for HIV/AIDS for each year (2019-20, 2020-21, 2021-22, and 2022-23) at both the national and provincial levels.

2.10.2 Estimation of spending for the community-led response.

This NASA included a basic resource tracking of the community-led responses (using the draft version of UNAIDS guidelines on Resource Tracking of Community-led responses).

The NASA framework usually focuses on monetary transactions that involve payment for goods and services delivered and used, due to its traditional emphasis on financing and expenditures. However, the NASA framework also allows tracking the resources of community-led organizations (CLOs). This entails measuring non-financial flows, such as in-kind donations, volunteer work, and other transactions that do not involve monetary exchanges. The 2022 pilot project of CLO resource tracking by UNAIDS demonstrated that these require extra effort to identify, quantify, and value. The estimation of CLO spending in Pakistan followed the vigorous methodology used in the UNAIDS 2022 pilot project of CLO resource tracking, and the following phases were included:

1. **CLO mapping:** This aimed at the identification of potential CLOs. The provincial Aids control managers provided a list of potential CLOs in their respective provinces, including other networks and organizations that are involved in the national response.
2. **CLO screening process:** The self-identification form created by UNAIDS in the CLR RT pilots was adjusted and used for the identification of potential CLOs. All identified organizations were contacted, and a CLO self-identification form was administered to them all. The answers from the respondents indicated if an organization was a CLO or not.

3. **Data collection and cleaning:** The consultant triangulated the data collected with other sources of data to avoid double counting (most of the CLOs are either sub/sub-recipients or self-funded (volunteer-based organizations). Their financial expenditure was assumed to be collected from the principal recipients or the funding sources.
4. Data analysis and summary of the CLO report are presented in the appendices.

2.10.3 Estimation of the Pakistan Government's indirect spending on HR for HIV and the health systems strengthening cost

This methodology outlines the process undertaken to ascertain the financial contributions of host hospitals to ART centres, covering various operational cost categories. It employed data collection, calculation, and allocation methods to estimate the hospital's financial support for HIV care services.

During the HIV Program Review of 2023, an examination of the financial sources supporting Antiretroviral Therapy (ART) centres revealed that these centres received funding from three distinct financing entities:

1. The Aids Control Program	2. The Global Fund Grants	3. The host hospital where the ART centre is located.

While data pertaining to the first two financing sources were readily available and were captured in NASA, determining the financial contribution of the host hospital to HIV care required a more detailed approach. This was achieved through the collection of information during in-depth interviews conducted with both the ART centre managers and Aids Control Program Managers. These interviews provided insight into various cost categories associated with hospital operational costs, namely:

1. Human resources allocated by the hospital to the ART centre.	2. The physical space provided by the hospital for the ART centre.	3. Incineration-related charges.	4. Utilities expenses covered by the hospital on behalf of the ART centre.

The estimation of costs involved the following procedures:

Human Resources Cost for HIV: To ascertain the cost of human resources, a comprehensive process was undertaken. This involved the identification of job designations and their associated basic pay scales for individuals who were provided by the hospital to the ART (Antiretroviral Therapy) center. The first step was to categorize and define different job roles within the context of the ART center. Once the job designations were clearly outlined, the next step involved determining the average annual salary for each specific job grade. After establishing the average annual salary for each job grade, the total cost of human resources was computed by multiplying this figure by the number of ART centers. This comprehensive approach allowed for a thorough assessment of the overall expenditure related to human resources across all ART centers, providing a more accurate representation of the financial implications associated with staffing in this context.

Space Cost: The space-related expenses were determined by using a standard assumption of the average space assigned to each ART (Antiretroviral Therapy) centrers, which was 250 square meters. The construction cost for each square meter was set at 5000 Rs per square meter, which represented the costs involved in building and equipping the infrastructure for each center. The total construction value of the

center was derived by multiplying the space assumption (250 square meters) by the construction cost for each square meter (5000 Rs). Since NASA doesn't use annualised capital cost (as in accounting practices for capital investments), this assumption was used as a basis for estimating the annual repair and maintenance charges assigned to ART centres. Specifically, annual repair and maintenance charges were assigned 5% of the total construction cost that was captured in this NASA as recurrent expenditure.

Incineration Cost Calculation: The calculation of incineration costs involved an estimation of the average waste material generated, which was approximately 500 kg per ART Centre per month. These waste materials were proportionally allocated to ART centres based on their respective provinces. The price per kilogram of incineration was obtained from GF PR organisation "Nai Zindagi Trust" data, and this price was multiplied by the quantity of waste material generated, with amounts allocated according to provincial proportions.

Utilities Cost: Estimating utility expenses involved identifying the annual costs associated with electricity, gas, and internet facilities provided by the hospital. As the utility bills (electricity, gas, and internet) of the hospital do not disaggregate by different departments within the hospital, there was a need to estimate the utility charges for the ART centres. In this regard, the average of the utility charges as incurred by the Nai Zindagi COPC (Continuum of Prevention and Care) sites were used for the estimation of the utility cost per ART centre. The utility costs were proportionally allocated to ART centres based on their respective provinces.

HR	Space (maintenance and repair)	Utilities	Incineration charges
26%	65%	7%	2%

2.10.4 Other assumptions applied

- When the provincial breakdown of spending was not available, the Global Fund proportional allocation by province was used to estimate the provincial distribution of HIV spending on prevention and care and treatment. The distribution of the Global Fund resources to the provinces is aligned with the burden of disease in these provinces.

Punjab	Sindh	PK	Baloch
81%	16%	2%	1%

- All Global Fund recipients' data were assumed to be captured in the data provided by Global Fund PRs therefore any Global Fund spending obtained from sub-recipient/providers was excluded.
- All Care and treatment activities reported by the government organisations (provincial Aids program) and international partners were assumed to be provided by public hospital (ART centres).
- Only for standardization purposes, the annual average exchange rates from the Bank of Pakistan below were used when needed. The expenditure data gathered in various currencies were converted and are presented in Pakistan Rupee.

AVERAGE EXCHANGE RATES FOR THE FINANCIAL YEARS			
Currency	2020/2021 (PKR)	2021/2022 (PKR)	2022/2023 (PKR)
1 USD	159.476	178.932	252.122

2.11 Limitations of the study

Some organizations were not able to provide data disaggregated to the level required by NASA. In these cases, funds spent on different activities were not broken down into specific production factors (PF) and were lumped together as "not disaggregated". Only 2% of PF had this code, which showed the high quality of the data.

This NASA did not try to compare trends of HIV and AIDS spending with those in previous NASAs, it is important to note that different NASAs used different approaches to estimate the OOPP and the government HR and utilities costs, making direct comparisons inaccurate and misleading.

NASA Pakistan examined the financial inputs and processes, but it has the limitation of not evaluating the outcomes and impact of the spending. Assessing the direct correlation between financial investments and actual health outcomes is complex and requires more extensive study to establish the impact of the spending on the disease outcomes. In section 4.2, a simple consideration of the numbers of persons on ART and the units of ART expenditure are examined. Data limitations hindered further analysis.

The out-of-pocket payment data for HIV / AIDS was derived from the National Health Accounts for Pakistan, however, due to the lack of intervention-specific breakdown in the NHA dataset, the whole OOPP for HIV was attributed to care and treatment. This hampers the ability to precisely estimate and disaggregate OOPP HIV prevention spending, which would have been probably small.

The assumption was made that care and treatment interventions were aimed at people living with HIV, so all treatment interventions for Key population groups were categorized under PLWHIV as beneficiaries. It was methodologically impractical to distinguish Key population groups living with HIV from other PLWHIV. Hence the analysis of beneficiaries has under-estimated treatment spending for KP.

Measuring the Government's expenditure on HIV in Pakistan primarily relied on estimations, with just 28% constituting the actual contributions from the provincial government towards the HIV response. This limitation arises due to the absence of an integrated accounting system capable of comprehensively recording all governmental expenditures on HIV, including those related to human resources, utilities, and other costs associated with health system strengthening. Consequently, such expenditures have been estimated rather than actual reported expenditures.

NASA Pakistan primarily focused on financial aspects and did not conduct a comprehensive analysis of the broader contextual factors influencing HIV/AIDS responses, such as socio-political dynamics, cultural nuances, or systemic challenges within the healthcare system.

NASA does not have specific procurement and supply management (PSM) codes in the production factor categories, hence for this assessment, the PF code PF.01.10.01 was used to classify the PSM costs to be able to distinguish them from the commodity prices.

3

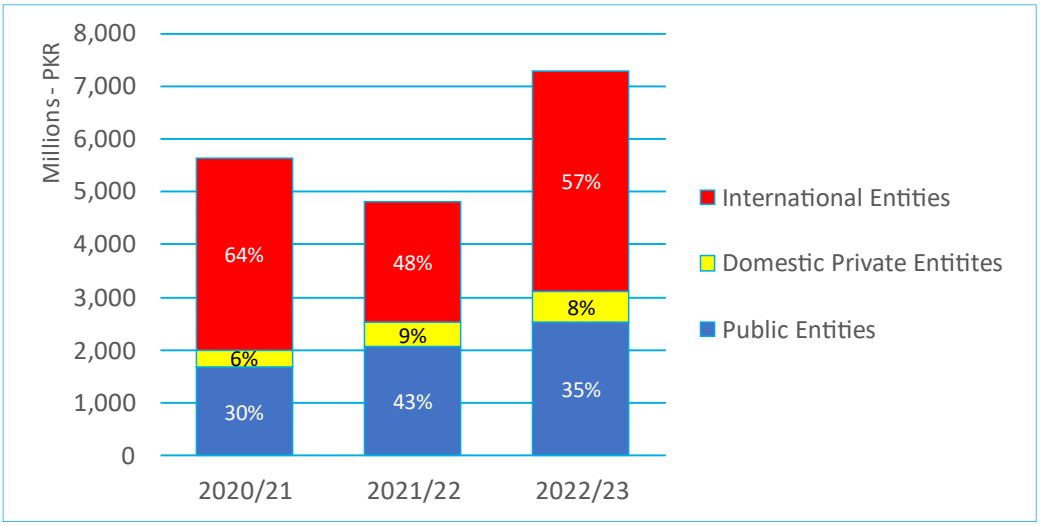
NASA FINDINGS

3.1 Total HIV and AIDS Spending by Financing Entities in Pakistan

The funding of HIV response in Pakistan is provided by several financing entities, including the government of Pakistan, private financing entities (non-governmental organizations), and international financing entities. Figure shows that the total HIV spending in Pakistan increased from 5.6 billion PKR (US$ 35.4 million) in 2020/21 to 7.3 billion PKR (US$ 29 million) in 2022/23, with a slight decrease to 4.8 billion PKR (US$ 26.9 million) in 2021/22.

The analysis of HIV spending over the past three years highlights a fluctuating trend. In 2021/22, there was a decline in spending, indicating a decrease of 15% from the previous year. The spending on HIV programs experienced a considerable surge in 2022/23, reaching 7.3 billion KPR. This spike represented a substantial growth rate of 52% compared to the previous year. This rise could be attributed to several factors. Firstly, there was an attempt to generate more domestic funding, with a nominal increase of 52% over the three years from 1.7 billion PKR in 2020/2021 to 2.5 billion PKR in 2022/23. The international partners also have provided more resources to maintain the essential HIV services, with the Global Fund boosting its funding by 15% in nominal terms between 2020/21 and 2022/23.

FIGURE 2: TOTAL HIV AND AIDS SPENDING BY FINANCING ENTITIES (2020/21 TO 2022/23, PKR MILLION %)



Note: The private sector spending is mainly the OOP expenditure related to HIV/AIDS that was extracted from the NHA dataset. This NASA used appropriate projection techniques, adjusting for inflation and exchange rate variations, to estimate OOP expenditure for HIV/AIDS for the years 2020/21, 2021/22, and 2022/23

Pakistan largely depends on foreign entities (primarily the Global Fund) to finance the HIV response. Foreign entities covered 64% of overall HIV spending (KPR 3.6 billion) in 2020/21, but the analysis indicates a significant decrease in external funding to 48% (KPR 2.2 billion) in 2021/22 whereas during the same period Government commitment/funding increased. This decline can be attributed to the Global Fund's new cycle of funding and a change in the principal recipient from NACP-CMU to UNDP. The Global Fund as the largest donor for HIV programs in Pakistan, provided 61% of total financing in 2020/21, 44% in 2021/22, and 55% in 2022/23 (Table 2). However, the analysis also shows an upward trend, with international entities spending increasing to 4.1 billion PKR in 2022/23, displaying a growth rate of 82%.

The government of Pakistan was the second contributor to HIV spending in the country, after the Global Fund. Government spending on HIV has shown an increasing trend over the past three years, both in

absolute and relative terms. The government spent 1.6 billion PKR in 2020/2021, representing 30% of the total spending on HIV, then increased to 2 billion PKR in 2021/2022, representing 43% of the total spending. In 2022/2023 the analysis shows a noble increase in government spending reaching 2.5 billion PKR, representing 35% of the total spending. This is remarkable as it happened in the context of COVID-19, and Pakistan, like other countries in the world, was not spared from the impact of the pandemic. According to a feature story by UNAIDS (23), the COVID-19 pandemic and the associated lockdown disrupted the access to health services, education, and employment for people living with HIV (PLHIV) and key populations, especially transgender people, in Pakistan. However, it has not been found that the COVID-19 pandemic has diverted resources from other important programmes and initiatives. Hence, we did not mention the impact of COVID-19 on HIV spending in this report.

In United States dollar (USD) terms, increments in the Pakistan Government's contributions are often insignificant, given the fluctuating exchange rate with the Pakistan Rupee, which often loses value to the dollar. When external funds increase, the overall proportion of public funds decreases. In nominal terms, the Government's contribution has increased by 52% from 2020/21 to 2022/23, indicating its positive commitment to increasing domestic resources for HIV and AIDS. Thus, using proportions alone as a measure of the country's spending performance may be misleading.

Private funds (mainly Out-of-Pocket payments) saw a moderate increase from 329 million PKR (6% of the total spending) in 2020/21 to 447 million PKR (9% of the total spending) in 2021/22. The OOPE was adjusted for inflation and continued to rise, reaching 571 million PKR (8% of the total spending) indicating a significant growth rate of 28% in nominal terms from 2021/22 to 2022/23. One should note that despite the free provision of HIV care and treatment in Pakistan, people still incur OOP expenditure on HIV for various reasons, such as: Transport costs to and from the health facilities, Opportunity costs, fees paid for medical services or tests that are not covered by the free program, Food and nutrition supplements that are recommended for people on antiretroviral therapy (ART) - these are assumed to be part of OOPP from the health accounts' estimation.

FIGURE 3: FINANCING ENTITIES' CONTRIBUTIONS TO HIV (2020/21 - 2022/23, PKR MILLION)

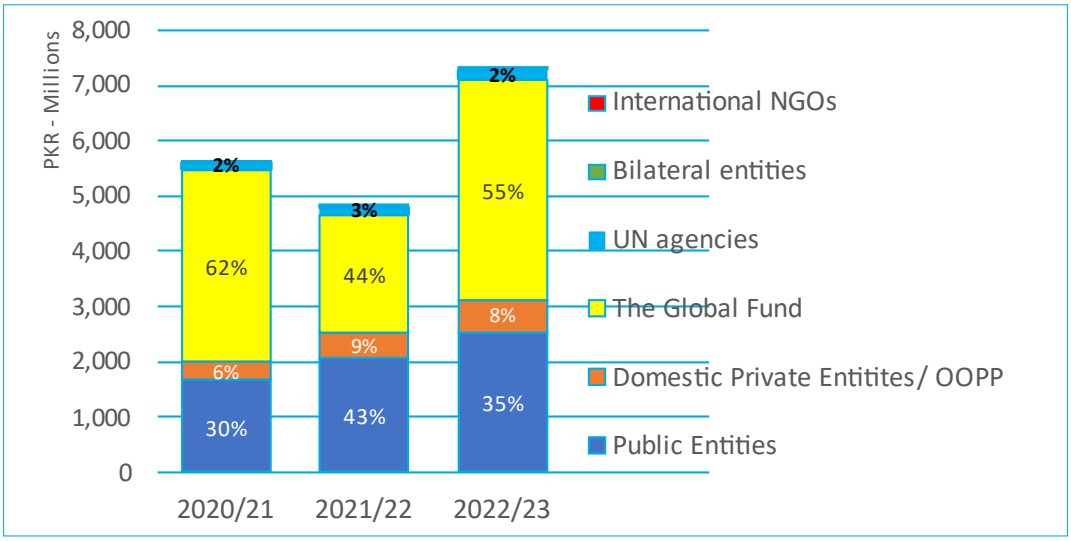


TABLE 1: FINANCING ENTITIES' CONTRIBUTIONS TO HIV IN PAKISTAN (2017/18-2019/20, PKR,%)

Financing Entities (PKR)	2020/21	2021/22	2022/23	2020%	2021%	2022%
Public Entities	1,674,325,164	2,069,160,676	2,539,759,113	30%	43%	35%
Domestic Private Entitites/ OOPP	328,749,451	446,749,860	571,430,427	6%	9%	8%
The Global Fund	3,473,572,943	2,132,447,763	3,998,764,816	62%	44%	55%
UN agencies	124,813,294	145,597,025	169,407,063	2%	3%	2%
Bilateral entities	9,944,662	11,296,301	9,067,771	0%	0%	0%
International NGOs	15,874,698	3,473,254	2,120,000	0%	0%	0%
Grand Total	5,627,280,212	4,808,724,879	7,290,549,191	100%	100%	100%

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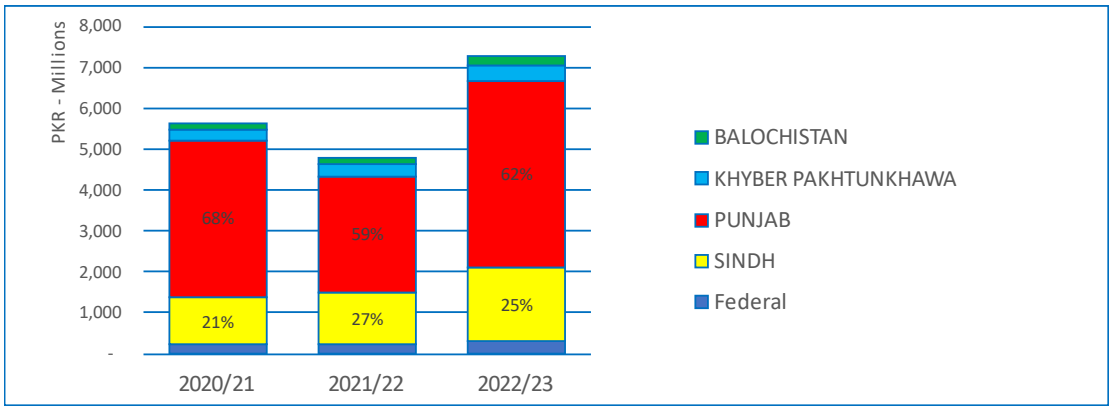
3.2 Geographic Distribution of HIV Expenditure in Pakistan

Pakistan is a federal country with four provinces: Punjab, Sindh, Khyber Pakhtunkhwa (KP), and Balochistan. Each province has its own health department and budget, responsible for planning, implementing, and monitoring the health programs and services in their respective areas. The geographical distribution of HIV spending in Pakistan reflects the differences in the size, population, and HIV burden of each province, as well as the availability and allocation of resources from various sources.

Among the provinces, Punjab had the highest HIV spending in all three years, followed by Sindh, and with much smaller amounts in Khyber Pakhtunkhwa and Balochistan. The HIV spending in Punjab increased from 3.8 billion PKR in 2020/21 to 4.5 billion PKR in 2022/23, accounting for 68% of the total HIV spending in 2020/21, 59% in 2021/22, and 62% in 2022/23. In nominal terms, the budget allocated for HIV in Sindh rose by 58%, from 1 billion PKR in 2020/21 to 1.8 billion PKR in 2022/23. In Khyber Pakhtunkhwa, the HIV spending increased from 279 million PKR in 2020/21 to 399 million PKR in 2022/23, accounting for 5% of the total HIV spending in 2020/21 and 2022/23, but 6% % in 2021/22. The federal HIV spending increased gradually over the years, from 231million PKR in 2020/21 to 291 million PKR in 2022/23. Balochistan has recorded the least HIV spending, although increased from 121 million PKR in 2020/21 to 231 million PKR in 2022/23, accounting for 2% of the total HIV spending in 2020/21, 3% in 2021/22, and 2022/23.

Figure 4 shows the trend of HIV spending per province in Pakistan for the three years under assessment: HIV spending at the federal level and HIV spending that is not disaggregated by part of the country.

FIGURE 4: GEOGRAPHIC DISTRIBUTION OF HIV EXPENDITURE IN PAKISTAN (2020/21-2022/23, PKR)



Note: The Federal Level reflects some of the estimated GoP contribution to HIV response (HR-HIV & utilities cost). While the provincial spending represents the direct contributions from all the financing entities to provinces as well as the estimated provincial governments contribution through HR &utilities cost. Devolution and the role of Federal and Provincial entities in the post-devolution arrangements would help to explain greater provincial commitments and spending at the provincial levels.

TABLE 2: GEOGRAPHIC DISTRIBUTION OF HIV EXPENDITURE IN PAKISTAN (2020/21-2022/23, PKR)

HIV spending per province (PKR)	2020/21	2021/22	2022/23	% 2020	% 2021	% 2022
Federal	231,491,114	236,079,722	291,441,730	4%	5%	4%
SINDH	1,157,656,389	1,276,300,104	1,826,428,743	21%	27%	25%
PUNJAB	3,836,730,607	2,829,166,325	4,542,601,834	68%	59%	62%
KHYBER PAKHTUNKHAWA	279,883,391	310,826,911	399,330,355	5%	6%	5%
BALOCHISTAN	121,518,712	156,351,817	230,746,528	2%	3%	3%
Grand Total	5,627,280,212	4,808,724,879	7,290,549,191	100%	100%	100%

Table 3 depicts the HIV spending per province per capita and per PLHIV in Pakistan, excluding the federal level. Punjab has the largest population and the largest number of PLHIV among the provinces in Pakistan, and thus in terms of total expenditure, Punjab emerges as the highest spender, consistently allocating substantial sums across the three fiscal years. When dividing by the provinces' total population, Punjab's per capita HIV spending was PKR41 remains comparable to that of Sindh of 38 PKR per capita for HIV-related initiatives. Comparing the spending per PLHIV across provinces, it appears that Punjab allocates the highest amount per PLHIV, followed by Sindh, Balochistan, and Khyber Pakhtunkhwa, respectively.

The data reveals a disparity in the allocation of funds per PLHIV across the provinces. Punjab, despite having the largest PLHIV population, allocates the highest amount per PLHIV (PKR 39,583), which is nearly double that of Sindh (PKR 19,894) and significantly higher than Khyber Pakhtunkhwa (PKR 28,998) and Balochistan (PKR 25,130). The findings highlight potential equity issues in the allocation of HIV spending across provinces in Pakistan. While Punjab receives the highest budget for HIV spending and allocates the most funds per person living with HIV (PLHIV), other provinces like Khyber Pakhtunkhwa and Balochistan receive significantly lower budgets per PLHIV. This discrepancy raises concerns about equitable access to HIV services and resources for PLHIV across different regions of the country.

However, further analysis is needed to determine if these funds are adequately addressing the burden of HIV in each province, considering factors such as the prevalence of HIV and the specific needs of PLHIV in each province.

TABLE 3: HIV SPENDING PER PROVINCE , PER CAPITA, AND PER PLHIV IN PAKISTAN (EXCLUDING THE FEDERAL LEVEL)

HIV spending per province (PKR)	2020/21	2021/22	2022/23	Per capita	Per PLHIV
SINDH	1,157,656,389	1,276,300,104	1,826,428,743	38	19,894
PUNJAB	3,836,730,607	2,829,166,325	4,542,601,834	41	39,583
KHYBER PAKHTUNKHAWA	279,883,391	310,826,911	399,330,355	13	28,998
BALOCHISTAN	121,518,712	156,351,817	230,746,528	19	25,130

Table 4 shows the HIV spending by province and source of funding for the three years under assessment. According to data collected, the percentage distribution of spending across the different finance entities and provinces changed over the years. Here is a summary of the main trends: The largest share of spending by the government was for Punjab province (53% in 2022/23), followed by Sindh (29%), Khyber Pakhtunkhawa (10%), and Balochistan (6%). The estimated household spending increased from PKR 326 million in 2020/21 to PKR 570 million in 2022/23. The largest share of spending by households was for Punjab province (50% in 2022/23), followed by Sindh (40%), Khyber Pakhtunkhawa (6%), and Balochistan (4%).

The local NGOs funds for HIV programs increased from 2.7 million PKR in 2020/21 to 5.7 million PKR in 2021/22 but decreased to 1.3 PKR in 2022/23. NGOs have funded HIV activities in two provinces and their

largest share of spending was for Sindh province (96% in 2022/23), followed by Punjab (4%). Similarly, the funding from international NGOs and foundations dropped considerably by 87%, from PKR 15.9 million in 2020/21 to PKR 2.1 million in 2022/23. The funding from multilateral agencies was allocated to all four provinces, with Punjab getting the largest portion (69% in 2022/23), followed by Sindh (20%), Khyber Pakhtunkhawa and Balochistan (2% each).

TABLE 4: HIV SPENDING BY PROVINCE AND FUNDING ENTITIES (2020/21-2022/23, PKR, %)

Spending at Federal and provincial levels by finance entity (PKR)		2020/21	2021/22	2022/23
GOVERNMENT OF PAKISTAN		1,702,535,813	2,088,630,246	2,567,999,043
	FEDERAL	3%	2%	3%
	SINDH	23%	28%	29%
	PUNJAB	60%	54%	52%
	KP	10%	10%	10%
	BALOCHISTAN	4%	5%	6%
HOUSEHOLD/OOPP		326,032,905	441,026,317	570,134,427
	SINDH	40%	40%	40%
	PUNJAB	50%	50%	50%
	KP	6%	6%	6%
	BALOCHISTAN	4%	4%	4%
LOCAL NGOs		2,716,546	5,723,543	1,281,000
	SINDH	62%	45%	96%
	PUNJAB	38%	55%	4%
BILATERAL AGENCIES	PUNJAB	9,944,662.0	11,296,301.0	9,067,771.0
MULTILATERAL AGENCIES		3,598,386,237	2,278,044,788	4,168,171,880
	FEDERAL	6%	10%	7%
	SINDH	17%	22%	20%
	PUNJAB	73%	63%	69%
	KP	2%	3%	2%
	BALOCHISTAN	1%	1%	2%
INT. NGOS & FOUNDATIONS		15,871,281	3,473,254	2,120,000
	SINDH	17%	22%	100%
	PUNJAB	83%	78%	0%
GRAND TOTAL	NATIONAL	5,655,490,861	4,828,194,449	7,318,789,122

Please note that about 72% of public spending was based on estimates. Detailed provincial analysis are presented in the appendix.

3.3 Revenues of Financing Schemes

Revenues of financing schemes describe the main flows from which financing schemes obtain their revenues, that is the mechanisms through which resources enter the system. The classification of revenues of financing schemes tracks the collection mechanisms of a financing framework.

Direct financial transfers from foreign entities accounted for the highest proportion of HIV and AIDS financing revenues, at 64% in 2020/21, 48% in 2021/22 and 57% in 2022/23. The government of Pakistan, through national revenues (internal transfers from government domestic revenue), accounted for 30% of total HIV funding in 2020/21, 44% in 2021/22 and 35% in 2022/23. Other domestic revenues, mainly the revenues from households, amounted to 6% of total HIV funding in 2020/21, 9% in 2021/22, and 8% in

2022/23. The slight proportional decrease in other domestic revenues is due to the large increase in international transfers in nominal and proportional terms in 2022/23.

FIGURE 5: FINANCING REVENUES FOR HIV (2020/21-2022/23, PKR)

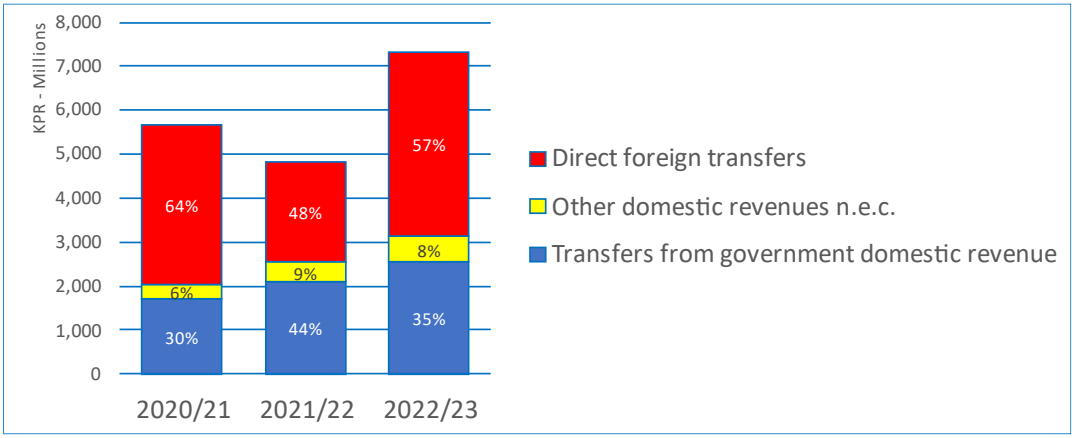


TABLE 5: FINANCING REVENUES FOR HIV (2020/21-2022/23, PKR)

HIV Financing Revenues (PKR)	2020/21	2021/22	2022/23	% 2020	% 2021	% 2022
Transfers from government domestic revenue	1,702,535,813	2,092,365,070	2,567,999,043	30%	44%	35%
Other domestic revenues (mainly Households).	328,749,451	446,749,860	571,430,427	6%	9%	8%
Direct foreign transfers	3,624,205,597	2,289,079,519	4,179,359,652	64%	48%	57%
Grand Total	**5,627,280,212**	**4,808,724,879**	**7,290,549,191**	**100%**	**100%**	**100%**

TABLE 6: TOTAL HIV FINANCING ENTITIES IN PAKISTAN DISAGGREGATED BY REVENUES (2020/21-2022/23, PKR)

HIV Financing Entities and their Revenues (PKR)	2020/21	2021/22	2022/23	% 2020	% 2021	% 2022
FE.01. Public Entities	**1,702,535,813**	**2,088,630,246**	**2,567,999,043**	**30%**	**43%**	**35%**
Transfers from government domestic revenue	1,702,535,813	2,088,630,246	2,567,999,043	30%	43%	35%
FE.02. Domestic Private Entities	**328,749,451**	**446,749,860**	**571,430,427**	**6%**	**9%**	**8%**
Other domestic revenues	328,749,451	446,749,860	571,430,427	6%	9%	8%
FE.03. International Entities	**3,624,205,597**	**2,292,814,343**	**4,179,359,652**	**64%**	**47%**	**57%**
Transfers from government domestic revenue		3,734,824		0%	0%	0%
Direct foreign transfers	3,624,205,597	2,289,079,519	4,179,359,652	64%	47%	57%
Total	**5,655,490,861**	**4,828,194,449**	**7,318,789,122**	**100%**	**100%**	**100%**

3.4 Financing Schemes

Financing schemes are structural arrangements through which HIV and AIDS services and goods are paid for and obtained by households. Financing schemes help to define how HIV and AIDS funds are managed and organized, and the extent to which resources are pooled and allocated to pay for HIV and AIDS services by different healthcare financing agents and purchasers. Examples include direct payments by households, third-party financing arrangements such as voluntary and social health insurance, government schemes, and voluntary prepayment schemes from non-profit-making institutions serving households.

The analysis in Figure 6 and Table 7 show a fluctuating trend in financing schemes, with a drastic decrease for the central government schemes in 2021/22, due to the Global Fund's new cycle of funding and a change in the principal recipient. The main PR for the current HIV grants in Pakistan is the United Nations Development Programme (UNDP Pakistan), which replaced the National AIDS Control Programme (NACP) as the PR for the public sector grant in July 2021. Hence, a significant increase in resident foreign agencies schemes from 2021/22 and 2022/23.

However, in 2022/23, 35% of HIV financing was channelled through government schemes, mostly provincial government schemes (34%). Most of the international entities' financing flows via the resident foreign agencies' schemes (36% of the total) and Not-for-profit organization schemes (21%). The Out-of-pocket excluding cost-sharing received 8% of HIV financing in 2022/23.

FIGURE 6: HIV FINANCING SCHEMES (2020/21-2022/223, PKR)

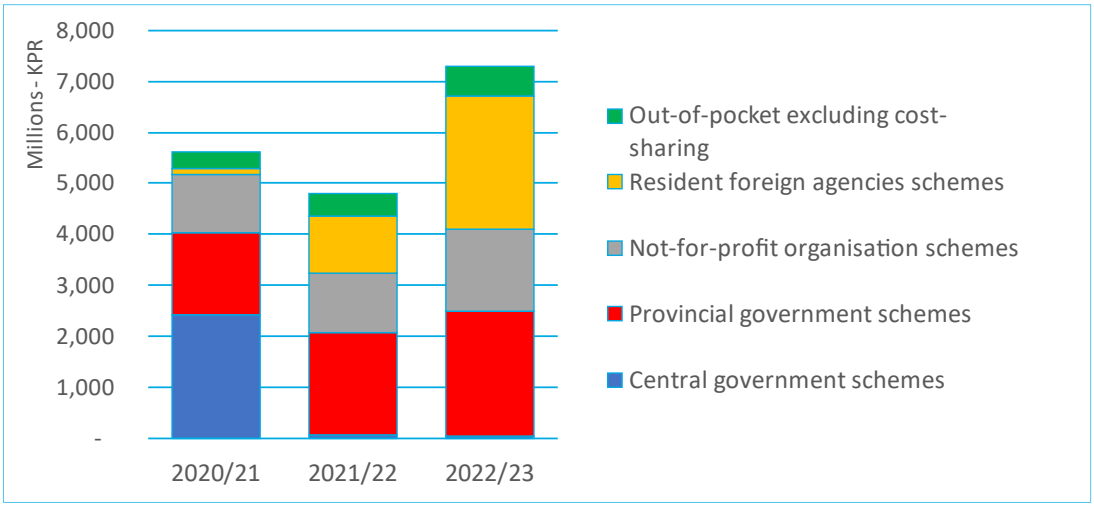


TABLE 7: HIV FINANCING SCHEMES (2020/21-2022/23, PKR)

HIV Financing Schemes (PKR)	2020/21	2021/22	2022/23	% 2020	% 2021	% 2021
Central government schemes	2,443,903,088	76,221,950	74,516,618	43%	2%	1%
Provincial government schemes	1,667,460,778	2,042,736,361	2,499,584,295	29%	42%	34%
Not-for-profit organisation schemes	1,093,907,625	1,138,770,382	1,549,601,422	19%	24%	21%
Resident foreign agencies schemes	124,186,465	1,129,439,439	2,624,977,359	2%	23%	36%
Out-of-pocket excluding cost-sharing	326,032,905	441,026,317	570,109,427	6%	9%	8%
Grand Total	**5,655,490,861**	**4,828,194,449**	**7,318,789,122**	**100%**	**100%**	**100%**

Note: The significant decline of spending via the central government scheme resulted from the Global Fund recipients moving from the Ministry of Health to UNDP, thus the increase in resident foreign agencies scheme from 2021/22 and 2022/23.

TABLE 8: HIV FINANCING ENTITIES AND THEIR FINANCING SCHEMES (2020/21-2022/23, PKR)

HIV Financing Entities and their Schemes (PKR)	2020/21	2021/22	2022/23	% 2020	% 2021	% 2022
FE.01 Public Entities	**1,702,535,813**	**2,088,630,246**	**2,567,999,043**	**30%**	**43%**	**35%**
Government schemes	1,702,535,813	2,088,630,246	2,567,999,043	30%	43%	35%
FE.02 Domestic Private Entities	**2,716,546**	**5,723,543**	**1,321,000**	**0%**	**0%**	**0%**
Not-for-profit organisation schemes	2,716,546	5,723,543	1,321,000	0%	0%	0%
Out-of-pocket excluding cost-sharing	326,032,905	441,026,317	570,109,427	6%	9%	8%
FE.03 International Entities	**3,624,205,597**	**2,292,814,343**	**4,179,359,652**	**64%**	**47%**	**57%**
Government schemes	2,400,105,409	30,328,065	6,101,870	42%	1%	0%

Not-for-profit organisation schemes	1,224,100,188	2,262,486,278	4,173,257,781	22%	47%	57%
Grand Total	**5,655,490,861**	**4,828,194,449**	**7,318,789,122**	**100%**	**100%**	**100%**

3.5 The Financing Agents and Purchasers (FAP)

Figure 7 shows the HIV financing agents and purchasers in Pakistan in PKR for the three years under assessment. The table also shows the percentage share of HIV financing by each agent and purchaser for the three years. The public sector was the largest HIV financing agent and purchaser in Pakistan, managing up to 73% of the total HIV spending in 2020/21, 44% in 2021/22, and 35% in 2022/23. However, the funds managed by the public sector decreased from 4.1 billion PKR in 2020/21 to 2.1 billion PKR in 2021/22 and then increased slightly to 2.6 billion PKR in 2022/23. The second largest HIV financing agent and purchaser in Pakistan were the not-for-profit institutions, managed 19% of the total HIV spending in 2020/21, 24% in 2021/22, and 21% in 2022/23. The funds managed by the not-for-profit institutions increased from 1.1 billion PKR in 2020/21 to 1.5 billion PKR in 2022/23.

By 2022/23, the multilateral agencies had grown to the third largest HIV financing agent and purchaser in Pakistan, initially accounted for only 2% of the total HIV spending in 2020/21, then drastically increased to 23% in 2021/22, and further to 36% in 2022/23. The multilateral agencies' HIV spending increased significantly from 114 million PKR in 2020/21 to 2.6 billion PKR in 2022/23, this was attributed to the change of the Global Fund PR as UNDP represents the multilateral agencies. The private households (out-of-pocket payments) managed 6 %of the total HIV spending in 2020/21, 9% in 2021/22, and 8% in 2022/23.

FIGURE 7: FINANCING AGENTS & PURCHASERS FOR HIV SERVICES (2020/21-2022/23, PKR)

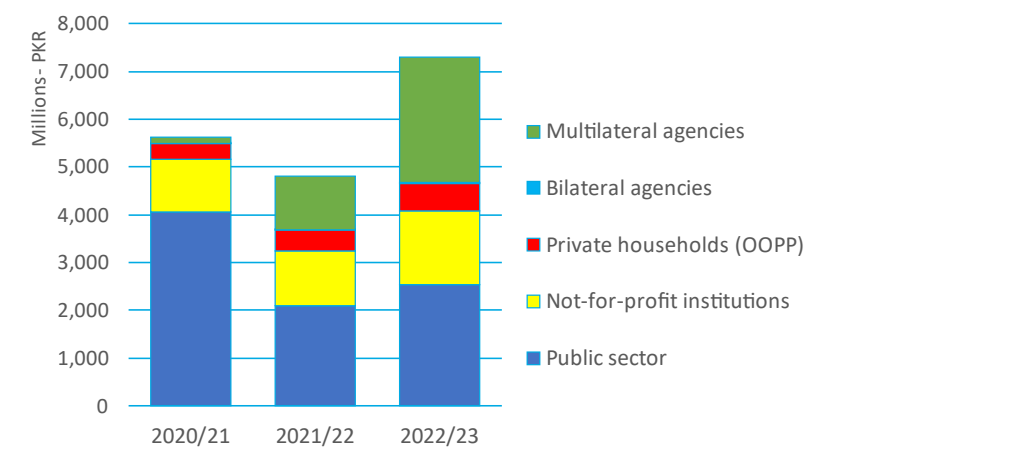


TABLE 9: FINANCING AGENTS & PURCHASERS FOR HIV SERVICES (2020/21-2022/23, PKR, %)

Financing Agents and Purchasers (PKR)	2020/21	2021/22	2022/23	2020%	2021%	2022%
Public sector	4,102,641,222	2,118,958,311	2,574,100,913	73%	44%	35%
Not-for-profit institutions	1,102,626,852	1,138,770,382	1,549,601,422	19%	24%	21%
Private households (OOPP)	326,032,905	441,026,317	570,109,427	6%	9%	8%
Bilateral agencies	9,944,662	11,296,301	9,067,771	0%	0%	0%
Multilateral agencies	114,245,220	1,118,143,138	2,615,909,588	2%	23%	36%
Grand Total	5,655,490,861	4,828,194,449	7,318,789,122	100%	100%	100%

TABLE 10: FINANCING ENTITIES AND THEIR AGENTS & PURCHASERS FOR HIV SERVICES (2020/21-2022/23, PKR,%)

Financing entities and their Financing agents (PKR)	2020/21	2021/22	2022/23	% 2020	% 2021	% 2022
FE.01 Public Entities	**1,702,535,813**	**2,088,630,246**	**2,567,999,043**	**30%**	**43%**	**35%**
FAP.01.01 Territorial governments	1,702,535,813	2,088,630,246	2,567,999,043	30%	43%	35%
FE.02 Domestic Private Entities	**328,749,451**	**446,749,860**	**571,430,427**	**6%**	**9%**	**8%**
FAP.02.05 Not-for-profit institutions	2,716,546	5,723,543	1,321,000	0%	0%	0%
FAP.02.04 Private households	326,032,905	441,026,317	570,109,427	6%	9%	8%
FE.03 International Entities	**3,624,205,597**	**2,292,814,343**	**4,179,359,652**	**64%**	**47%**	**57%**
FAP.01.01 Territorial governments	2,400,105,409	30,328,065	6,101,870	42%	1%	0%
FAP.02.05 Not-for-profit institutions	1,091,187,662	1,133,046,839	1,548,280,422	19%	23%	21%
FAP.03.01 Country offices of bilateral agencies	8,722,644	-	-	0%	0%	0%
FAP.03.02 Multilateral agencies	114,245,220	11,296,301	9,067,771	2%	0%	0%
Total	**5,655,490,861**	**4,828,194,449**	**7,318,789,122**	**100%**	**100%**	**100%**

3.6 PROVIDERS OF HIV SERVICES IN PAKISTAN

HIV services in Pakistan are implemented by different service providers, such as hospitals (ART centres), government entities (including, MOH, National AIDS Control Program -NACP-, Provincial AIDS control program -PACP-, etc) blood banks, non-profit organizations, multilateral agencies, and international NGOs and foundations. The distribution of spending by these service providers reflects their roles and contributions to the HIV response in Pakistan.

Table 11 shows that the largest provider of HIV services in terms of spending was public hospitals (ART centres) which accounted for 58% of the total spending in 2020/21, 56% in 2021/22, and 51% in 2022/23. The second largest provider of HIV services was non-profit providers, mainly the CBOs and CLOs which accounted for 23% of the total spending in 2020/21, 26% in 2021/22, and 22% in 2022/23. Their spending increased from 1.3 billion PKR in 2020/21 to 1.6 billion PKR in 2022/23. Followed by government entities (MOH, NACP and PACP), with 23% in 2021/22 and 19% in 2022/23. Multilateral agencies (UN agencies) also played a role in the delivery of HIV services in Pakistan, as evidenced by their spending on various HIV interventions, which accounted for 2% of the total spending in each of the 3 years under assessment.

TABLE 11: PROVIDERS OF SERVICES FOR HIV/AIDS (PKR, %, 2019/20 – 2020/21)

Providers of HIV services - PKR	2020/21	2021/22	2022/23	% 2020	% 2021	% 2022
Public Hospitals -ART centres	3,260,521,406	2,709,525,289	3,737,817,868	58%	56%	51%
Government entities	1,555,483,405	1,093,059,168	1,383,677,572	28%	23%	19%
Blood banks (public)	30,591,220	57,088,450	71,677,575	1%	1%	1%
Non-profit providers	1,288,773,257	1,237,750,098	1,617,108,992	23%	26%	22%
Multilateral agencies	97,230,119	113,321,090	109,960,285	2%	2%	2%
International NGOs and foundations	273,046,652	357,150,249	837,039,484	5%	7%	11%
TOTAL	**5,655,490,861**	**4,828,194,449**	**7,318,789,122**	**100%**	**100%**	**100%**

FIGURE 8: PROVIDERS OF SERVICES FOR HIV/AIDS (USD,%, 2019/20 – 2020/21)

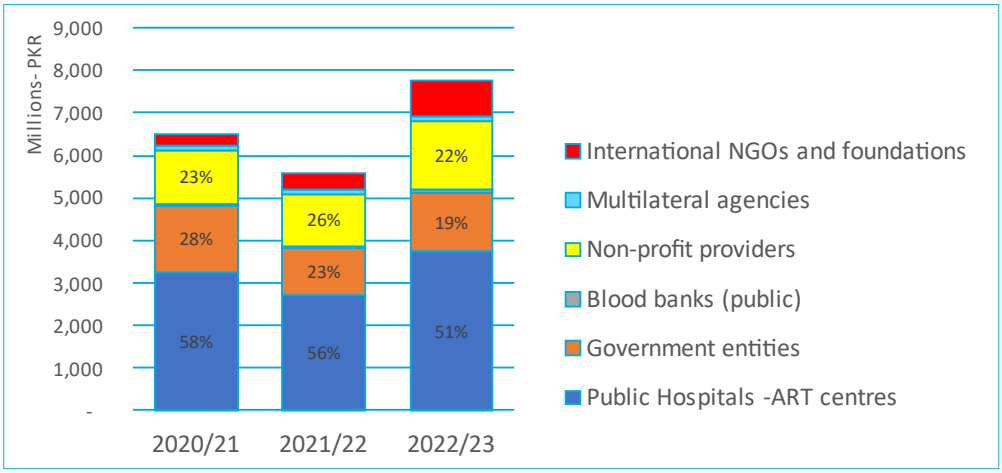
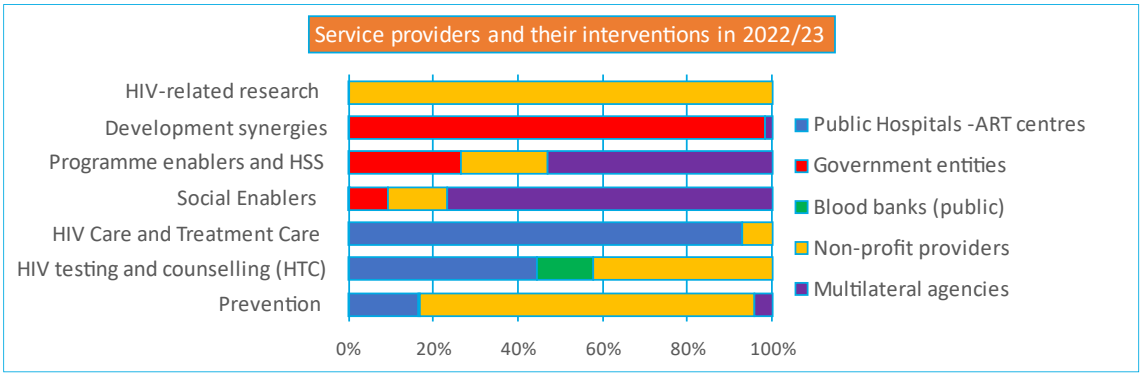


Table 13 shows the spending on different HIV interventions by their providers of services. HIV care and treatment and HIV testing and counselling (HTC) were the main expenditure components for public hospitals (ART centres), while programme enablers and systems strengthening, and development synergies (trainings) were the primary expenditure components for government entities. They also allocated the lowest amount of resources to social enablers. On the other hand, Prevention, and HTC were the major expenditure components for non-profit providers. They also assigned the little spending to social enablers and solely provided the HIV-related research. The multilateral agencies as provider spent the most on programme enablers and systems strengthening and social enablers.

TABLE 12: HIV PROGRAMME AREAS AND THEIR PROVIDERS OF SERVICES (%, 2022/23)

Program areas with Service providers (PKR, 2022/23)	Public Hospitals - ART centres	Government entities	Blood banks (public)	Non-profit providers	Multilateral agencies
Prevention	160,264,033		1,470,475	762,308,645	40,707,122
HIV testing and counselling (HTC)	238,700,944		70,207,100	226,501,844	-
HIV Care and Treatment Care	3,846,367,974			286,494,854	-
Social Enablers	2,335	6,620,995		9,925,745	54,238,557
Programme enablers and HSS	-	429,429,772		329,702,334	852,025,754
Development synergies	-	1,616,732	-	-	28,336
HIV-related research		-		2175570.439	-
Grand Total	4,245,335,286	437,667,499	71,677,575	1,617,108,992	946,999,769

FIGURE 9: HIV PROGRAMME AREAS AND THEIR PROVIDERS OF SERVICES (%, 2022/23)



In summary, the graph above illustrates a multi-sectoral approach to HIV intervention funding, with collaboration between public hospitals, government entities, non-profit providers, and multilateral agencies, indicating a coordinated effort to address the complex challenges posed by HIV/AIDS.

Table 13 illustrates the distribution of funding by the financing entities to their implementing partners/ service providers. The dominant financing agent in terms of spending was public entities, and their principal implementing partner was the governmental organisations (ART centres, and governments entities) which accounted for 63%, 43%, and 35% of the total spending in the respective years. The government also allocated some fundings, although negligible and decreasing amounts to CBOs to implement on behalf of the government.

In Pakistan, the government has not recognized fully the value of partnering with NGOs to extend the reach of HIV services and ensure their effective implementation. By funding NGOs to carry out HIV-related activities, the government can tap into the specialized knowledge, resources, and community networks that these organizations possess. This approach enables the government to decentralize service delivery, reaching populations that may be underserved or marginalized, and tailoring interventions to meet specific local needs. Moreover, by engaging NGOs, the government can promote community involvement and ownership of HIV programs, fostering trust and collaboration between service providers and the communities they serve. Overall, funding NGOs to implement HIV services on behalf of the government is a strategic investment that enhances the efficiency, effectiveness, and inclusivity of HIV response efforts in Pakistan.

TABLE 13: PROVIDERS OF SERVICES AND THEIR FINANCING AGENTS/PURCHASERS

HIV Financing Agents/purchaser & their Service Providers (PKR)	2020/21	2021/22	2022/23	% 2020	% 2021	% 2022
FAP.01 Public entities	**4,102,641,222**	**2,118,958,311**	**2,574,100,913**	**73%**	**44%**	**35%**
Governmental organizations	3,567,311,010	2,057,064,528	2,531,592,971	63%	43%	35%
Non-profit providers	262,283,559	61,893,783	42,507,942	5%	1%	1%
International NGOs and foundations	273,046,652	-	-	5%	0%	0%
FAP.02 Private entities	**273,046,652**	**1,579,796,699**	**2,119,710,849**	**5%**	**33%**	**29%**
Governmental organizations	415,833,780	737,628,022	981,040,408	7%	15%	13%
Non-profit providers	1,012,825,977	842,168,678	1,138,670,441	18%	17%	16%
FAP.03 International entities	**124,189,882**	**1,129,439,439**	**2,624,977,360**	**2%**	**23%**	**36%**
Governmental organizations	13,296,043	325,280,463	1,242,046,981	0%	7%	17%
Non-profit providers	13,663,721	333,687,637	435,930,610	0%	7%	6%
Multilateral agencies	97,230,119	113,321,090	109,960,285	2%	2%	2%
International NGOs and foundations	-	357,150,249	837,039,484	0%	7%	11%
Total	**5,655,490,861**	**4,828,194,449**	**7,318,789,122**	**100%**	**100%**	**100%**

Government organisations include public hospitals (ART centres) and other government entities.

3.7 Aids Spending Categories (Programme Areas and Interventions)

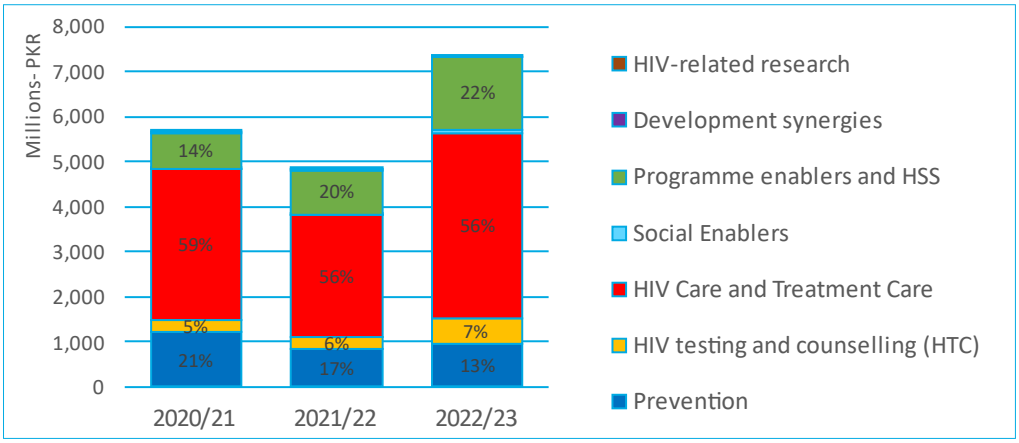
NASA uses the term "AIDS spending categories" to define all HIV-related interventions and activities in the HIV and AIDS response. AIDS spending categories include prevention, care and treatment, and other health and non-health services related to HIV and AIDS. This section presents the broader programme areas and HIV spending per intervention in Pakistan and the percentage share of HIV spending by each intervention for the three years under assessment.

HIV care and treatment was the largest intervention of HIV spending in Pakistan, accounting for 59% of the total HIV spending in 2020/21, and 56% in both 2021/22, and 2022/23. Care and treatment experienced a 19% reduction in nominal terms in 2021/22 then increased by 52% to reach 4 billion PKR in 2022/23. The

programme enablers and systems strengthening[1] was the second largest intervention in Pakistan, accounting for 14% of the total HIV spending in 2020/21, 20% in 2021/22, and 22% in 2022/23. Program enablers spending increased by 22 % in 2021/22 and considerably increased again by 65% to reach 1.6 billion PKR in 2022/23. Conversely, the spending on HIV prevention declined by 32% between 2020/21 and 2021/22 from 1.2 billion PKR to 822 million PKR but then increased again by 17% in 2022/23, representing 21%, 17% and 13% of total HIV spending, respectively.

The HIV testing and counselling (HTC) was the fourth largest intervention, accounting for 5% of the total HIV spending in 2020/21, 6% in 2021/22, and 7% in 2022/23. The HTC spending increased significantly by 52% between 2021/22 and 2022/23 reaching 533 million PKR in 2022/23. The other interventions, such as social enablers, development synergies, and HIV-related research, were the smallest in terms of HIV spending in Pakistan, accounting for 2% or less of the total HIV spending in all three years. This assessment didn't record any spending on social protection and economic support in Pakistan over the 3 years.

FIGURE 10: TOTAL HIV SPENDING PER PROGRAMME AREA (2020/21-2022/23, PKR, %)



Note: HTC sub-categories include the testing for KPs, and therefore spending on KP testing should be included in HTC (and not prevention). However, where a package of KP prevention services is delivered and the specific spending on their testing cannot be disaggregated, then these were all included under prevention (and were not double counted in both categories).

TABLE 14: TOTAL HIV SPENDING PER PROGRAMME AREA (2020/21-2022/23, PKR, %)

HIV spending per intervention (KPR)	2020/21	2021/22	2022/23	% 2020	% 2021	% 2022
Prevention	1,205,896,303	822,827,046	964,750,275	21%	17%	13%
HIV testing and counselling (HTC)	260,443,887	274,684,056	533,910,789	5%	6%	7%
HIV Care and Treatment Care	3,357,892,920	2,713,553,993	4,132,862,827	59%	56%	56%
Social Enablers	13,902,201	22,034,858	70,785,298	0.2%	0.5%	1%
Programme enablers and HSS	799,587,846	973,897,492	1,611,160,195	14%	20%	22%
Development synergies	16,741,327	20,595,245	3,144,168	0.3%	0.4%	0.0%
HIV-related research	1,026,378	601,760	2,175,570	0.0%	0.0%	0.0%
Grand Total	**5,655,490,861**	**4,828,194,449**	**7,318,789,122**	**100%**	**100%**	**100%**

The provincial split of HIV spending displayed similar proportional splits, with Care and treatment, HTC, prevention and programme enablers and systems strengthening taking the largest shares in all provinces (Figure 11): In all provinces care and treatment took the largest share, 61% in Sindh, 65% in Punjab, 81% KP and 62% Balochistan in 2022/23. The share of prevention was higher in Punjab (20%), and Sindh (19%) and

[1] Program enablers cover: Strategic planning, coordination and policy development, Strategic information, program administration and management, etc)

this may be attributed to greater population, epidemic burden in the two provinces. While in other provinces, prevention was under 10% of the total spending on HIV in 2022/23.

The Federal level had the highest spending on programme enablers and systems strengthening, followed by Punjab and Sindh. Among the provinces, Balochistan had the highest proportion share of HTC spending in all three years, followed by Sindh, and Punjab.

FIGURE 11: PROVINCIAL HIV EXPENDITURE PER PROGRAMME AREA (2022/23, PKR, %)

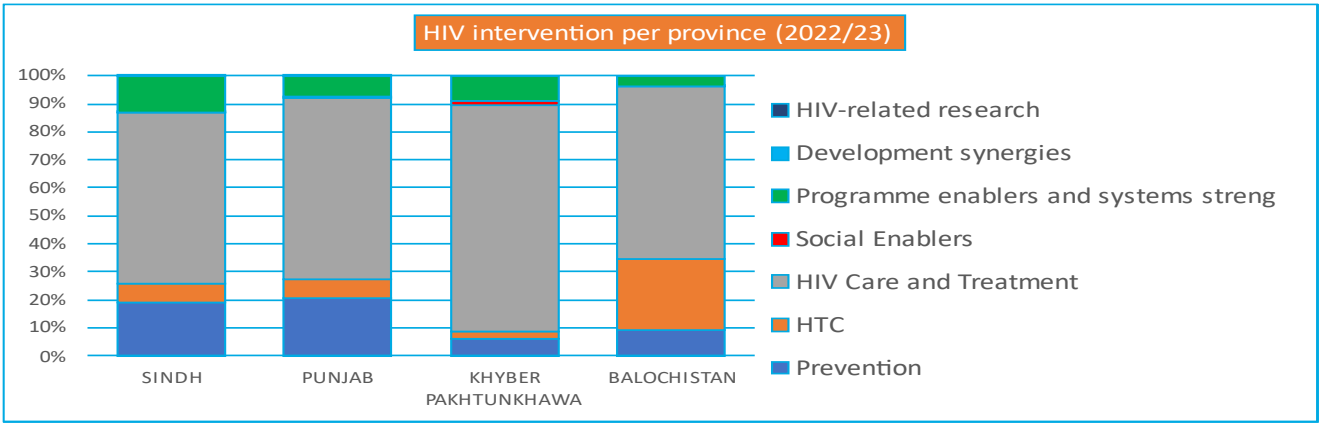
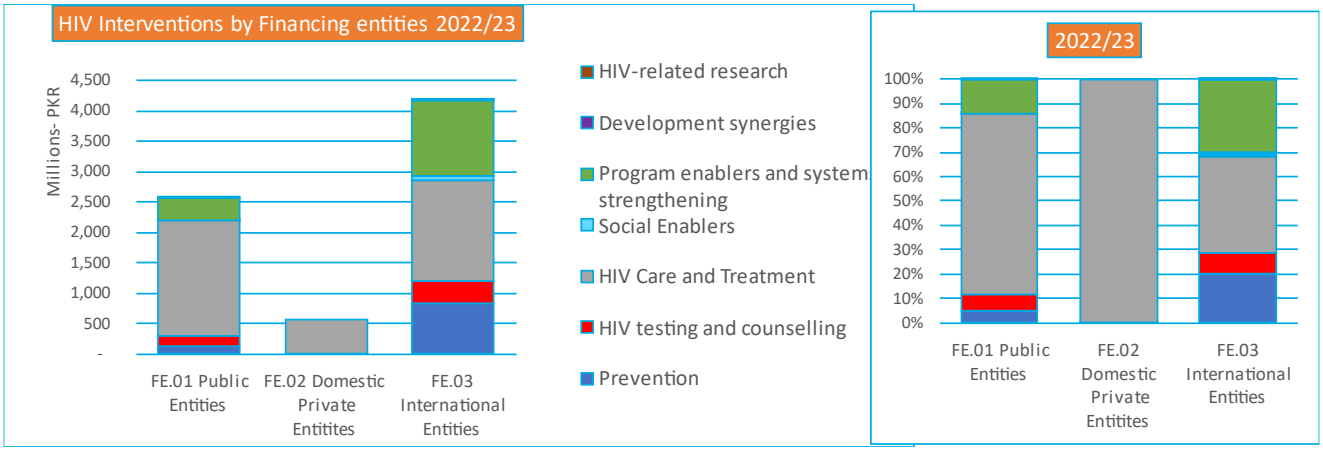


Figure 12 indicates the proportional contributions of different financing entities to each of the programme areas in 2022/23. Care and treatment activities were predominantly financed by public entities (46%), and followed by international entities (40%), and the private sector (14%). Programme enablers and systems strengthening were mainly funded by international entities (78%) followed by public Entities (22%). Prevention interventions were mainly financed by international entities at 86% while HIV testing and counselling (HTC) was almost three-quarters funded by international entities and the remaining was funded by public sector. HIV related research was exclusively funded by the international entities, while the other interventions, such as social enablers, development synergies were the smallest in terms of HIV spending in Pakistan and were mainly funded by public entities.

TABLE 15: TOTAL HIV SPENDING PER PROGRAMME AREA (2020/21-2022/23, PKR, %)

Financing Entities and HIV program areas (KPR-2022/23)	Public FE	Private FE (OOPP)	International FE	% Public Entities	% Household	% International FE
Prevention	131,313,197	1,321,000	832,116,077	14%	0%	86%
HIV testing and counselling	173,800,622		360,110,167	33%	0%	67%
HIV Care and Treatment	1,897,510,769	570,109,427	1,665,242,632	46%	14%	40%
Social Enablers	1,767,886		69,017,412	2%	0%	98%
Program enablers and systems streng.	360,490,737		1,250,669,458	22%	0%	78%
Development synergies	3,115,832		28,336	99%	0%	1%
HIV-related research			2,175,570	0%	0%	100%

FIGURE 12: FINANCING ENTITIES' CONTRIBUTIONS TO HIV PROGRAMME AREAS (2022/23, %)



3.7.1 Spending on HIV prevention activities

Total spending on HIV prevention declined by 32% between 2020/21 and 2021/22 from 1.2 billion PKR to 823 million PKR but then increased again by 17% to reach 965 million PKR in 2022/23. Over 80 % of prevention spending went towards the Five Pillars of Prevention each year, and the remaining percentage was shared among other prevention interventions), such as PMTCT, SBCC, community mobilization, programmatic activities for vulnerable populations, prevention for children and youth and prevention of HIV transmission aimed at PLWHIV (Figure 13). One important point is that the rise in prevention spending from 2021 to 2022 does not make up for the drop from 2020 to 2021. Therefore, the spending for prevention has gone down over time. This is more evident for the 5 pillars of prevention (table 15).

FIGURE 13: SPENDING ON HIV PREVENTION IN PAKISTAN (2020/21-2022/23, PKR, %)

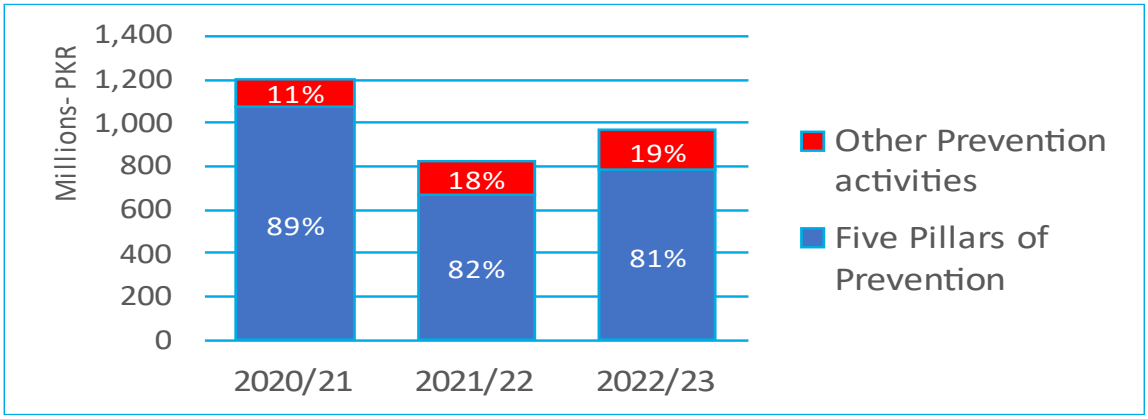
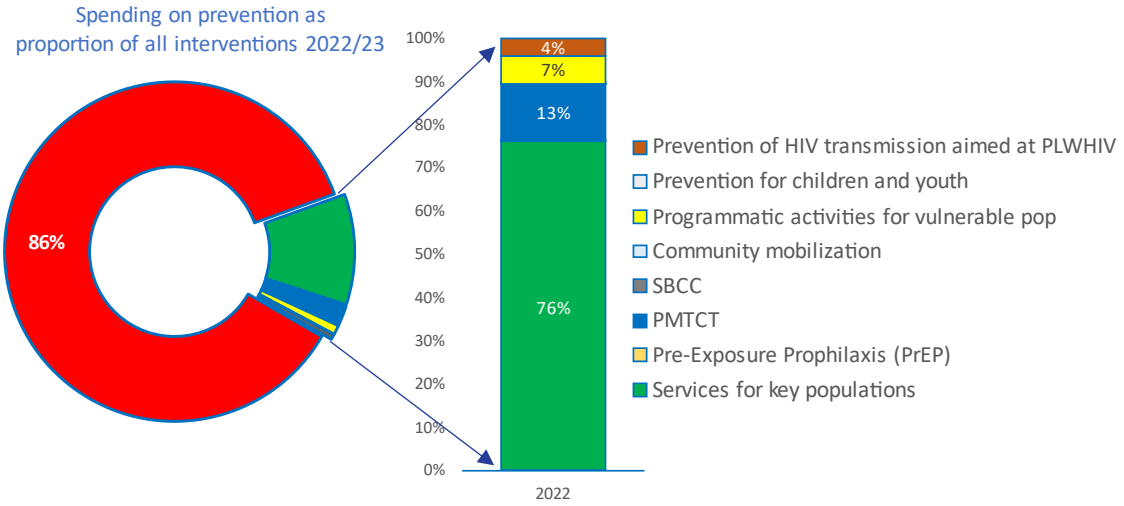


FIGURE 14: SPENDING ON PREVENTION AS PROPORTION OF ALL HIV INTERVENTIONS, % 2022/23



According to the data analysed, the total spending on services for key populations decreased by 38% from 1 billion PKR in 2020/21 to 665 million in 2021/22. Then it increased by 18% to reach 780 million PKR in 2022/23, representing 11% of the total envelope of HIV in the country. Therefore, the spending for the prevention for KP has gone down over time. See Figure 18 below for further disaggregation by key population group.

The percentage of spending on the other Prevention activities category increased by 13% in 2021/22 and by 21% in 2022/23. Table 16 also shows that some subcategories of prevention activities had no spending in some years, such as community mobilization in 2020/21, and prevention for children and youth in 2021/22 and 2022/23. The analysis also shows that some subcategories of prevention activities had significant changes in spending over the years, such as PrEP, which increased from 2.7 million PKR in 2020/21 to 7.4 million PKR in 2021/22, and then decreased to 2.4 million PKR in 2022/23, and prevention of HIV transmission aimed at PLHIV, which had little spending in 2020/21 but increased considerably from 2.8 million in 2021/22 to 38 million PKR in 2022/23. The prevention for children and youth was recorded in one year only (2020/21).

TABLE 16: SPENDING ON HIV PREVENTION INTERVENTIONS (2020/21-2022/23, PKR, %)

Prevention activities (PKR)	2020/21	2021/22	2022/23	% 2020	% 2021	% 2022
ASC.01.01 Five Pillars of Prevention	**1,073,049,497**	**672,747,238**	**783,227,489**	**89%**	**82%**	**81%**
Services for key populations	1,070,287,603	665,291,546	780,774,044	89%	81%	81%
Pre-Exposure Prophylaxis (PrEP)	2,761,894	7,455,692	2,453,445	0%	1%	0%
ASC.01.02 Other Prevention activities	**132,846,806**	**150,079,807**	**181,522,786**	**11%**	**18%**	**19%**
PMTCT	38,699,985	46,030,080	60,678,479	3%	6%	6%
SBCC	19,000	330,000	341,001	0%	0%	0%
Community mobilization	-	328,450	1,470,475	0%	0%	0%
Programmatic activities for vulnerable pop	90,012,422	100,586,942	80,729,271	7%	12%	8%
Prevention for children and youth	3,715,642	-	-	0%	0%	0%
Prevention of HIV transmission aimed at PLWHIV	399,757	2,804,336	38,303,560	0%	0%	4%
Total	**1,205,896,303**	**822,827,046**	**964,750,275**	**100%**	**100%**	**100%**

Figure 15 shows that the key population group that was most prioritised for the 3 years under assessment was people who inject drugs (PWID), as they received the highest percentage share of the total funding for

all KP services in each fiscal year. PWID received 48% of the total funding in 2020/21, 63% of the total funding in 2021/22, and 58 % of the total funding in 2022/23. The spending on activities for sex workers and their clients increased slightly in both proportional and nominal terms and reached 103 million PKR in 2022/23, while the spending on activities for MSM decreased significantly by 81% from 317.9 million PKR in 2020/21 to 60.9 million PKR in 2022/23. The spending on activities for transgender people increased gradually over the years and reached 84 million PKR in 2022/23. The little spending on activities for inmates in prisons decreased drastically by 85% between 2020/21 and 2022/23, these trends suggest that there were some shifts in the allocation of resources and priorities for the services for key populations in Pakistan over the years.

FIGURE 15: SPENDING ON THE SERVICES FOR KEY POPULATION (2020/21-2022/23, PKR, %)

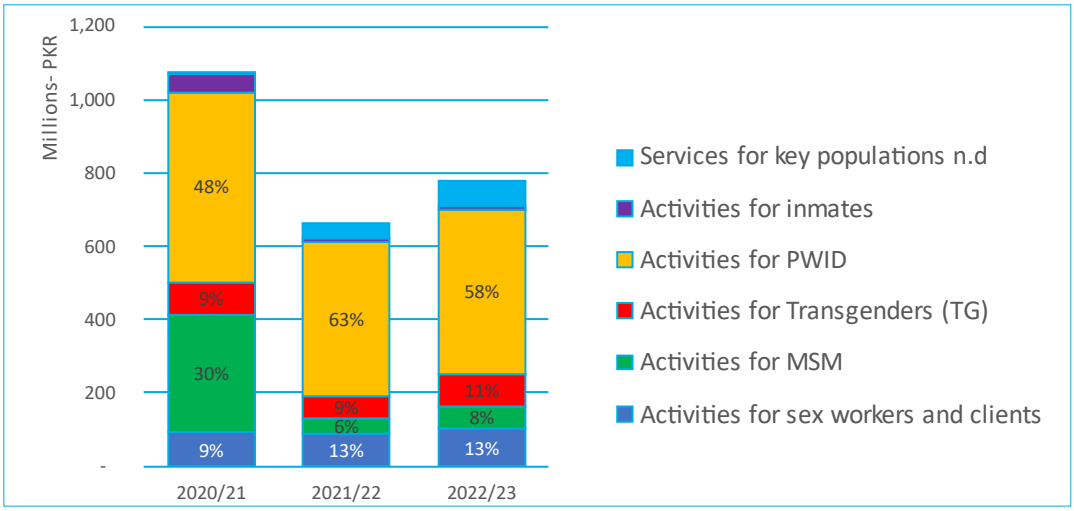
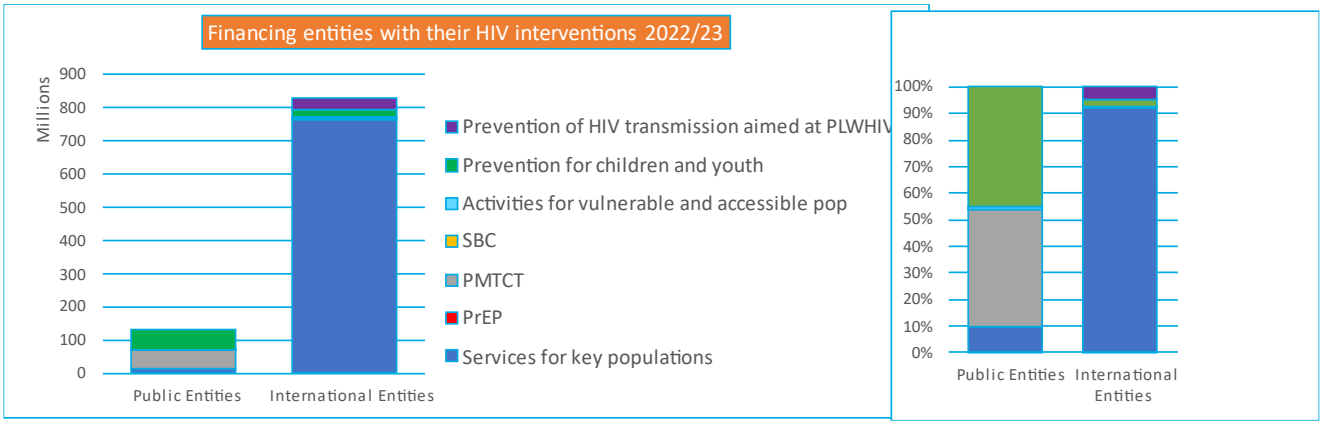


Figure 16 depicts the percentage distribution of spending of financing entities across the different HIV prevention activities they support. The spending on services for key populations was the largest share of spending by both public entities (18%) and international entities (92%). However, the spending by international entities was much higher accounting for 98% of the services for key populations. The prevention for children and youth was also funded by both public entities (80%) and international entities (20%). The spending on the prevention of HIV transmission aimed at people living with HIV (PLHIV) and PrEP were entirely funded by international entities, while PMTCT was predominantly funded by public entities. The community mobilisation and the social and behavioural communication for change (SBCC) recorded the least spending and were entirely funded by public entities. These trends suggest that there were some potential imbalances in the funding and allocation of resources for HIV prevention activities in Pakistan.

FIGURE 16: HIV PREVENTION ACTIVITIES BY FINANCING ENTITY (2022/23, %)

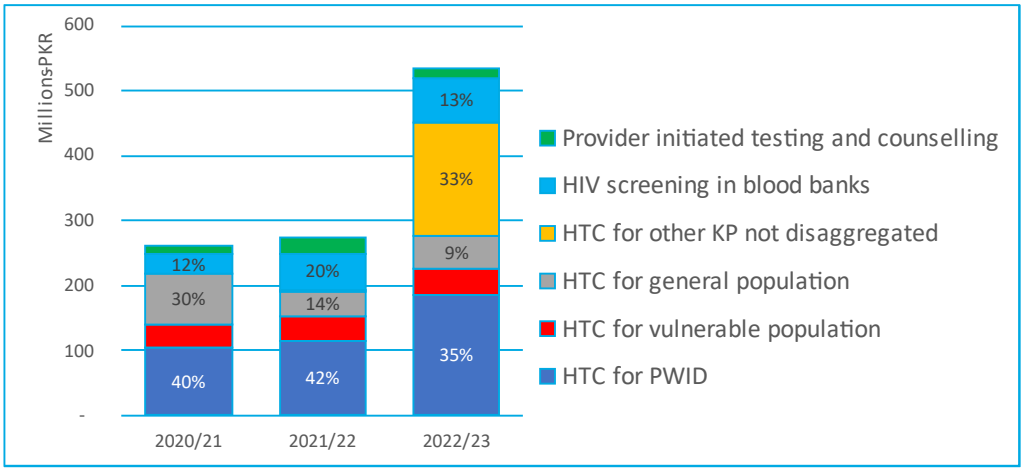


3.7.2 Spending on HIV testing and counselling

The total spending on HTC interventions in Pakistan increased gradually by 5% between 2020/21 and 2021/22 then increased considerably by 95% from PKR 275 million in 2021/22 to PKR 534 million in 2022/23. However, the percentage distribution of spending across the different HTC modalities and target populations also changed over the years.

HIV testing and counselling for Key populations accounted for 40% of HTC spending in 2020/21, 43% in 2021/22, and 68% in 2022/23. Among the KP, the PWID were the most prioritised and their spending increased in absolute terms from PKR 103 million (40%) in 2020/21 to PKR 185 million (35%) in 2022/23 but decreased proportionally relative to other HTC interventions. The second-largest component in this subgroup was HTC for the general population, which accounted for 30% (PKR 77 million) in 2020/21 and drastically decreased to 9% (PKR 49 million) in 2022/23. However, there was a fluctuation in HIV testing and counselling for vulnerable and accessible populations over the years under assessment.

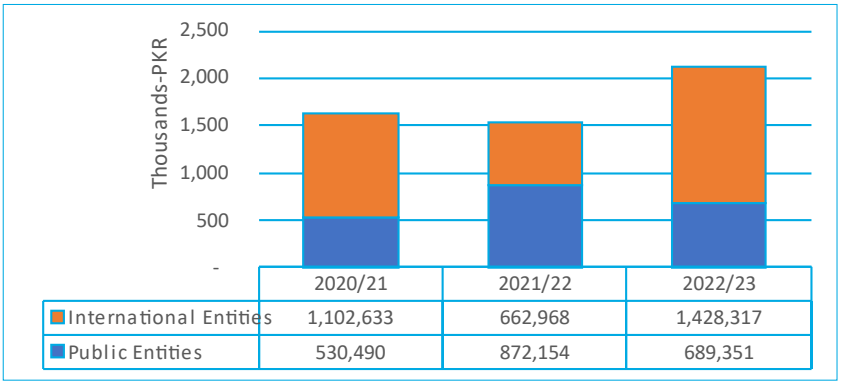
FIGURE 17: SPENDING ON HIV TESTING AND COUNSELLING (2020/21-2022/23, PKR)



Spending labelled as HTC for key populations not disaggregated, experienced a substantial increase in funding share in the fiscal year 2022/23. This may suggest a greater need to focus on reaching specific subgroups within the key population category, to achieve a more targeted and nuanced approach to HIV testing and counselling. Additionally, investments in HIV screening in blood banks witness a steady increase, reflecting the recognition of the importance of blood safety and the role of blood banks in HIV prevention efforts. Conversely, funding for provider-initiated testing and counselling (PITC) experiences fluctuations, with a notable decrease observed in the fiscal year 2022/23.

The analysis shows that the funding and allocation of resources for the HTC interventions in Pakistan varied over the years, depending on the source and the target of the spending (Figure 18). While public entities initially increased their contribution to HTC from PKR 530 thousand in 2020/21 to PKR 872 thousand in 2021/22, these then reduced to PKR 689 thousand in 2022/23. On the other hand, international entities, such as multilateral agencies and international NGOs, initially decreased their funding from PKR 1.1 million in 2020/21 to PKR 663 thousand in 2021/22, but then increased to PKR 1.4 million in 2022/23. This indicates that the HTC interventions in Pakistan were largely dependent on external support.

FIGURE 18: FINANCING ENTITIES FOR HIV TESTING AND COUNSELLING (2020/21-2022/23, PKR)



	2020/21	2021/22	2022/23
International Entities	1,102,633	662,968	1,428,317
Public Entities	530,490	872,154	689,351

3.7.3 Spending on HIV care and treatment activities

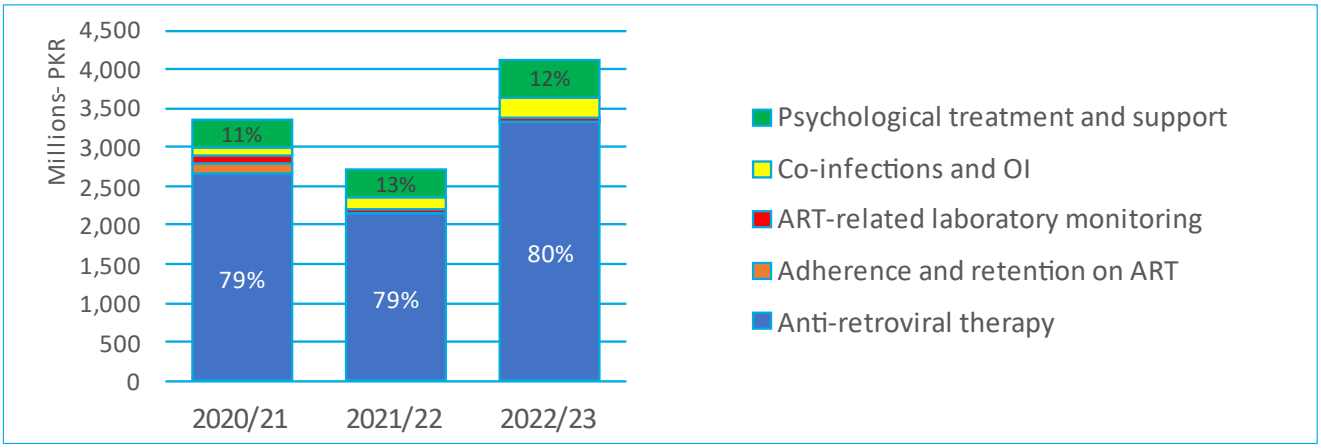
According to the NASA data, the total spending on HIV care and treatment in Pakistan increased by 23% in nominal terms from PKR 3.3 billion in 2020/21 to PKR 4.1 billion in 2022/23, which indicates a growing commitment and investment from the public financing entities, domestic private entities, and international financing entities in this area.

The ART received the bulk of spending on HIV care and treatment for the three years, accounting for 79%, 79%, and 80% of the total spending on HIV care and treatment in each year, respectively. Followed by the psychological treatment and support services accounted for 11%, 13%, and 12% of the total spending on HIV care and treatment each year, respectively. However, the data also show that there were some variations and imbalances in the funding and allocation of resources across the different components of HIV care and treatment. For example, the spending on ART, which is the mainstay of HIV care and treatment, decreased from PKR 2.6 billion in 2020/21 to PKR 2.1 billion in 2021/22 and then increased to PKR 3.3 billion in 2022/23. This suggests that the spending on ART fluctuated over the years, but it did not affect the continuity and quality of ART services. It was established that some ARV stock from the previous year was used in the following year to cover the gap, such as when there was an over-estimation of ART drugs in one year, and then a carry-over or redistribution of ART drugs to the next year. The number of patients on ART has gradually increased from 29,626 in 2020/21 to 34,205 in 2021/22 and to 43,817 in 2022/23.

Similarly, the spending on adherence and retention on ART, which is a key factor for the effectiveness and sustainability of ART, was only PKR 115 million in 2020/21 and was dropping gradually to reach PKR 6 million only in 2022/23. This suggests that the spending on adherence and retention on ART was negligible and that there might have been some gaps in providing adequate support and follow-up to PLHIV on ART. Furthermore, the spending on ART-related laboratory monitoring, decreased significantly from PKR 121 million in 2020/21 to PKR 37 million in 2021/22 and then increased to PKR 47 million in 2022/23. This also

suggests that the spending on ART-related laboratory monitoring also fluctuated over the years and that there might have been some limitations in ensuring the availability and accessibility of laboratory tests and equipment.

FIGURE 19: SPENDING ON HIV CARE AND TREATMENT ACTIVITIES (2020/21-2022/23, PKR)

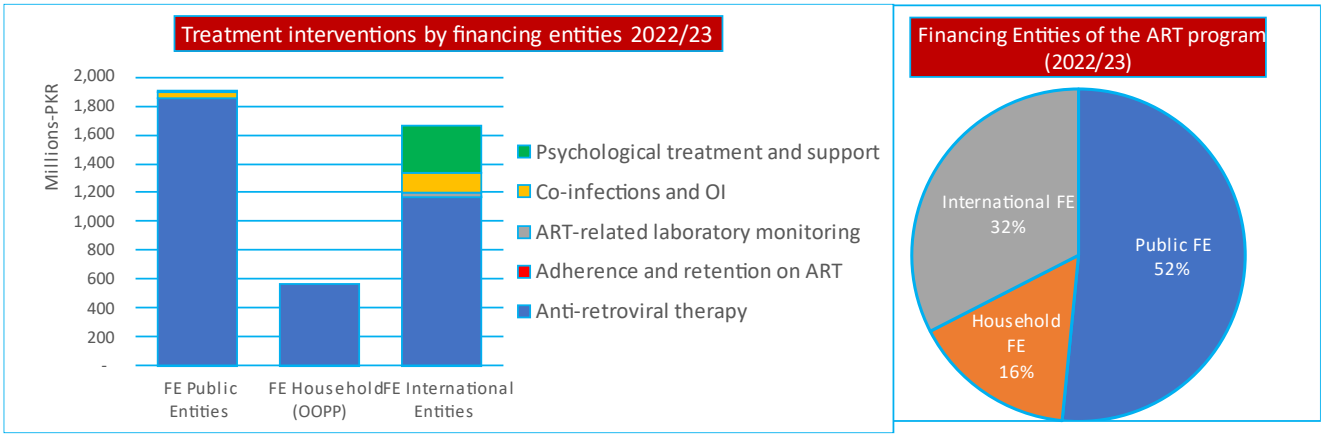


Note: Most of the psychological treatment and support was directed to KP, however the NASA methodology requires to record all treatment and support under PLWHIV.

On the other hand, the spending on co-infections and opportunistic infections increased significantly over the years from PKR 87 million in 2020/21 to PKR 256 million in 2022/23. This suggests that there might have been some efforts to improve the prevention and management of these conditions. Likewise, the spending on psychological treatment and support services increased moderately over the years, and that there might have been some initiatives to enhance the psychosocial support and counselling for PLHIV and KP.

Figure 20 shows the funding of different HIV care and treatment services by financing entities, in the fiscal year 2022/23. Note that the same trend of spending was observed in the previous years. ART received a total of PKR 3.3 billion of funding from the three financing entities, with public entities contributing the most (52%), followed by international entities (33%) and by domestic private entities (OOPP) (16%). Although with a minimal spending, adherence and retention on ART, and ART-related laboratory monitoring were entirely funded by international entities.

FIGURE 20: FINANCING ENTITIES FOR HIV CARE AND TREATMENT (2022/23, %.)



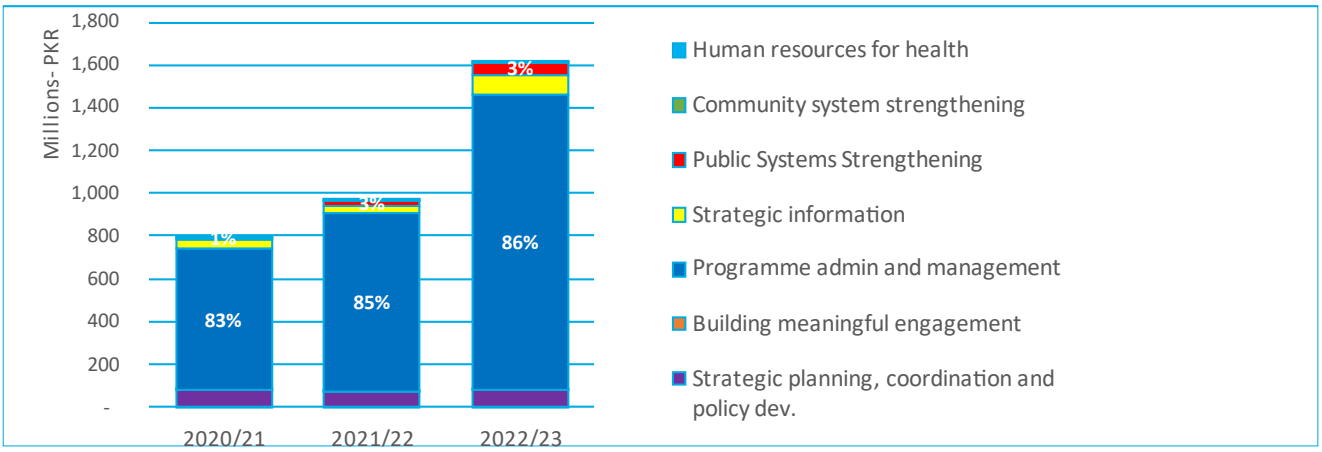
Note: The majority of care and treatment expenditures were collected with primary data, while the estimated cost accounted for 18% of the total spending in care and treatment in 2020/21, 36% in 2021/22 and 24% in 2022/23. The estimated spending on care and treatment reflects the HR cost contribution from the government of Pakistan.

3.7.4 Spending on programme enablers and systems strengthening (PESS)

Figure 21 shows the spending on different components of programme enablers and systems strengthening (PESS). The analysis reveals some interesting trends and variations in spending and prioritization over the years. The noticeable trend was the increase in the total spending from 799 million PKR in 2020/21 to 974 million PKR in 2021/22 and then to 1.6 billion PKR in 2022/23, This represents a 65% increase between 2021/22 to 2022/23.

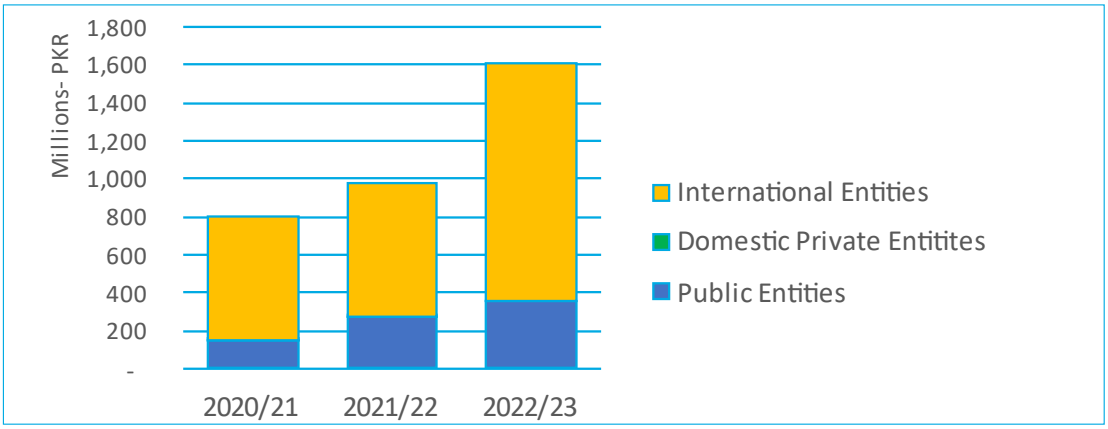
The largest component in terms of spending share was programme administration and management, which accounted for 83%, 85% and 86% of the total PESS spending in 2020/21, 2021/22, and 2022/23 respectively. The increase in the spending share of this intervention over the years suggests a higher demand for administrative and managerial support for the programme. The second largest intervention was strategic planning, coordination and policy development, which accounted for 10% of the PESS total spending in 2020/21, then decreased to 8% in 2021/22, and 5% in 2022/23. All the other PESS activities combined received 7% of PESS total spending in both 2020/21 and 2021/22, and 9% in 2022/23.

FIGURE 21: SPENDING ON PROGRAMME ENABLERS AND SYSTEMS STRENGTHENING (2020/21-2022/23, PKR)



Programme enablers and systems strengthening was primarily funded international entities 81%, 72% and 78% in 2020/21, 2021/22 and 2022/23 respectively. The remaining was funded by the public entities. It should be noted that these expenditures of public sources for PESS were derived from the estimate of the Government's contribution to strengthening health systems.

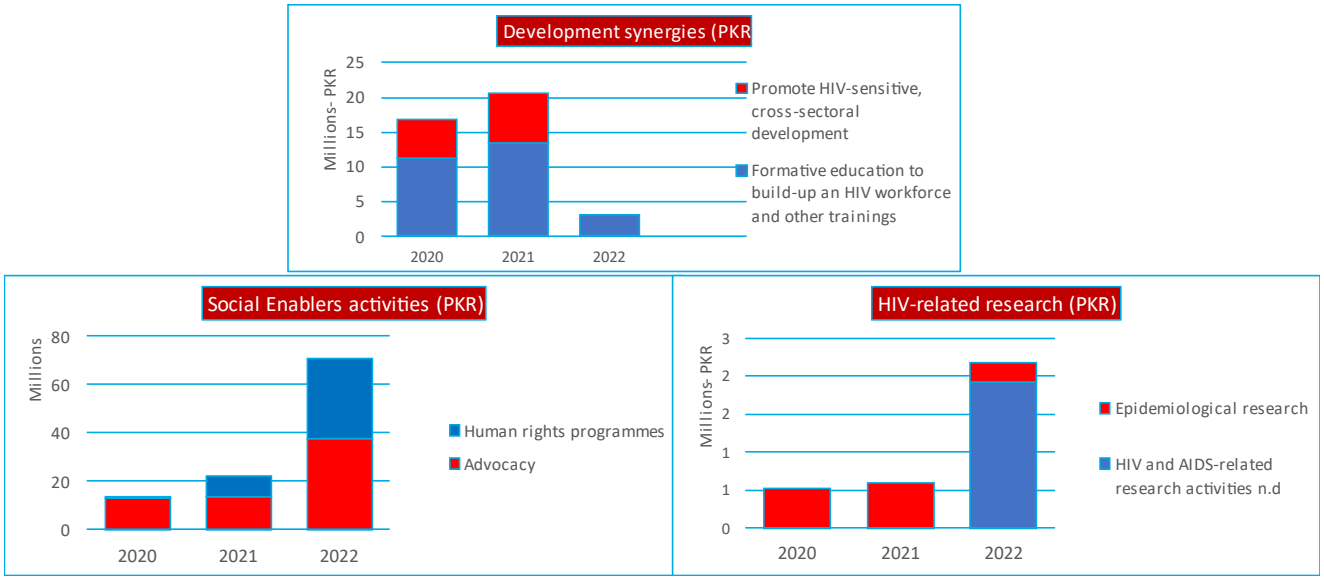
FIGURE 22: FINANCING ENTITIES FOR PROGRAMME ENABLERS AND SYSTEMS STRENGTHENING (2020/21-2022/23, PKR)



3.7.5 Spending on other HIV programme areas/interventions in Pakistan.

Figure 23 reveals some patterns and trends of the spending on other program areas that received only a very small portion of total HIV spending from different financing entities. The other three AIDS Spending categories include social enablers; development synergies; and research, all together accounting for about 1% of the total HIV spending over the 3 years under assessment. Although the social enablers' spending increased significantly from 32 million PKR in 2020/21 to 76 million PKR in 2022/23, the spending in other programme areas remains negligible. A possible implication of this negligible funding is that the HIV response may not be sufficiently integrated with the broader development agenda and may not address the underlying social and economic determinants of the epidemic.

FIGURE 23: SPENDING ON OTHER PROGRAMME AREAS/INTERVENTIONS (2020/21 – 2022/23, PKR)



The largest share of spending for other program areas was allocated to social enablers, particularly advocacy, which gradually increased from 13 million PKR in 2020/21 to 38 million PKR in 2022/23. Human rights and advocacy were entirely funded by international entities. The development synergies, which include training were entirely funded by public entities over the 3 years. The lack of social protection and economic support for PLWHIV and vulnerable populations in Pakistan's HIV response could have far-reaching consequences, including worsened health outcomes, increased vulnerability, and hindered efforts to control the spread of HIV. Implementing comprehensive social protection measures and economic

support programs is essential to ensure equitable access to healthcare, promote adherence to treatment, and address the socio-economic determinants of HIV/AIDS in Pakistan.

TABLE 17 SPENDING ON OTHER PROGRAMME AREAS/INTERVENTIONS (2020/21 – 2022/23, PKR)

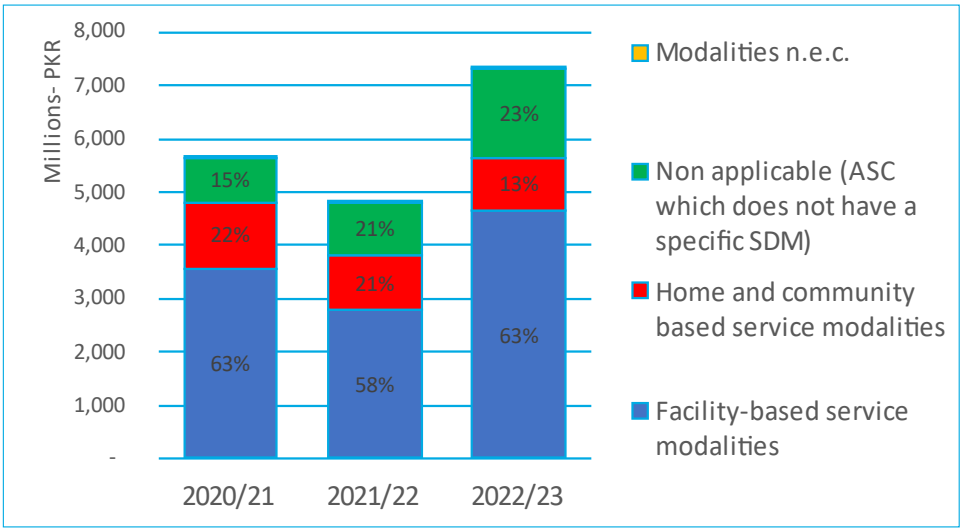
Other AIDS Spending categories	2020/21	2021/22	2022/23	% 2020	% 2021	% 2022
Advocacy	13,113,188	13,421,551	37,614,403	41%	31%	49%
Human rights programmes	789,013	8,613,307	33,170,895	2%	20%	44%
Formative education to build-up an HIV workforce and other trainings	11,159,651	13,437,935	3,144,168	35%	31%	4%
Promote HIV-sensitive, cross-sectoral development	5,581,675	7,157,309	-	18%	17%	0%
Research	1,026,378	601,760	2,175,570	3%	1%	3%
Grand Total	**31,669,906**	**43,231,863**	**76,105,036**	**100%**	**100%**	**100%**

3.8 HIV Services Delivery Modalities (SDM)

HIV services delivery modalities (SDM) refer to the ways and means of providing HIV prevention, testing, treatment, and care services to the people who need them. In Pakistan, there are two main types of HIV service delivery modalities: facility-based and community-based. Facility-based services are provided by health facilities, mainly the ART centre and laboratories in public hospitals. On the other hand, community-based services are provided by community-based organizations, including, CLOs peer groups, and outreach workers, that operate outside the formal health system and offer HIV services in community settings, such as homes, workplaces, and hotspots.

In 2022/23, facility-based interventions accounted for 63% while the SDM non-applicable which refers to the services that did not have a specific delivery model, such as program enablers and systems strengthening research, and development synergies, accounted for 23% of total HIV expenditure, followed by 13% spent on home and community settings. A similar trend was observed in previous years.

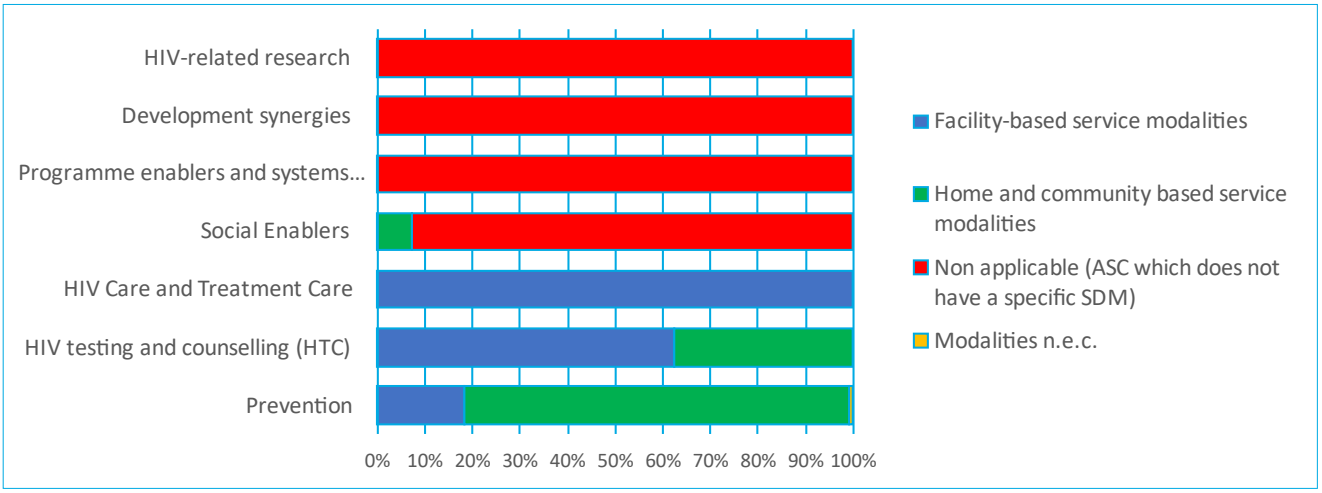
FIGURE 24: SPENDING ON SERVICE DELIVERY MODALITY (2020/21-2022/23, PKR).



In the Pakistan context, the majority of stable clients receive ART through the facility-based accelerated treatment model at ART centres. In 2022/23 the breakdown of spending on prevention was as follows: 81% on activities at home or in the community and 18% on activities in facilities (particularly PMTCT and PReP) and the remaining 1% was in other institutions (not health facilities). HTC were 63% in facilities, and

37% in community settings. As explained, PESS, development synergies, and research didn't have a specific SDM and were classified as "not applicable".

FIGURE 25: THE PROPORTION OF EXPENDITURE BY SERVICE DELIVERY MODALITY IN EACH PROGRAMME AREA IN 2022/23



3.9 Beneficiaries of HIV Spending

The analysis of beneficiaries reveals some interesting and important insights into the spending on different beneficiary groups of HIV programs in Pakistan from 2020/21 to 2022/23. Figure 26 shows that the distribution of spending across the beneficiary groups changed significantly over the three years.

The largest share of spending went to people living with HIV, who received 59% of the total spending in 2020/21, followed by 56% in 2021/22 and 57% in 2022/23. The nominal amount of spending on people living with HIV increased over time and reached PKR 4 billion in 2022/23. This shows that people living with HIV remained the priority group for HIV spending in Pakistan.

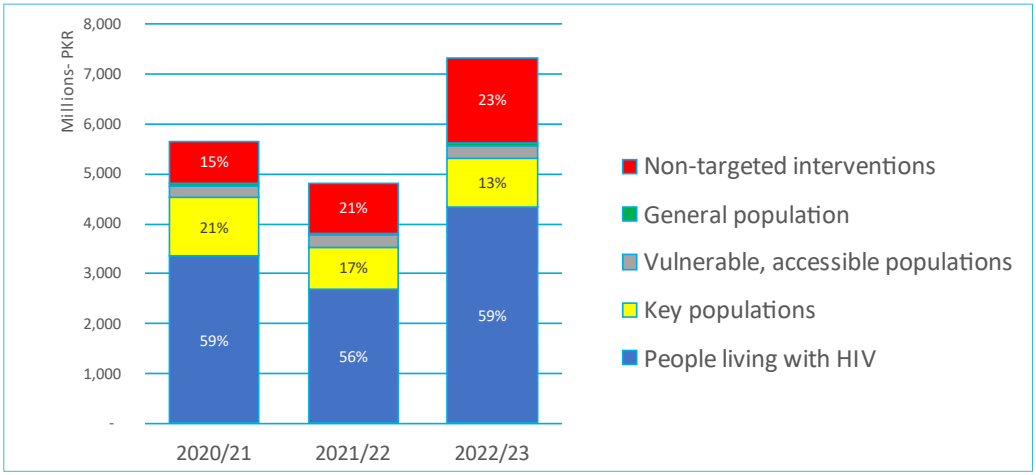
The second largest share of spending went to non-targeted interventions, which are interventions that do not focus on a specific group or population, but rather aim to improve the overall health system or policy environment for HIV response, such as health system strengthening, Strategic planning, coordination and policy development, Programme administration and management, Strategic information, development synergies, and HIV related research. The non-targeted intervention received 15% of the total spending in 2020/21, followed by 21% in 2021/22 and 23% in 2022/23, increasing from 831 million PKR in 2020/21 to 1.7 billion PKR in 2022/23. This suggests that non-targeted interventions became more important or influential in the HIV response, or that they required more resources to implement.

The third largest share of spending went to key populations, receiving 21% of the total spending in 2020/21, and decreased to 17% in 2021/22 and 13% 2022/23. This shows that the services for key populations didn't maintain a relatively stable share of spending over time, and their nominal amount of spending decreased from 1.8 billion PKR in 2020/21 to 983 million PKR in 2022/23. This decrease of prevention for KP could be attributed to the concurrent increased funding to HTC for KP over the 3 years under assessment.

The smallest shares of spending went to vulnerable, accessible populations and the general population. Vulnerable, accessible populations include (Pregnant and breastfeeding HIV+ women, Health care workers, Truck drivers/transport workers, Recipients of blood or blood products, and Junior high/high school students) which received 4% of the total spending in 2020/21, 5% in 2021/22 and 3% in 2022/23. The general population received 1% in 2021/22 and 2022/23 and increased to 3% of the total spending in all

three years. This increase was due to more funding allocated to HTC targeting general population in 2022/23.

FIGURE 26: BENEFICIARIES OF HIV SPENDING IN PAKISTAN, 2020/21 - 2022/23



Note: The key population who are living with HIV and receiving care and treatment support, have been classified as people living with HIV. It was methodologically impractical to differentiate Key population groups living with HIV from PLWHIV, hence the spending on PLWHIV includes all spending on HIV+ KPs.

Table 18 shows further breakdown of spending per beneficiary population in Pakistan, as well as the percentage of the total spending allocated to each sub-population group. According to the table, within the spending on key populations,the largest share went to PWID, which received more than half of the KP total spending in each year, followed by Men having Sex with Men (MSM), who received 27% of KP spending in 2020/21 but only 6% in 2022/23. The spending on Sex Workers (SW) and transgender people remained relatively minimal and stable, ranging from 8% to 11% and 8% to 9% of the KP spending, between 2021/22 and 2022/23 respectively. The spending on inmates decreased sharply, from 4% in 2020/21 to 1% of the KP spending in 2022/23. The spending on key populations (not disaggregated) increased significantly, from 0% in 2020/21 to 2% in 2022/23, this rise suggests that some respondents couldn't split their spending per specific group of KP in 2022/23.

TABLE 18: BENEFICIARIES OF HIV SPENDING IN PAKISTAN (PKR, %, 2020/21 - 2022/23)

Beneficiaries of HIV spending (PKR)	2020/21	2021/22	2022/23	% 2020	% 2021	% 2022
BP.01 People living with HIV	**3,358,292,677**	**2,699,069,841**	**4,171,166,387**	**59%**	**56%**	**57%**
Adult and young people living with HIV	19,416,557	464,646,317	1,297,830,205	0%	10%	18%
People living with HIV n.d	3,338,876,120	2,234,423,525	2,873,336,182	59%	46%	39%
BP.02 Key populations	**1,188,762,283**	**834,135,643**	**983,237,628**	**21%**	**17%**	**13%**
PWID	620,411,983	534,069,383	638,903,071	11%	11%	9%
Sex workers (SW)	93,537,722	89,372,089	103,674,068	2%	2%	1%
MSM	317,899,846	41,056,667	60,086,076	6%	1%	1%
Transgender	92,094,760	63,353,929	85,151,196	2%	1%	1%
Inmates (prisoners)	49,354,168	11,988,493	7,563,676	1%	0%	0%
Key populations n.d	15,463,803	94,295,083	87,859,541	0%	2%	1%
BP.03 Vulnerable, accessible populations	**200,168,751**	**239,021,350**	**251,396,206**	**4%**	**5%**	**3%**
Pregnant and breastfeeding HIV + women	38,699,985	46,030,080	60,678,479	1%	1%	1%
Health care workers	46,781,105	43,469,270	63,228,727	1%	1%	1%

Vulnerable, accessible n.d	58,263,000	91,515,000	56,769,000	1%	2%	1%
Truck drivers/transport workers	22,117,800	2,247,000	2,012,000	0%	0%	0%
Recipients of blood or blood products	30,591,220	55,760,000	68,708,000	1%	1%	1%
Junior high/high school students	3,715,642	-	-	0%	0%	0%
BP.04 General population	**77,009,398**	**38,838,260**	**230,723,739**	**1%**	**1%**	**3%**
BP.05 Non-targeted interventions	**831,257,752**	**1,017,129,355**	**1,682,265,161**	**15%**	**21%**	**23%**
Total (PKR)	**5,655,490,861**	**4,828,194,449**	**7,318,789,122**	**100%**	**100%**	**100%**

Figure 27 displays how the different funding entities distributed their funding among different beneficiary groups. People living with HIV were the major beneficiaries across all the financing entities over the 3 years under assessment. In 2022/23 this category received most of its funding from public entities, which contributed (44%), international entities (43%), and OOPP (13%) of the total spending for the people living with HIV category. The key populations category received almost all its funding from international entities, which contributed (97%) each year under assessment. On the other hand, public entities were the main source of funding for vulnerable and accessible populations (91%) and the general population (92%). Finally, the non-targeted interventions category received more than three-quarters of its funding from international entities (78%) and public entities contributed 22% respectively.

FIGURE 27: EXPENDITURE OF FINANCING ENTITY BY THEIR BENEFICIARY POPULATION (2022/2023)

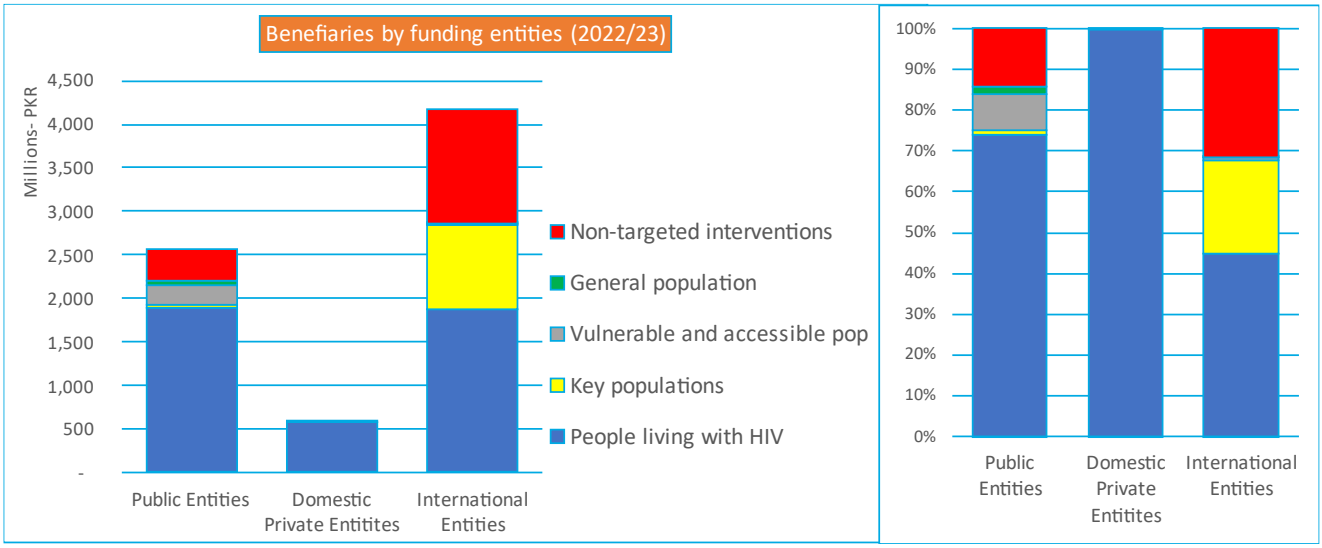
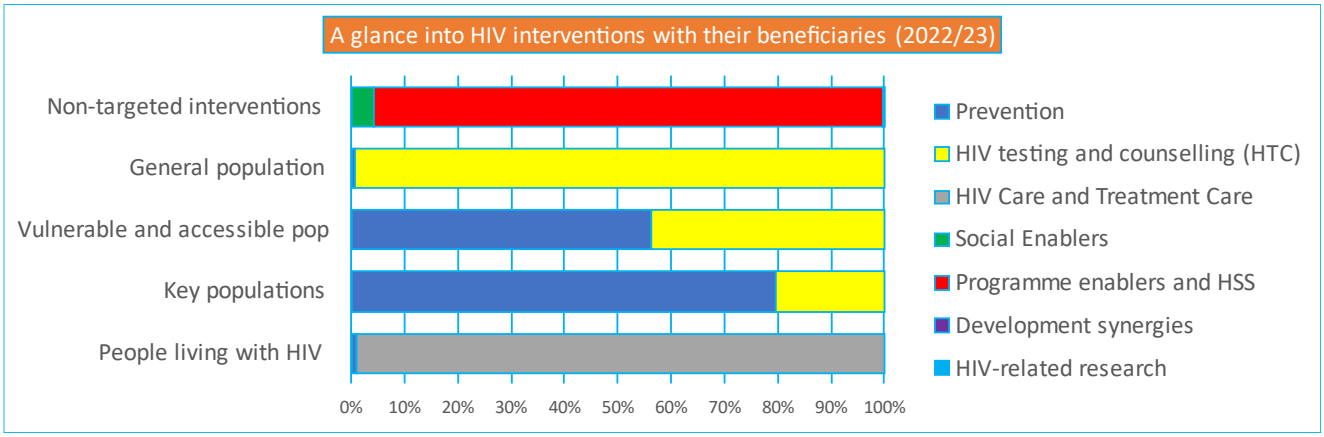


Figure 28 below shows the beneficiary groups of each HIV programme area in 2022/23. People living with HIV were the main beneficiaries of HIV care and treatment interventions. HIV testing and counselling initiatiatives were aimed at KPs, vulnerable and accessible poulations and the general population. Prevention efforts were mainly benefitting KPs and vulnerable and accessible populations.. Non-targeted interventions included programme enablers and systems strengthening, development synergies, and HIV-related research.

FIGURE 28: BENEFICIARIES PER HIV PROGRAMME AREA IN PAKISTAN , 2022/23



3.10 Production Factors of HIV/AIDS Spending

Table 19 shows that the recurrent expenditure category accounted for the largest share of the spending for the production factors in both years, with 99% in 2020/21 and 2021/22, and 97% in 2022/23. Recurrent expenditure is the spending on the day-to-day operations and running of the programme, such as wages, salaries, rent, utilities, and commodities and supplies. On the other hand, Capital expenditure is the spending on the acquisition and improvement of the fixed assets of the production factors, such as buildings, machinery, equipment, vehicles, and IT. However, the analysis also shows that the capital expenditure accounted for a minimal share of the spending for the production factors in three years, with 1%, 1%, and 3% in 2020/21, 2021/22, and 2022/23 respectively.

TABLE 19: HIV SPENDING FOR THE PRODUCTION FACTORS (2020/21 – 2022/23, PKR, %)

Production Factors (PKR)	2020/21	2021/22	2022/23	% 2020	% 2021	2022%
Current expenditures	5,599,207,274	4,773,503,621	7,115,620,685	99%	99%	97%
Capital expenditures	56,283,587	54,690,828	203,168,437	1%	1%	3%
Grand Total	**5,655,490,861**	**4,828,194,449**	**7,318,789,122**	**100%**	**100%**	**100%**

The different production factors for HIV/AIDs services are displayed in Table 20. The major cost drivers for HIV have been medical products and supplies over the years, accounting for 36% of the total HIV expenditure in 2020/2021, 23% in 2021/22, and 26% in 2022/23. The Medical products and supplies include expenditure on ARVs and other pharmaceuticals, laboratory reagents, and other medical supplies. The ARVs alone consumed about 52%, 12% and 28% of the share of the medical product and supplies respectively, representing 19% of overall spending on HIV in 2020/21 then drastically decreased to 2% in 2021/22 and then increased to 6% of overall spending in 2022/23. The reduction in ARV spending in 2021/22 can be attributed to the utilization of existing stock from the previous year to bridge the gap, while the subsequent increase in 2022/23 suggests a carry-over or redistribution of ART drugs from the prior year.

Personal costs/salaries constituted the other major expenditure components, representing 26% of the total spending in 2020/21 , 33% in 2021/22 , and 32% of the total spending in 2022/23. Over the period from 2021/22 to 2022/23, there was a steady increase in the spending on human resources, from 1.6 billion to 2.3 billion, corresponding to 47% increment in nominal terms. The cost of operational and program management was also prioritised over the years, rising from PKR1.5 billion in 2021/22 to PKR 2 billion in 2022/23, accounting for 31% of the total spending in 2022/23, succeeded by the expenditure other indirect

costs which comprised 8%, 7% and 9% of the total spending in 2020/21, 2021/22 and 2022/23 respectively. Builiding and renovations constituted the primary expenditure component among the capital expenditures, representing 1% of the total spending in 2020/21, 2021/22, and rose to 3% in 2022/23.

TABLE 20: PRODUCTION FACTORS FOR HIV (USD, %, 2020/21 – 2022/23)

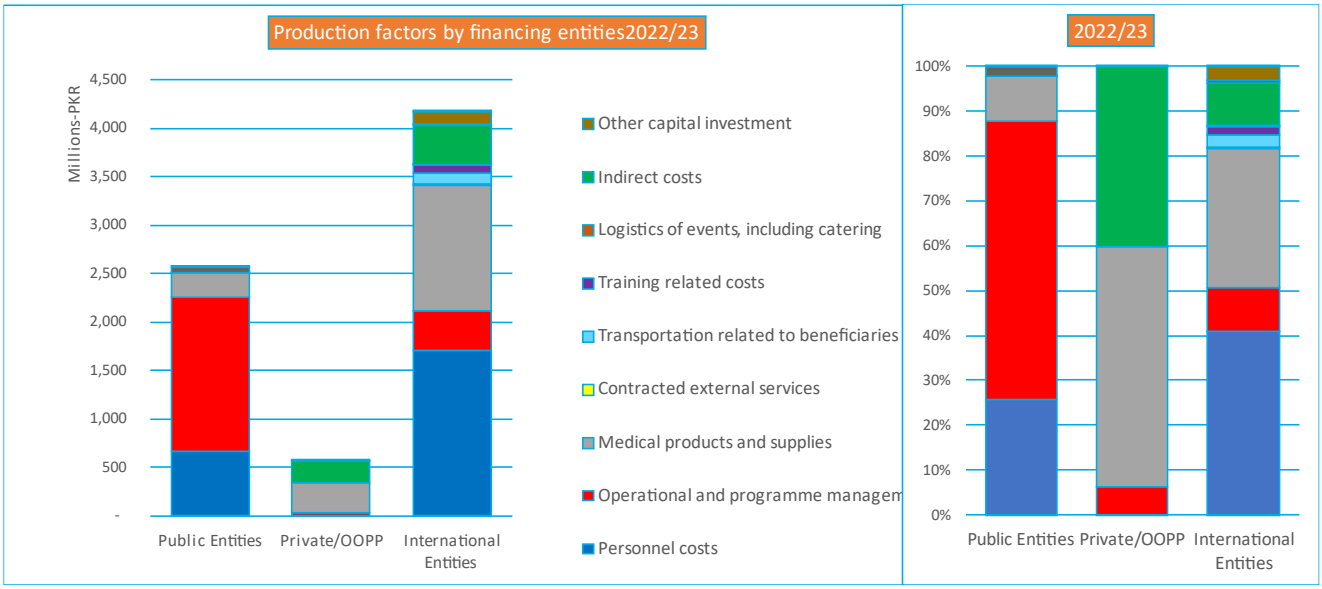
Production factors -PKR	2020/21	2021/22	2022/23	% 2020	% 2021	2022%
PF.01 Current expenditures	**5,599,207,274**	**4,773,503,621**	**7,115,620,685**	**99%**	**99%**	**97%**
Personnel costs	1,472,312,923	1,608,693,902	2,367,641,883	26%	33%	32%
Operational and programme management	1,316,540,841	1,553,553,347	2,035,754,423	23%	32%	28%
Medical products and supplies	2,050,677,169	1,111,242,726	1,868,163,752	36%	23%	26%
Contracted external services	3,069,549	5,893,202	11,390,084	0%	0%	0%
Transportation related to beneficiaries	111,114,742	79,310,651	108,797,059	2%	2%	1%
Training- Training related costs	47,236,453	31,998,051	84,413,462	1%	1%	1%
Logistics of events	19,972,060	11,059,612	8,642,712	0%	0%	0%
Indirect costs	458,593,716	352,424,156	630,817,308	8%	7%	9%
Current direct and indirect expenditures n.d	119,689,822	19,327,975	-	2%	0%	0%
PF.02 Capital expenditures	**56,283,587**	**54,690,828**	**203,168,437**	**1%**	**1%**	**3%**
Building	11,039,453	27,018,981	69,981,888	0%	1%	1%
Other capital investment	44,861,560	22,976,957	128,758,170	1%	0%	2%
Vehicles	382,573	4,694,891	4,428,379	0%	0%	0%
Grand Total	**5,655,490,861**	**4,828,194,449**	**7,318,789,122**	**100%**	**100%**	**100%**

Note: Since NASA does not have a specific PF code for PSM (of commodities, such as ARV, condoms, etc), hence the PF code PF.01.10.01 (under indirect costs) was used to classify the PSM costs.

Figure 29 below shows the distribution of spending on different production factors by financing entities in 2022/23. The largest share of funding for the public entities was spent on operational and programme management (62%), followed by personnel costs (26%) and medical products and supplies (10%). The domestic private entities (households OOPP) spent on medical products and supplies (54%) and indirect costs (40%). The international entities on the other hand spent most of their funding on personnel costs (41%), medical products and supplies (31%) and (10%) on operational and programme management costs.

The production factor analysis indicates a heavy reliance on international funding for human resource/staffing, constituted 72% from international entities. Similarly, medical products and supplies represented the largest expenditure category for international entities (70%), reflecting their emphasis on procurement and distribution of essential health products and supplies. It is crucial to indicate that the procurement of antiretroviral drugs (ARVs) and other medical products was solely funded by international entities. Contracted external services and transportation related to beneficiaries were fully covered by international entities, indicating their role in outsourcing logistical support. Conversely, the operational and program management expenses were predominantly funded by public entities (78%), underscoring their central role in program implementation and oversight.

FIGURE 29: PRODUCTION FACTORS BY FUNDING ENTITIES (USD, % 2022/2023)



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4

COMPARISON OF SPENDING VERSUS ESTIMATED COSTS OF PAKISTAN AIDS STRATEGY

4.1 Adequacy and Prioritization of Past Expenditure

This analysis focuses on comparing the estimated resources in Pakistan AIDS strategy (PAS) for the fiscal years 2020/21, 2021/2022, and 2022/23 against the actual spending recorded in NASA. The goal is to assess the alignment of financing allocation to HIV interventions with the priorities outlined in the PAS. This analysis provides also a comparison of interventions for which estimated costs and expenditure data were available and comparable for the three financial years. The results show how well the allocation of financing to HIV conformed to the priorities defined in the PAS.

The Pakistan AIDS Strategy (PAS IV) update, spanning the years 2023 to 2026, outlined a projected total implementation cost that escalated from US$ 36 million in 2021 to US$ 117 million in 2026.

TABLE 21: COMPARISON OF PAS IV BUDGET AND NASA EXPENDITURE:

GAP analysis – PAS IV budget and NASA spending (US$ Million)								
2020/2021			2021/2022			2022/2023		
PAS IV update 2023	NASA 2023	% Gap	PAS IV update 2023	NASA 2023	% Gap	PAS IV update 2023	NASA 2023	% Gap
36 million US$	35.2 million US$	2.2%	56 million US$	26.8 million US$	52.1%	66 million US$	28.9 million US$	56.2%

In 2020/2021: The PAS IV estimate exceeded actual spending by 2.2%, resulting in a minor potential financing gap of US$ 0.8 million. The alignment between budget and expenditure was relatively close.

In 2021/22, the PAS costs nearly doubled, partly due to the additional M&E cost that was not included in the previous years, but representing 8% of the total in 2021/21 and also the increased emphasis on KP interventions in PAS. This resulted in a significant gap of 52.1% between the PAS IV budget and NASA expenditure, indicating a funding deficit of US$ 29.2 million. This substantial difference raises concerns about the adequacy of resources allocated for HIV interventions, and particularly for KP, as discussed further below.

In 2022/2023: The potential financing gap expanded to 56.2%, reflecting a substantial deficit of US$ 37.1 million. Inadequate financing poses a significant challenge to the HIV response in Pakistan, as emphasized by the Pakistan National HIV Programme/Response Review (2023).

However, definitive conclusions regarding the existence of funding gaps cannot be drawn until a thorough examination of the methods and assumptions utilized in the PAS costing is conducted, so as to understand the large increase anticipated in 2021/22 and including whether the aspirational PAS interventions and targets were comparable with those captured in the NASA. The potentially large gaps showed in Table 20 suggest a need for a more realistic alignment between aspirational cost estimates and actual expenditure to ensure optimal allocation and efficient utilization of resources for HIV interventions. Nevertheless, inadequate financing raises concerns about the potential impact on the effectiveness of the HIV response in Pakistan, as highlighted in the HIV program/response review.

4.1.1 Alignment and prioritisation of previous expenditure

Figure 33 compares those interventions for which both estimated costs and expenditure data were available and comparable for three years, and a smaller amount of spending (representing 5% of the total

NASA spending in 2020/21, 6% in 2021/22, and 8% in 2022/23) which could not be directly matched to the costed PAS interventions. Spending categories that could not be matched included: research, social enablers, development synergies, and prevention for general et vulnerable populations.

The Pakistan AIDS strategy PAS-IV (PAS) aims to achieve its objectives by focusing on prevention services for key populations (57% of the total PAS costs), care and treatment (20%), and program enablers (program and M&E cost) (24%). It should be noted that the HIV counselling and testing for KP (in NASA) were grouped with the prevention services for key populations for comparison purposes with the specific PAS activities. Comparing the percentage share of spending in Pakistan with the percentage share of resources required for the PAS - as a measure of prioritisation, Figure 33 indicates that the spending found by NASA appears to underprioritize KP interventions, while overprioritizing care and treatment.

FIGURE 30: PROPORTIONAL PAS IV COST ESTIMATES VERSUS EXPENDITURE (2022/23, %)

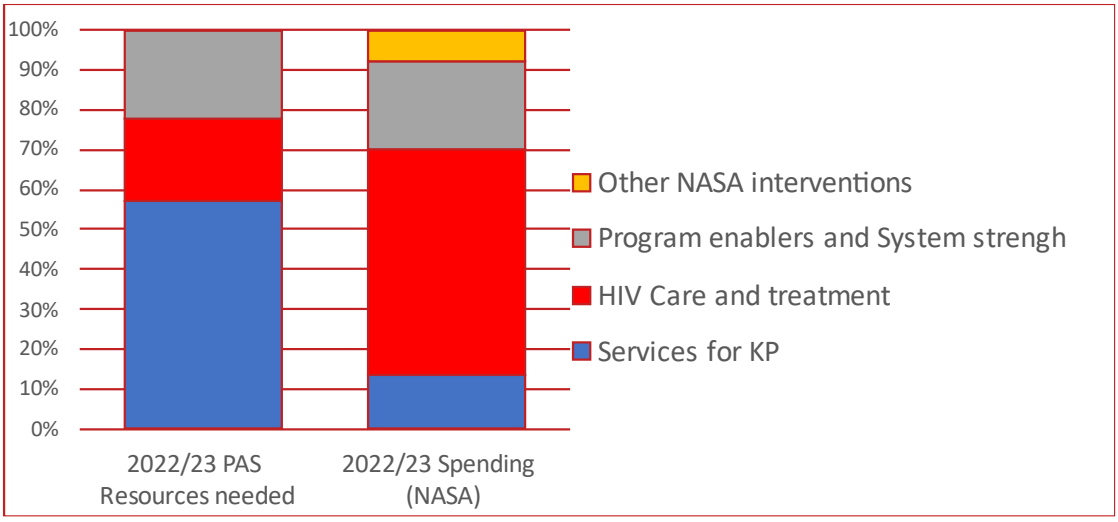


Table 22 compares the actual spending on HIV interventions in Pakistan, as reported by NASA, with the estimated costs of the Pakistan AIDS Strategy PAS-IV (PAS), for the fiscal years 2021, 2022, and 2023. The table also shows the percentage of spending and costs for each intervention, relative to the total spending and costs for each year. The interventions include services for key populations (KP), Care and treatment, program enablers & HSS, and other NASA interventions which were not directly comparable to PAS interventions.

The analysis revealed that the biggest discrepancy between spending and costs estimates was seen in the area of services for KP, with 43% less spending than estimated costs. This could be due partly to some activities such as psychological support costs that were directed to KP, but NASA methodology assigned these to PLHIV. The PAS average annual estimate for the three years was US$31 million per year, but NASA reported an average actual average annual spending of only US$5 million over the 3 years, around a sixth of what was estimated as needed. This may imply that the services for KP were under-funded and/or were under prioritised, despite being the main focus of the PAS, accounting for 57-63% of the total estimated costs. In 2022/23 alone, the potential funding gap for the service for KP was US$34million. The meagre funding of services for KP may have contributed to the poor performance, as well as other challenges to scale-up of services, as reflected in the KP targets being missed by 45% in 2022/23 (21).

Treatment had a more consistent picture, with potential underestimated costs in the 3 years. The PAS average estimate for the three years was US$12 million, while the NASA average actual spending was US$17 million. This could imply that the treatment spending was not aligned with the estimated costs across

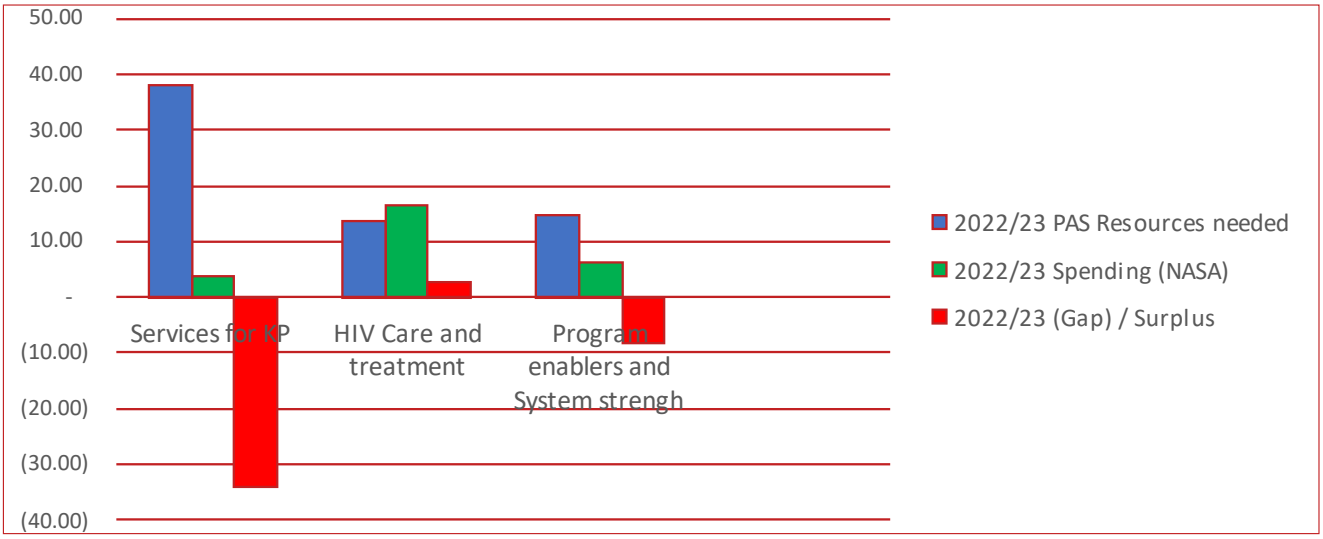
the years. The possible overspending on treatment in 2021/22 may have been due to the COVID-19 pandemic, which increased the demand and supply of health services, the actual spending was US$ 15 million while the estimated cost in PAS was US$ 10 million (43% surplus in 2021/22 and 24% surplus in 2022/23). Unfortunately, this is not reflected in the treatment coverage, as performance indicators show that the care and treatment targets were underachieved by 59% in 2022/23 (21). This may indicate that scale-up is not progressing despite considerable spending on this area, and/or may imply inefficient spending. Further efficiency analysis would assist in identifying the possible reasons for this shortfall in the non-financial performance.

Program enablers, including health systems strengthening efforts, had the opposite pattern, with possible underestimation of resources needed in 2021 and possible overestimation in 2022 and 2023. The PAS average estimate for the two outer years was US$13.7 million, but the NASA average actual spending was US$5.9 million representing 57% less expenditure than the projected costs (for 2021/22 to 2022/23). The high cost estimation of program enablers in 2021/22 and 2022/23 may have been due to the increased need of specific program enabling or health systems strengthening interventions, which accounted for 22-23% of the total estimated costs. This desired increased investment to health systems strengthening, and other program enablers could benefit the sustainability of the HIV response.

TABLE 22: NASA SPENDING IN PAKISTAN COMPARED WITH PAS ESTIMATED COSTS, 2022/23

NASA vs PAS IV (US$)	2020/21		2021/22		2022/23	
	PAS IV	NASA	PAS IV	NASA	PAS IV	NASA
Services for KP	22,949,343	7,454,177	32,615,529	4,661,721	38,071,593	3,899,849
	61%	23%	57%	22%	57%	21%
Treatment	12,628,731	21,055,788	10,850,846	15,165,281	13,563,716	16,392,313
	34%	59%	19%	56%	20%	56%
Program enablers & HSS	475,000	5,013,844	12,633,948	5,442,805	14,828,894	6,390,399
	1%	14%	22%	20%	23%	22%
Other NASA interventions		1,939,150		1,713,447		2,346,199
		5%		6%		8%

FIGURE 31: NASA SPENDING IN PAKISTAN COMPARED WITH PAS ESTIMATED COSTS, 2022/23



4.2 Efficiency of HIV Spending in Pakistan

This section will attempt to examine the efficiency of HIV spending in Pakistan without conducting full efficiency analyses. The data available allows for the analysis of only some specific HIV interventions such as ART and Services for KP (including HTC for KP), along with their annual results or their performance indicator in 2022/23. This aims to provide some insights into the inefficiencies or efficiencies achieved in these interventions.

The data available showed a significant potential discrepancy between the actual spending and the estimated costs, and between the actual results and the targets for the 3 years under assessment. The KP intervention performance indicators show that the targets were missed by 45% in 2022/23. The comparison also shows that the services for KP cost estimates were much higher than the actual spending over the study period. Similar to the findings for key population interventions, there is a disparity between the estimated costs and actual spending on care and treatment services. Despite higher-than-expected actual spending, the underachievement in treatment initiation rates suggests inefficiencies or barriers in accessing care and treatment services.

2022 programmatic data shows that the testing coverage targets (national level) set in PAS IV have been significantly underachieved. As of June 2022, 22% of the estimated PLHIV knew their status, 14% of the PLHIV with known status were on HIV treatment (ART), and only 5% of PLHIV on treatment have viral suppression. Using this information, we have made some tentative judgments about the inefficiency of HIV spending in Pakistan. Overall, these findings underscore the urgent need for a comprehensive review of HIV service delivery mechanisms in Pakistan, with a focus on improving spending efficiency, strengthening program implementation, and enhancing the effectiveness of interventions targeting key populations and care and treatment services. Addressing these inefficiencies is essential to optimizing the impact of HIV response efforts and achieving better health outcomes for affected populations in the country.

TECHNICAL EFFICIENCY OF HIV SPENDING IN PAKISTAN

This section will attempt to give some insights into the technical efficiency of HIV spending in Pakistan. The availability of data makes it possible to analyse only the unit of expenditures on care and treatment interventions such as ART, with their performance indicator achievement in 2020/21, without conducting full efficiency analyses. This will give some indication of any inefficiencies or efficiencies achieved with this intervention, which would then require a deeper examination. In addition, the section will also compare the programme performance with the NSP targets for 2020/21.

The analysis reveals a moderate reduction in the unit expenditure per patient on antiretroviral therapy (ART) over two years, declining from US$207 per person in 2021/22 to US$200 in 2022/23, marking a slight decrease of 3%. However, it's important to note that a direct comparison with the estimated costs from the PAS couldn't be made due to the absence of ART cost estimates in the PAS data. Concurrently, the number of individuals receiving ART increased by 28% from 34,205 in 2020/21 to 43,817 in 2022/23, falling short of the PAS target number by 48% in 2022/23. This notable decrease in unit of expenditure alongside the expansion of ART coverage suggests potential budgetary adjustments or changes in healthcare delivery strategies. Possible factors contributing to this trend could also include reductions in ARV unit prices and the implementation of cost-effective strategies aimed at enhancing the quality and coverage of ART services. Further investigation into these findings can help identify additional avenues for cost savings and optimize resource allocation for improved ART service delivery.

5

CONCLUSIONS

5.1 HIV spending in Pakistan from 2017/18 to 2022/23

This report presents the findings of the National AIDS Spending Assessment (NASA) for Pakistan from 2020/21 to 2022/23, which tracks and analyses the sources, allocation, and utilization of HIV spending in the country. HIV spending in Pakistan has fluctuated over the years, with some periods of significant increase and some of decrease.

Pakistan's reliance on foreign entities to fund its HIV response has been substantial, constituting 64% of total HIV spending in 2020/21. However, this dependency decreased to 47% in 2021/22 before rising again to 57% in 2022/23. Concurrently, the government of Pakistan's contribution to HIV spending varied, accounting for 20%, 43%, and 35% of the total expenditures in 2020/21, 2021/22, and 2022/23 respectively. Private financing entities, primarily out-of-pocket payments from households, contributed an average of 8% throughout the assessment period. The report highlights significant shifts in the sources and allocation of resources for Pakistan's HIV response over the years. These changes may have implications for the effectiveness and sustainability of HIV programs and services in the country, underscoring the importance of ongoing monitoring and strategic planning to ensure continued progress in combating HIV/AIDS.

5.2 Regional Variation of HIV Spending in Pakistan: Trends and Implications.

HIV spending in Pakistan varies across the four provinces and the federal level, depending on the size, population, and HIV burden of each region, as well as the availability and allocation of resources from various sources. Punjab had the highest HIV spending among the provinces, followed by Sindh, Khyber Pakhtunkhwa, and Balochistan.

The report analyzes HIV spending trends across Pakistan’s provinces over three years. Punjab consistently had the highest HIV spending, followed by Sindh, Khyber Pakhtunkhwa, and Balochistan. While per capita spending in Punjab and Sindh appeared equitable based on population size, examining the HIV burden revealed disparities. Punjab’s spending per PLHIV was significantly higher than Sindh’s. Overall, HIV spending increased across provinces, with Sindh experiencing the largest percentage rise. The report also highlights funding fluctuations from all the different funding sources with varying allocations among provinces..

5.3 The providers of HIV services in Pakistan from 2020/21 to 2022/23.

Public health facilities and other government entities were the largest providers of HIV services in Pakistan, accounting for three-quarters of the total spending in all three years. However, government entities’ spending decreased over the years, while the non-profit providers’ spending increased slightly. The main expenditure components for the different providers of HIV services varied according to their roles and capacities in the HIV response. HIV care and treatment and prevention and HTC were the dominant components for public hospitals and non-profit providers, while programme enablers and systems strengthening, and social enablers were the dominant components for international provider of services.

5.4 AIDS spending categories in Pakistan from 2020/21 to 2022/23.

The main HIV spending interventions in Pakistan were HIV care and treatment, which represented over the half of the total HIV spending in each year, followed by the programme enablers and systems strengthening. However, the spending trend for these interventions differed over time, with the programme enablers and systems strengthening spending rising and the care and treatment decreased in 2021/22 then rose in 2022/23. The third and forth main HIV spending interventions were the prevention and HIV testing and counselling, combined accounted for about a quarter of the total HIV spending in each year. The spending trend for these interventions also varied over time, with the HIV testing and counselling spending growing and the prevention spending decreasing overall in nominal terms and proportion. The other HIV spending interventions, such as, social enablers, development synergies, and HIV-related research, were the minor interventions, which accounted for 2% or less of the total HIV spending in each year.

5.7 HIV services delivery modalities (SDM) in Pakistan from 2020/21 to 2022/23.

The majority of HIV spending in Pakistan was allocated to the facility-based services, mainly provided by the ART centre and laboratories in public hospitals, accounting for about 60% of the total HIV spending in all three years. This indicates the high demand and utilization of clinical services for HIV care and treatment in the country. were the second largest SDM in Pakistan. The non applicable SDM (intervention that did not have a specific delivery model, such as program enablers and systems strengthening, research, and development synergies. were the second largest SDM in Pakistan, accounting for about a quarter of the total HIV spending in all three years. This reflects the importance of these interventions for the overall HIV response in the country. The community-based services, mainly provided by the CLOs, peer groups, and outreach workers, were the third largest SDM in Pakistan, accounting for about a fifth of the total HIV spending in all three years. This shows the significant role of the community-based organizations in delivering HIV prevention, testing, and care services in community settings, such as homes, workplaces, and hotspots.

5.8 Beneficiaries of HIV spending in Pakistan from 2020/21 to 2022/23.

The analysis of beneficiaries provides valuable insights into the distribution of HIV program spending in Pakistan from 2020/21 to 2022/23. Notably, there were significant shifts in spending across beneficiary groups during this period. People living with HIV consistently received the largest share of funding, highlighting their continued priority in HIV expenditure. Additionally, non-targeted interventions, aimed at enhancing the overall health system and policy environment for HIV response, saw an increase in both their share of spending and absolute funding amount. However, spending on key populations experienced fluctuations, with a decline in their share of spending over the years. However, funding for PWID remained the highest among key populations, while funding for other groups such as MSM, SW, and transgender individuals remained relatively stable.

Furthermore, the analysis underscores the diverse sources of funding supporting beneficiary populations in Pakistan, public entities emerged as significant contributors to funding for vulnerable and accessible populations, while international entities played a crucial role in financing key population interventions. These findings emphasize the need for strategic allocation of resources and tailored interventions to effectively address the evolving landscape of HIV response in Pakistan.

5.9 Production factors of HIV spending in Pakistan from 2020 to 2023.

The recurrent expenditures were the main categories of spending for the production factors, accounting for between 97 and 99% of the total spending in all three years, indicating the importance of the day-to-day operations and running of the HIV programs and services in the country. The medical products and supplies and the personnel costs were the major cost drivers for HIV, accounting for more than half of the total spending in all three years. The medical products and supplies included the expenditure on ARVs and other pharmaceuticals, which were essential for HIV care and treatment, accounted for 36%, 23%, and 26% of the total HIV spending in 2020/21, 2021/22, and 2022/23 respectively.

6

RECOMMENDATIONS

The HIV response in Pakistan is largely dependent on international partners to finance the HIV response, ranging from 57% to 64% of the total spending, which poses a challenge for its sustainability and ownership of the HIV programs and services in the country. Therefore, the government of Pakistan should increase its domestic contribution and explore alternative funding mechanisms for the HIV response, particularly in light of the sustainable funding for HIV. Particular attention should be paid to:

6.1 Sustainable funding for the HIV response

To increase the domestic contribution of the government of Pakistan for the HIV response, especially in the areas of HIV care and treatment, prevention, and testing and counselling, which are the most essential and cost-effective interventions for the HIV epidemic in the country, the following are needed:

6.1.1 Advocate for Targeted Budget Allocations:

- Advocate for a specific and increased allocation within the national budget dedicated to HIV care and treatment, prevention, and testing and counselling.
- Collaborate with key stakeholders, including health policymakers and parliamentarians, to emphasize the urgency of allocating funds for HIV programs and integrating them into the national healthcare budget.

6.1.2 Provincial Partnerships for Equitable Distribution:

- Establish collaborative partnerships with provincial health authorities to ensure a fair distribution of funds, considering regional HIV prevalence and risk factors.
- Develop a framework for cooperation with provincial health departments, outlining a transparent and needs-based allocation mechanism to address the varying HIV landscape across different regions.

6.1.3 Leverage International Support with a Domestic Focus:

- Collaborate with international donors to secure financial and technical support for HIV programs, emphasizing the necessity for continued domestic commitment.
- Engage in strategic dialogue with international donors, presenting a comprehensive plan that highlights how external support will complement and reinforce domestic efforts in the context of Pakistan's HIV response.

6.1.4 Private Sector Engagement through Partnerships:

- Engage the private sector through targeted public-private partnerships, encouraging corporate social responsibility initiatives to support HIV programs.
- Initiate discussions with major corporations, industries, and business associations, outlining the societal benefits of supporting HIV initiatives and proposing collaborative projects that align with corporate social responsibility goals.

6.1.5 Collaboration with Civil Society for Mobilization:

- Collaborate with civil society organizations to mobilize resources and expertise, emphasizing community-driven initiatives and advocacy for HIV prevention and care.
- Establish partnerships with local NGOs, leveraging their community networks for resource mobilization, awareness campaigns, and grassroots interventions tailored to the unique needs of diverse populations.

6.1.6 Exploration of Innovative Financing:

- Explore innovative financing options to generate additional and predictable resources for the HIV response.
- Establish a working group to investigate and assess the feasibility of innovative financing mechanisms such as social impact bonds, debt swaps, and earmarked taxes, considering their applicability within the Pakistani context.

6.2 Improve Effectiveness and Efficiency.

6.2.1 Targeted Interventions for Key Populations:

- Prioritize the Key populations and vulnerable populations, customizing interventions to address their specific needs and vulnerabilities.
- Conduct a comprehensive risk assessment, collaborating with public health experts and community representatives, to identify and prioritize populations most susceptible to HIV, ensuring interventions are targeted and impactful.

6.2.2 Optimization of Unit Costs through Strategic Approaches:

- Optimize unit costs by adopting cost-effective service delivery models and negotiating competitive pricing for medications and diagnostics through bulk procurement.
- Actionable Step: Establish a centralized procurement system, leveraging the purchasing power of bulk orders to secure favourable pricing for essential HIV-related commodities, ensuring cost-efficiency without compromising quality.

Based on the analysis of the regional variation of HIV spending in Pakistan, the following recommendations can be made for future research and policy:

- To improve the data quality and availability for HIV spending at the provincial and federal level, and to ensure that all the financing entities provide a regional split of their spending, especially the NACP spending from the Global Fund, which was not disaggregated by part of the country in 2020/21.
- To enhance the equity and efficiency of HIV spending across the provinces and the federal level, and to ensure that the resources are allocated and utilized according to the size, population, and HIV burden of each region, as well as the availability and allocation of resources from various sources.
- To optimize and prioritize the HIV spending in Punjab, which has the largest population and the largest number of PLHIV among the provinces but did not spend enough on HIV per capita or per PLHIV compared to Sindh or Khyber Pakhtunkhwa, and to ensure that the HIV funds are distributed and utilized in a fair and effective manner.

6.3 More funding to programs that address the structural barriers and drivers of the epidemic.

Public entities need to increase the amount of funding allocated for development synergies, social enablers, social protection, and economic support since these areas were almost entirely funded by international partners with minimal contributions from the public entities. Societal enablers, development synergies, and HIV-related research are three key components of the HIV response that aim to address the structural barriers and drivers of the epidemic, as well as to generate new evidence and innovations for improved outcomes. Therefore, it is imperative that the global community, including governments, donors, civil society, academia, and the private sector, recognize the value and importance of these components, and allocate adequate and consistent resources and support to them, in order to achieve the global goals of ending AIDS as a public health threat by 2030.

Based on the analysis of the beneficiaries of HIV spending in Pakistan, the following recommendations can be made:

To improve the funding availability and allocation for people living with HIV, who are the most affected and vulnerable group in the HIV response, and to ensure that their needs and preferences are met by the HIV programs and services. To evaluate the impact and effectiveness of the non-targeted interventions, which are the largest and fastest-growing category of HIV spending, and to ensure that they are aligned and coordinated with the specific interventions for the different beneficiary groups. To assess the equity and efficiency of the spending on key populations, who are the most at-risk and underserved group in the HIV response, and to ensure that they have access to quality and comprehensive HIV prevention, testing, treatment and care services.

6.4 Institutionalized routine HIV and AIDS resource tracking.

To ensure accountability and transparency and honour the right to information on responses to HIV and AIDS programmes, a central system needs to be set up to obtain data on expenditure from all economic agents operating in Pakistan in an agreed format. This information should be made available in the public domain. This will assist in improving the data quality and availability for HIV spending, harmonizing the NASA methodology with the national health accounts, and strengthening the coordination and alignment of HIV financing among different stakeholders.

6.5 Alignment between budget estimates and actual expenditure.

Given the financing gap between the resource need for PAS with the actual spending from NASA, it is recommended to:

- Conduct a thorough review of budgeting processes to enhance accuracy in estimating resource needs for HIV interventions.
- Strengthen coordination mechanisms between budgeting entities and program implementers to bridge the identified financing gaps.
- Advocate for increased financial commitments and support to bolster the HIV response in line with national priorities.

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APPENDICES

8.1. Resource Tracking of Community Led-Organizations HIV/AIDS Responses in PAKISTAN

The traditional NASA special emphasis on financing and expenditures resulted in a framework that prioritizes monetary transactions where there is compensation for goods and services provided and consumed. The NASA framework also allows for tracking resources of community-led organizations (CLOs). However, such approaches include the assessment of non-financial flows, for example, in-kind donations, non-paid labour, and other transactions where there is no exchange and no money involved. This reflects diverse mechanisms of contribution and commitment of households and corporations in support of communities.

This NASA attempted to track the spending for services for key populations and community-led responses using the draft version of UNAIDS guidelines on Resource Tracking of Community-led responses. The estimation of CLO spending required a vigorous methodology, that included the following phases:

1. CLO mapping- identification of potential CLOs by consulting potential data sources, including other networks and organizations that are involved in the national response.
2. CLO screening process using the decision tree to select CLOs - all identified organizations were contacted, and a CLO self-identification form was administered to them all. Decision trees to categorize whether an organization is or not a CLO.
3. Data collection and cleaning – the consultant has triangulated the data collected with other sources of data to avoid double counting (most of the CLOs are either sub/sub-recipients or self-funded (volunteer-based organizations). Their financial expenditure is assumed to be collected from the principal recipients or the funding sources.

8.1.1. CLO resource tracking methodology

The research associate undertook the data collection with rigorous quality control measures to ensure the correct application of the tools and the quality of the data collected. The CLO data collection tool and the data collection tool (DCT) were applied for primary data collection. As self-administered questionnaires were sent to all the identified CLOs, researchers were required to conduct face-to-face, or virtual interviews and assist respondents to complete the data collection tool correctly. Face-to-face interviews allow for data verification, completeness of data, and accurate reporting.

To facilitate the sampling process, a database of all the CSOs involved in HIV was developed by the research team. For purposes of this study, all the CSOs (CBOs, NGOs, CLOs) were targeted.

8.1.2. Study coverage

There is a small number of Community-Based Organizations spread across Pakistan. These organizations play a critical role in addressing and alleviating issues that affect mostly the key population, including but not limited to prevention for key population groups, awareness and sensitization, stigma reduction, advocacy, and more – with a primary goal to improve the lives of the most vulnerable individuals. Unfortunately, these organizations tend to be under-resourced and have limited financial track records, thus a limited capacity to implement activities and interventions at a large scale, affecting their ability to access adequate funding.

From the selection tree analysis, the research team identified 16 CLOs (Balochistan 2, Punjab 8 and Sindh 6). The CLOs were organizations from different key population groups, such as sex workers, transgender people, PLWHIV, PWID and MSM.

Below is a list of the services provided by these CLOs: more details are provided under the resource transaction section.

- Human Rights programs
- Advocacy
- Prevention for sex workers, Trans, PWID, MSM, and PLHIV.
- Linkage to care and other services.
- Social support poverty alleviation
- Adherence and retention on ART - support
- Stigma and discrimination reduction
- HIV testing and counselling for key Pop and vulnerable populations.
- Psychological treatment and support service

8.1.3. Challenges with the valuation of non-monetary flows

It was found that most CLOs do not keep records of the non-monetary flows, like volunteers, donations, and rent-free use of property, therefore, the data was collected from manager recall and could be subjected to recall bias.

Most CLOs were able to itemize all donated goods and their quantities by source, but without a proper valuation of the donations, it was difficult to provide a reasonable estimation. However, the CLO data collection template allowed the research team to collect both financial (grants) and non-financial (donated goods/services/time/space) data. The latter was quantified and given a monetary value as follows:

- Volunteer time – the Pakistan minimum wage of 32000 per month was applied to the estimated number of hours worked by the volunteers. This is a low rate usually applied for menial work and so may have underestimated the contribution of volunteers' time. The CLOs were interviewed to determine the amount of time spent on HIV services in a week, and this was then extrapolated annually. The number of volunteers directly involved in HIV services was scaled up to get a CLOs estimate of human resources costs.
- Donated goods/food - an estimated current market price was applied to these. Mostly, the respondents were able to give accurate monetary values. We determine the fair value of each in-kind donation depending on the type of donation.

- Free events venues – the valuation of free-rent space was based on current rental values. The respondents were able to give accurate rental values.

8.1.4. CLO resource tracking findings

HIV financing entities,

According to the collected data, the CLO HIV expenditure in Pakistan amounted to PKR 429 million (US$1.4million). The direct financial transfers from all funding sources to CLO constituted 78% of the total expenditure, whereas the estimated or valued non-financial contribution comprised 22% of the total CLO expenditure. The public sector's contribution was insignificant.

TABLE 23: FINANCING ENTITIES' CONTRIBUTIONS TO CLO HIV PROGRAMS

Financing entities (All sources)	Amount (PKR)	Amount (USD	2022%
FE.01 Public Entities	40,000	161.27	0%
FE.02 Domestic Private Entitites	93,061,800	375,190.49	22%
FE.03 International Entities	336,838,097	1,358,005.67	78%
Grand Total	429,939,897	1,733,357.43	100%

PAKISTAN CLO HIV spending by interventions

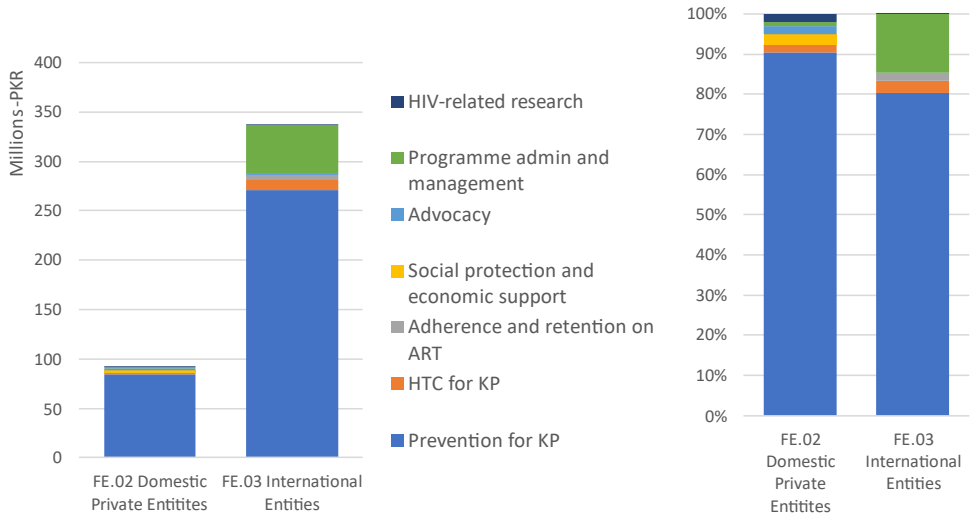
Table 2 below shows the total and relative HIV funding for each program area. Prevention services for KP received the most funding, 83% of the total, mainly from international and household sources (through volunteer time and donated space). Among the prevention spending, the largest portion went to programmatic activities for KP not disaggregated, 26%, followed by programmatic activities for the transgender population, 25%, TG 25%, SW 24%, and PWID 8%. Program administration and management was the second largest expenditure, 15% of the total CLO spending in Pakistan. The remaining interventions, such as HTC for KP, Adherence and retention on ART, Social protection and economic support, Advocacy, and HIV-related research, were underfunded and represented 7% of the total CLO spending on HIV.

TABLE 24: PAKISTAN CLO HIV SPENDING BY AIDS SPENDING CATEGORY

HIV interventions	Amount (PKR)	Amount (USD)	2022%
Prevention for KP	354,952,800	1,431,037.40	83%
HTC for KP	11,987,909	48,330.78	3%
Adherence and retention on ART	5,795,566	23,365.56	1%
Social protection and economic support	2,392,000	9,643.65	1%
Advocacy	2,518,888	10,155.22	1%
Programme administration and management	50,237,634	202,539.42	12%
HIV-related research	2,055,100	8,285.40	0%
Grand Total	429,939,897	1,733,357.43	100%

The majority of the funding from international sources, 80%, went to prevention activities for KP, while 16% was allocated to program administration and management and the rest was shared among other programs. In contrast, the domestic private sector (primarily households) allocated 90% of its funding to prevention activities for KP, and the remaining to social protection and economic support. These activities were carried out at the community level, targeting KP.

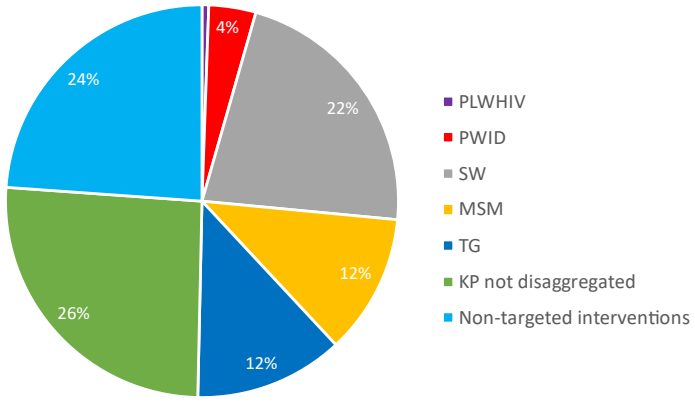
FIGURE 32: FINANCING ENTITIES OF THE CLO INTERVENTIONS IN PAKISTAN



PAKISTAN CLO HIV spending by beneficiaries

The bulk of HIV expenditure went to people living with KP not disaggregated, as some CLO implemented cross-cutting activities and could not separate the spending by the key population sub-groups. Therefore, 26% of funds were allocated to Key populations "not broken down by type". The non-targeted intervention was the second-largest recipient group with 24%, followed by SW 22%, MSM and TG 12% each, and PWID 4%. Some CLOs have embraced the integration approach and created service packages that address various issues affecting their communities. For instance, programs among key populations have effectively integrated HIV-related services with mental gender-affirming care, harm reduction, advocacy, and services that tackle gender-based violence. These interventions were classified as non-targeted intervention, accounting for 24% of the CLO total expenditure on HIV.

FIGURE 33: BENEFICIARIES OF CLO SPENDING IN PAKISTAN

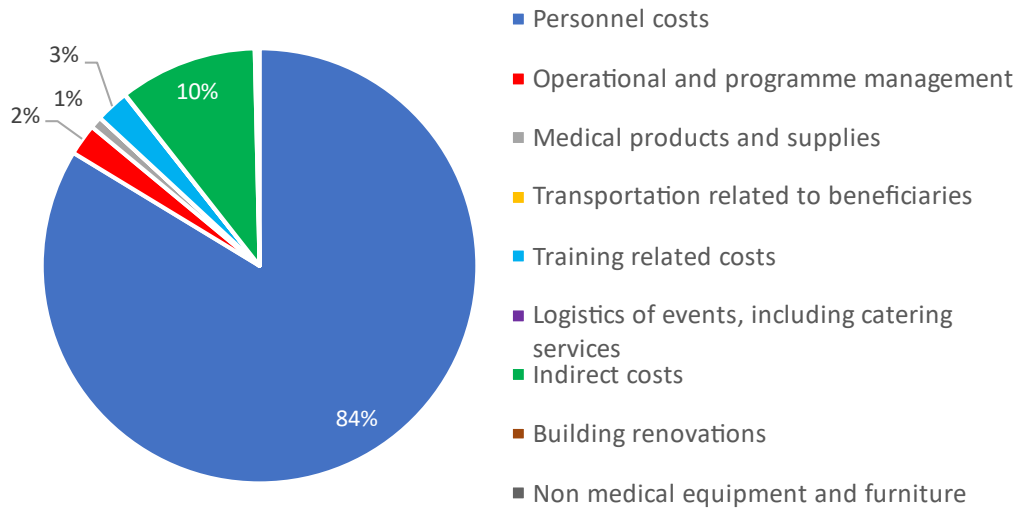


CLO HIV spending by Production in Pakistan

Production factors are essential inputs for delivering services and goods to beneficiaries. They consist of capital and recurrent expenditure. Recurrent expenditure is the cost of goods and services that CLO used in 2022 that needed to be made recurrently to sustain the production of services. The capital expenditure was less than 1% of the total CLO spending.

The main production factors were labor cost (salaries/volunteer time), which accounted for 84% of total CLO spending; volunteers time represented 24% of the labor cost and 20% of the total spending in 2022. The second cost driver was indirect cost, which consumed 10% of the total CLO HIV spending. Operational and program management costs were only 2% and training 2% of total CLO HIV spending, and less than 1% went to the donated space for meetings and other events. It was challenging for most CLOs to separate production factors from expenditure, as NASA classification required. They preferred to group production factors into one category to avoid complex calculations.

FIGURE 34: CLO HIV SPENDING BY PRODUCTION



Donated goods, volunteer time and services

Most CLOs were sub-recipients of Global Funds and received some in-kind donations, but they were not a significant part of their operations. These donations consisted of both tangible assets and personal services. The recorded donated goods and services in 2022 were volunteer time, medical and non-medical supplies, donated food/nutrients, and donated space for events.

Most CLOs did not depend on volunteers to carry out their activities. Volunteers' contributions were event-based, and they only participated when there were activities that required their involvement. Donated space for events and donated food and nutrients were the largest production factor donations, each representing 37% in 2022. They were followed by medical supplies at 16% and volunteer time at 8%. Volunteer time, which was valued at the minimum wage per month, accounted for of the total CLO donation estimate. The table 3 below shows the fair value in percentage terms of other donations to CLOs in 2022.

TABLE 25: PAKISTAN CLO DONATED GOODS/TIME/SERVICES

PAKISTAN CLO Donated time/ goods/ services	2022	%
Volunteer time	1,000,000	8%
Donated / subsidized office space	4,875,000	37%
Donated food/ nutrients	4,947,000	37%
Donated space for events	249,000	2%
Non Medical supplies	15,000	0%
Medical supplies	2,120,000	16%
Total	13,206,000	100%

Using the available data, this analysis also attempted to compare the financial transfer with the donations to CLO in 2022. We discovered that donated goods and volunteer time were not as significant sources of

support for CLOs as the direct financial transfer. The non-financial represented 20% of the total CLO expenditure, but they posed some unique challenges for proper recording and reporting.

8.1.5. CONCLUSION

CLOs operate throughout Pakistan. They play a vital role in addressing and reducing the problems that mainly affect people living with HIV and key populations. Their services target MSM, sex workers, and their clients, transgenders, PWID and PLWHIV. CLOs offer a variety of services to ensure that people living with HIV and key populations from different backgrounds can access HIV and OI treatment, prevention and testing, and harm reduction as well as human rights support and advocacy. The main source of funding for CLO services was international entities, while labor cost (salaries and volunteer time) was the largest spending category. All CLOs' activities were community-based, and the outreach service delivery model accounted for the largest share of expenditure.

8.2. Provincial breakdown of HIV spending in Pakistan

Pakistan has a federal system with four provincial units: Punjab, Sindh, Khyber Pakhtunkhwa (KP), and Balochistan. Each unit has its own health department and budget, which are in charge of designing, executing, and evaluating the health programs and services in their respective domains. The spatial distribution of HIV expenditure in Pakistan mirrors the variations in the magnitude, population, and HIV prevalence of each province, as well as the accessibility and distribution of resources from different sources. Punjab was the leading spender on HIV in all three years, followed by Sindh, Khyber Pakhtunkhwa, and Balochistan.

8.2.1. HIV spending in Punjab

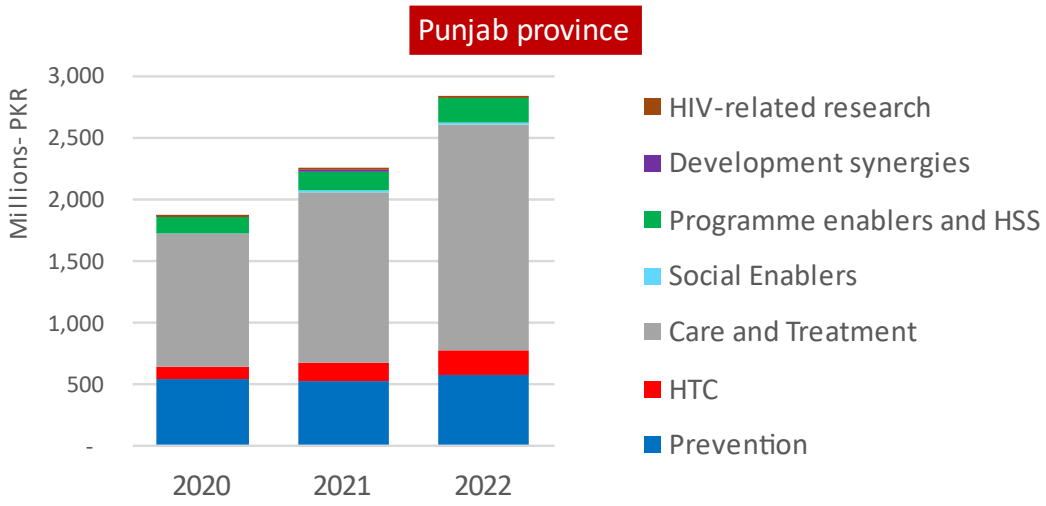
The analysis presents the share of HIV spending by different funding entities in Punjab province in 2020/21, 2021/22 and 2022/23. The public entities cover the federal and provincial governments, and the household category includes the out-of-pocket expenditure by the people living with HIV and key populations, as well as the donated goods and services by the community members. The multilateral organization category consists of international donors and agencies, such as the Global Fund, and UNAIDS.

The public funding entity was the largest contributor to HIV spending in Punjab province, accounting for 47% of the total. This shows that the government has taken a leading role in financing the HIV response in the province. The multilateral organization funding entity was the second largest source of HIV spending, representing 42% of the total and the household contribution was the smallest source of HIV spending, comprising 10% of the total.

The figure below reveals that the largest and increasing share of the budget went to Care and Treatment, which accounted for more than half of the total spending in each year. The second largest and decreasing share went to Prevention, which received less than a quarter of the total spending in 2022. The third largest and increasing share went to Programme Enablers and HSS, which maintained a 7% share of the total spending in each year. The fourth largest and increasing share went to HTC, which occupied around 6-7% of the total budget in each year. The smallest and most fluctuating shares went to Social Enablers, Development Synergies, and HIV-related Research, which received negligible or zero funding in some years. Overall, the table reveals that the HIV spending in Punjab province was concentrated on two main

interventions, while the other interventions received less funding. The spending patterns changed slightly over the three years.

FIGURE 35: HIV SPENDING BY INTERVENTIONS IN PUNJAB (PKR, 2020/21 – 2022/23)



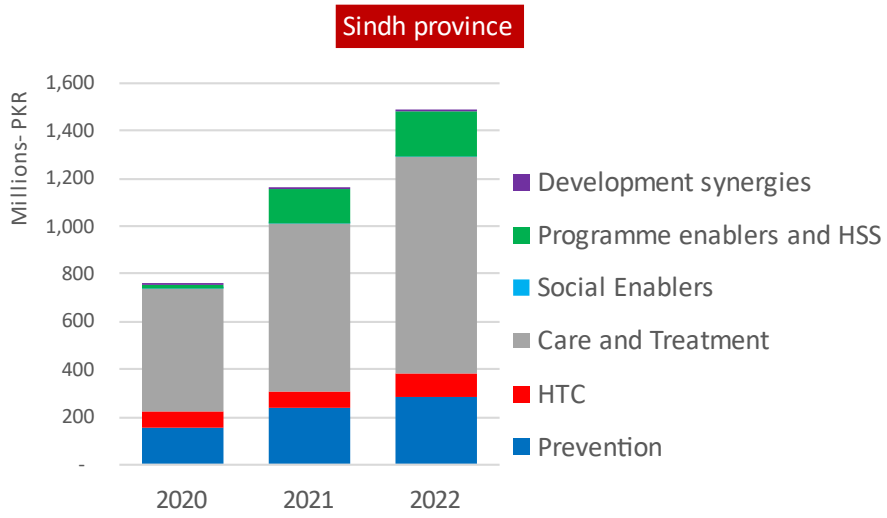
8.2.2. HIV spending in Sindh

According to the table, the government has taken a leading role in financing the HIV response in Sindh, accounting for 50% of the total. The multilateral organization funding entity was the second largest source of HIV spending, representing 34% of the total. This indicates that the international partners have provided substantial support to the HIV programs and services in the province. The household funding entity was the smallest source of HIV spending, comprising 15% of the total.

According to the figure below, the overall spending on HIV intervention in Sindh increased by 92% from KPR 762 million in 2020/21 to KPR 1,4 billion in 2022/23. The largest category of spending was care and treatment, which accounted for 68% of the total in 2020 and 61% in 2022. Spending on care and treatment increased by 76% in 2022. The second largest category of spending was prevention, which accounted for 20% of the total in 2020/21 and 19% in 2022/23. The spending on prevention increased by 18% in 2022/23.

Programme enablers and HSS was the third largest category of spending, which accounted for 2% of the total in 2020/21 and considerably increased to 13% in 2022/23. While HTC fluctuated between 9%,6%, and 7% of the total HIV spending in Sindh. The remaining interventions received very little or no funding at all. Social enablers had zero spending in all three years, indicating that these interventions were neglected or not prioritized in the HIV response in Sindh province. Development synergies had only 1% of the total spending in 2020, but none in 2021 and 2022.

FIGURE 36: HIV SPENDING BY INTERVENTIONS IN SINDH (PKR, 2020/21 – 2022)



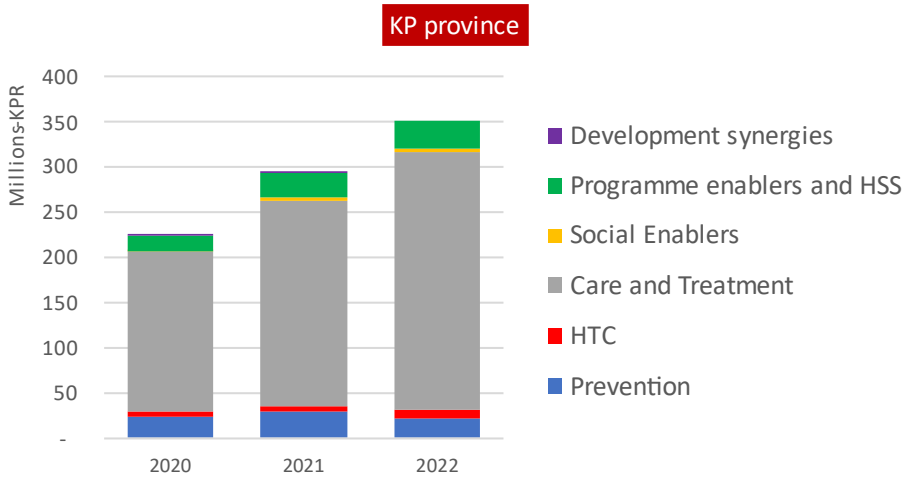
8.2.3. HIV spending in KHYBER PAKHTUNKHAWA

The data shows that the majority of the funding comes from the governmental sector, which accounts for 76% of the total funding or PKR 228 million. The second largest source of funding is from multilateral organizations, mainly the Global Fund and UN agencies, which contribute 15% of the total funding or PKR 45 million. The smallest source of funding is from households, which provide 10% of the total funding. The total funding for HIV services in KP province rose from PKR 224 million in 2020/21 to PKR 351 million in 2022/23.

The analysis shows how KP Province in Pakistan allocated its budget for HIV intervention across six categories from 2020 to 2022. The categories are prevention, HIV testing and counselling (HTC), care and treatment, social enablers, programme enablers and health system strengthening (HSS), and development synergies. The table also shows the percentage of each category out of the total budget for each year.

Figure 6 reveals that the total budget for HIV intervention increased by 57% from 2020/21 to 2022/23. The majority of the budget was spent on care and treatment, which increased by 61% and accounted for 79% of the budget in 2020/21 and 81% in 2022/23. The second largest category was prevention, which decreased by 9% between 2020/21 and 2022/3 and accounted for 11% of the budget in 2020/21 to 6% only in 2022. The third largest category was programme enablers and HSS, with an increasing trend over the years and accounted for 7% of the budget in 2020/21 and 9% in 2022/23. The other categories were HTC, social enablers, and development synergies, which accounted for 2%, 1%, and 0% of the budget in 2022/23, respectively. The analysis shows that KP Province prioritized care and treatment over other categories of HIV intervention, while reducing its spending on prevention.

FIGURE 37: HIV SPENDING BY INTERVENTIONS IN KP (PKR, 2020/21 – 2022)

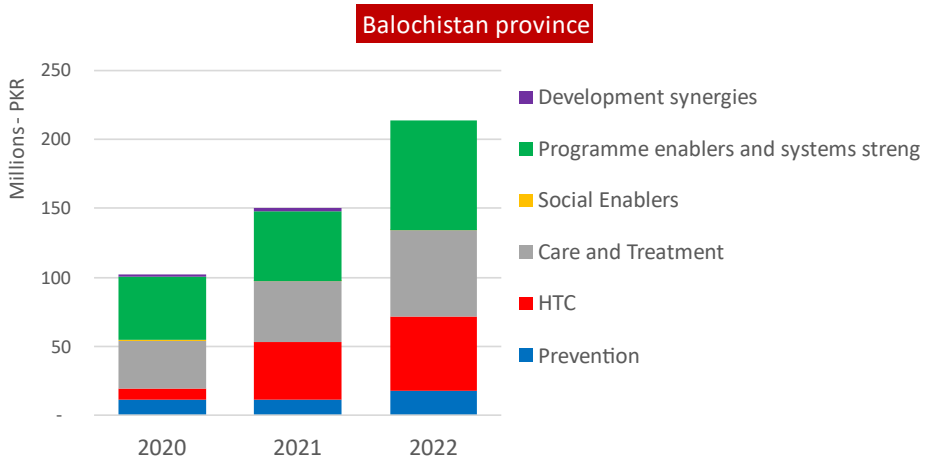


8.2.4. HIV spending in BALOCHISTAN

Balochistan has the smallest population and the smallest number of PLHIV among the provinces in Pakistan, and relatively allocated fewer resources for the HIV response than the other provinces. The analysis shows that the governmental sector is the main source of funding, providing 67% of the total amount. The multilateral organizations, including Global Funds and UNA agencies, are the second largest source of funding, contributing 22% of the total amount. The households are the smallest source of funding, providing only 11% of the total amount. The table below provides the absolute amount of funding for each entity or the total funding for the province.

The data shows that the total spending on HIV interventions in the province increased from KPR 102 million in 2020/21 to KPR 214 million in 2022. The largest category of spending was care and treatment, which accounted for 70% of the total in 2020/21 and 62% in 2022/23. The spending on care and treatment increased by 60% in 2022/23. The second largest category of spending was HTC, which accounted for 8% of the total in 2020/21 and 25% in 2022/23. The spending on HTC increased by 400% in 2022. Followed by spending on prevention, which accounted for 13% of the total in 2020 and 9% in 2022. The spending on prevention increased by 11% in 2022/23. The other categories were programme enablers and HSS, social enablers, and development synergies, which accounted for 4%, 0%, and 0% of the total in 2022/23, respectively.

FIGURE 38: HIV SPENDING BY INTERVENTIONS IN BALOCHISTAN (PKR, 2020/21 – 2022)



8.2.5. Conclusion

In 2022/23, the distribution of HIV intervention spending across provinces in Pakistan varied significantly, reflecting differing priorities and resource allocations.

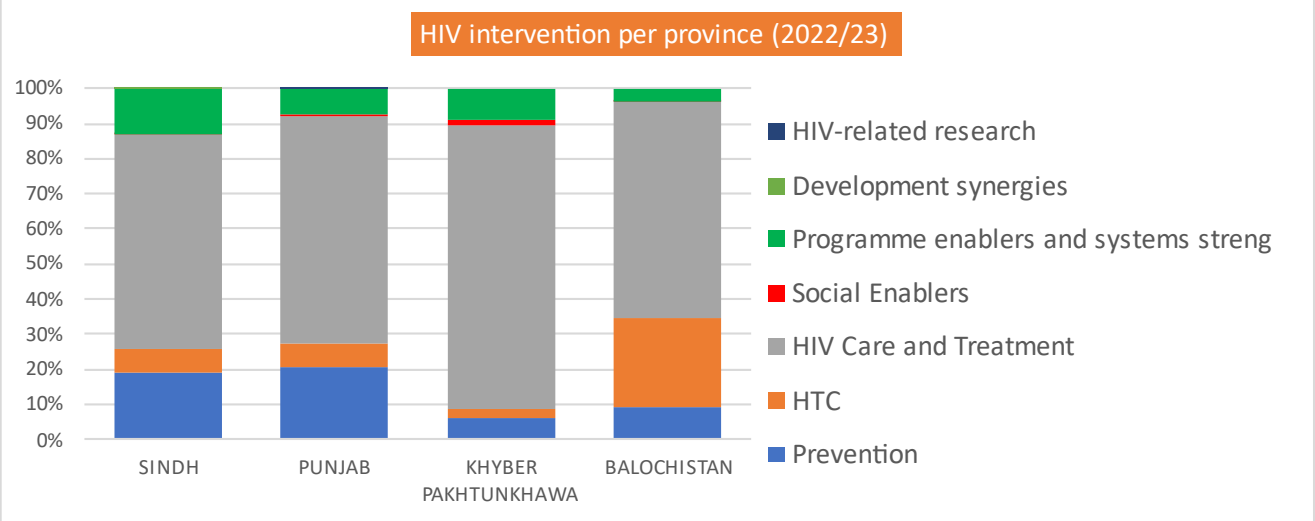
Sindh allocated the largest proportion of its budget to HIV Care and Treatment, accounting for 61% of its total expenditure, followed closely by Punjab with 65%. Khyber Pakhtunkhwa also prioritized HIV Care and Treatment, allocating 81% of its budget to this category, reflecting a strong emphasis on providing healthcare services to those living with HIV/AIDS. Balochistan allocated 62% of its budget to HIV Care and Treatment, aligning closely with Khyber Pakhtunkhwa's approach.

Regarding HIV prevention efforts, Punjab and Sindh allocated similar proportions of their budgets, with 20% and 19%, respectively. Khyber Pakhtunkhwa, however, allocated a smaller percentage (6%) to prevention initiatives, while Balochistan allocated 9%. This suggests a potential difference in emphasis on preventive measures among provinces. In terms of HIV testing and counselling (HTC), Khyber Pakhtunkhwa allocated the highest proportion of its budget (25%) to this category, indicating a strong focus on testing and counselling services. Sindh and Punjab allocated 7% each to HTC, while Balochistan allocated 2%.

Programme enablers and systems strengthening received varying levels of attention across provinces. Sindh allocated 13% of its budget to this category, while Punjab allocated 7%, Khyber Pakhtunkhwa allocated 9%, and Balochistan allocated 4%. These allocations reflect the differing priorities in strengthening the healthcare system and supporting program implementation among provinces.

Figure 8: HIV spending by interventions by provinces (PKR, 2020/21 – 2022)

Overall, while all provinces allocated a significant portion of their budgets to HIV Care and Treatment, there were differences in the emphasis placed on prevention, testing, and program enablers. These variations likely reflect differences in the HIV epidemic's nature and scale, as well as differing strategic priorities and resource availability across provinces in Pakistan.



8.3. CLO self-identification & non-financial data collection template.

This format is intended to support the self-identification of community organizations in relation to the operational definition of Community-led organization, regarding the HIV Resource Tracking of Community Led response project.

Section 1 *General Information*

Please fill the next information:

Name of the organization, coalition, or network:			
Acronym (in case that you use one):			
Contact information:	*Contact person:*	*Mail:*	*Mobile:*

Section 2 *Community Led information*

Community-led organizations, groups and networks, whether formally or informally organized, are entities for which the majority of governance, leadership, staff, spokespeople, membership and volunteers, reflect and represent the experiences, perspectives, and voices of their constituencies and who have transparent mechanisms of accountability to their constituencies. Community-led organizations, groups, and networks are self-determining and autonomous, and not influenced by government, commercial, or donor agendas.

#	ITEM	Answers		
1	Do the majority (50% or more) of your governance body, leadership, staff, spokespeople, membership and/or volunteers come from the communities that you serve?	**YES** **( )**	**NO** **( )**	
2	Do you use volunteer to implement your activities? If yes how many volunteer and how much time they spent per week?	**If the answer is yes , please fill table 5 below, if no ignore it**		
3	Do you have transparent mechanisms of accountability to your constituencies?	**YES** **( )**	**NO** **( )**	
3.1	Can you kindly describe your accountability system?			
4.	What are the beneficiary populations of your organization's activities and services?	**1.** **2.** **3.**		
5	Considering the answers, you have shared with us, do you consider your organization to be a CLO according to the UNAIDS operational definition?	**YES** **( )**	**NO** **( )**	**In process of becoming a CLO** **( )**

Section 3: *Alternative sources of funding*

3. (Q6): Volunteers' contribution- Please describe the volunteers' contribution to the organization programmes, the number of hours of voluntary work per day and the number of working days a year. Example, 10 volunteers working 4 hours a day = 40 hours/day, every Saturday = 52 days/year					
No. of volunteers	Programme/ACTIVITY	Volunteer Tasks / Duties	Hours Volunteer /day	Days/year	Estimated Volunteer Cost / Value? Using min.wage?

4. (Q7): Please describe the donated goods received by the organization. The assets are grouped in wide categories: buildings, equipment, furniture, vehicles, supplies (medicine, food, other supplies) and other goods. Use the receipt or accounting value for the goods.

No of items	Programme/activity and beneficiary	Donor Type and name (Public, international, private, etc)	Asset Description (Computer, bicycle, food parcels, test kits, vehicles, supplies)	Estimated value of each item	Year
5					

5. (Q8): Annual-Base Free Use of Property. Please describe property provided for free use, in cases where the usage is regular and continuous during the whole year. Classify the properties by type and use, describe the property by size, capacity or other distinctive features and provide an estimate of the market value of the annual rental rate at the lowest price, and the data source for the estimate.

Property Description	Property Type	Programme benefitting from use	Donated by whom	Donor Type	Estimated annual value of the rental for such a space in 2022/23? (PKR, & source of estimate)

6. (Q9): Event-Based Use of Property. Please describe property received free of charge of one-time use or for less than a year. Please provide an estimated value of price per output at lowest rate and indicate the data source for the estimate. Classify the properties by type and use, describe the property features and provide an estimate of the market rental rate at the lowest price for the time used, and the data source for the estimate.

Property type/use	Programme / service benefitting	Features/time used	Donor Name	Donor Type	Estimated annual value in 2022/23 (PKR, & source of estimate)

8.4. Financial data collection template for CBOs/CLO

Name of the Institution			
Province of implementation			
Person to contact			
Breakdown by Recipients/ service provider			
Year: 2020/21	Currency:		
	Financing Entities (FE)		
	Financing Agent-Purchaser (FAP)		
	Provider of services (PS)		
	Total Amount spent	1,000	Amount spent
ASC 1	**condom distribution**		**1,000**
Service Delivery Model	**community level out reach**		**1,000**
Service Delivery Model			
Beneficiary (BP) 1	Gen pop		**1,000**
Beneficiary (BP) 2			
Beneficiary (BP) 3			
Total spent BP			
Production Factor 1	transport		**200**
Production Factor 2	Salary		**600**
Production Factor 3	comndoms		**200**
Production Factor 4			
Production Factor 5			
Total Spent PF			**1,000**
ASC 2	**PMTCT**		
Service Delivery Model			
Beneficiary (BP) 1			
Beneficiary (BP) 2			
Total spent BP			-
Production Factor 1			
Production Factor 2			
Production Factor 3			
Production Factor 4			
Production Factor 5			
Total Spent PF			-

8.5. Detailed NASA tables

8.5.1. HIV Financing Entities and HIV program areas (PKR, 2022/23)

HIV Financing Entities and their Schemes (PKR)	2020/21	2021/22	2022/23	% 2020	% 2021	% 2022
FE.01 Public Entities	1,702,535,813	2,088,630,246	2,567,999,043	30%	43%	35%
Government schemes	1,702,535,813	2,088,630,246	2,567,999,043	30%	43%	35%
FE.02 Domestic Private Entitites	2,716,546	5,723,543	1,321,000	0%	0%	0%
Not-for-profit organisation schemes	2,716,546	5,723,543	1,321,000	0%	0%	0%
Out-of-pocket excluding cost-sharing	326,032,905	441,026,317	570,109,427	6%	9%	8%
FE.03 Entités internationales	3,624,205,597	2,292,814,343	4,179,359,652	64%	47%	57%
Government schemes	2,400,105,409	30,328,065	6,101,870	42%	1%	0%
Not-for-profit organisation schemes	1,224,100,188	2,262,486,278	4,173,257,781	22%	47%	57%
Grand Total	5,655,490,861	4,828,194,449	7,318,789,122	100%	100%	100%

8.5.2. HIV Financing Entities and Schemes (PKR, 2022/23)

Financing entities and their Financing agents (PKR)	2020/21	2021/22	2022/23	% 2020	% 2021	% 2022
FE.01 Public Entities	1,702,535,813	2,088,630,246	2,567,999,043	30%	43%	35%
FAP.01.01 Territorial governments	1,702,535,813	2,088,630,246	2,567,999,043	30%	43%	35%
FE.02 Domestic Private Entitites	328,749,451	446,749,860	571,430,427	6%	9%	8%
FAP.02.05 Not-for-profit institutions	2,716,546	5,723,543	1,321,000	0%	0%	0%
FAP.02.04 Private households	326,032,905	441,026,317	570,109,427	6%	9%	8%
FE.03 International Entities	3,624,205,597	2,292,814,343	4,179,359,652	64%	47%	57%
FAP.01.01 Territorial governments	2,400,105,409	30,328,065	6,101,870	42%	1%	0%
FAP.02.05 Not-for-profit institutions	1,091,187,662	1,133,046,839	1,548,280,422	19%	23%	21%
FAP.03.01 Country offices of bilateral agencies	8,722,644	-	-	0%	0%	0%
FAP.03.02 Multilateral agencies	114,245,220	11,296,301	9,067,771	2%	0%	0%
Total	5,655,490,861	4,828,194,449	7,318,789,122	100%	100 %	100%

8.5.3. HIV Financing Entities and Financing Agents/Purchasers (PKR, 2022/23)

HIV Financing Agents/purchaser & their Service Providers (PKR)	2020/21	2021/22	2022/23	% 2020	% 2021	% 2022
FAP.01 Public entities	**4,102,641,222**	**2,118,958,311**	**2,574,100,913**	**73%**	**44%**	**35%**
Governmental organizations	3,567,311,010	2,057,064,528	2,531,592,971	**63%**	**43%**	**35%**
Non-profit providers	262,283,559	61,893,783	42,507,942	**5%**	**1%**	**1%**
International NGOs and foundations	273,046,652	-	-	**5%**	**0%**	**0%**
FAP.02 Private entities	**273,046,652**	**1,579,796,699**	**2,119,710,849**	**5%**	**33%**	**29%**
Governmental organizations	415,833,780	737,628,022	981,040,408	**7%**	**15%**	**13%**
Non-profit providers	1,012,825,977	842,168,678	1,138,670,441	**18%**	**17%**	**16%**
FAP.03 International entities	**124,189,882**	**1,129,439,439**	**2,624,977,360**	**2%**	**23%**	**36%**
Governmental organizations	13,296,043	325,280,463	1,242,046,981	**0%**	**7%**	**17%**
Non-profit providers	13,663,721	333,687,637	435,930,610	**0%**	**7%**	**6%**
Multilateral agencies	97,230,119	113,321,090	109,960,285	**2%**	**2%**	**2%**

International NGOs and foundations	-	357,150,249	837,039,484	0%	7%	11%
Total	5,655,490,861	4,828,194,449	7,318,789,122	100%	100%	100%

8.5.4. HIV Financing Agents/Purchasers and Provides of services (PKR, 2022/23)

Program areas with Service providers (PKR, 2022/23)	Public Hospitals - ART centres	Government entities	Blood banks (public)	Non-profit providers	Multilateral agencies
Prevention	160,264,033		1,470,475	762,308,645	40,707,122
HIV testing and counselling (HTC)	238,700,944		70,207,100	226,501,844	-
HIV Care and Treatment Care	3,846,367,974			286,494,854	-
Social Enablers	2,335	6,620,995		9,925,745	54,238,557
Programme enablers and HSS	-	429,429,772		329,702,334	852,025,754
Development synergies	-	1,616,732	-	-	28,336
HIV-related research		-		2175570.439	-
Grand Total	4,245,335,286	437,667,499	71,677,575	1,617,108,992	946,999,769

8.5.5. HIV Program areas and Provides of services (PKR, 2022/23)

Program areas with Service Providers (PKR, 2022/23)	Public Hospitals - ART centres	Government entities	Blood banks (public)	Non-profit providers	Multilateral agencies
Prevention	160,264,033		1,470,475	762,308,645	40,707,122
HIV testing and counselling (HTC)	238,700,944		70,207,100	226,501,844	-
HIV Care and Treatment Care	3,846,367,974			286,494,854	-
Social Enablers	2,335	6,620,995		9,925,745	54,238,557
Programme enablers and HSS	-	429,429,772		329,702,334	852,025,754
Development synergies	-	1,616,732	-	-	28,336
HIV-related research		-		2175570.439	-
Grand Total	4,245,335,286	437,667,499	71,677,575	1,617,108,992	946,999,769

8.5.6. Beneficiaries with the Financing Entities (PKR, 2022/23)

Beneficiaries with Financing Entities (PKR, 2022/23)	Public Entities	Private Entitites (OOPP)	International Entities	Grand Total
People living with HIV	1,897,510,769	570,109,427	1,703,546,191	4,171,166,387
Key populations	27,787,752	1,321,000	954,128,876	983,237,628
Vulnerable, accessible populations	226,491,176	-	24,905,030	251,396,206
General population	51,499,777	-	179,223,962	230,723,739
Non-targeted interventions	364,709,569	-	1,317,555,592	1,682,265,161
Grand Total	2,567,999,043	571,430,427	4,179,359,652	7,318,789,122

8.5.7. HIV Program areas with Beneficiaries (PKR, 2022/23)

Programme areas with Beneficiaries (PKR, 2022/23)	People living with HIV	Key populations	Vulnerable and accessible pop	General population	Non-targeted interventions
Prevention	38,303,560	783,227,489	141,407,750	1,811,476	-
HIV testing and counselling (HTC)	-	200,010,139	109,988,456	223,912,193	-
HIV Care and Treatment Care	4,132,862,827	-	-	-	-
Social Enablers	-	-	-		70,785,298
Programme enablers and HSS	-	-	-	-	1,611,160,195
Development synergies	-	-	-	-	3,144,168
HIV-related research	-	-	-	-	2,175,570
Grand Total	4,171,166,387	983,237,628	251,396,206	230,723,739	1,682,265,161

8.5.8. HIV Program areas with service delivery models (2022/23)

Program areas with Service providers (PKR, 2022/23)	Public Hospitals - ART centres	Government entities	Blood banks (public)	Non-profit providers	Multilateral agencies
Prevention	160,264,033		1,470,475	762,308,645	40,707,122
HIV testing and counselling (HTC)	238,700,944		70,207,100	226,501,844	-
HIV Care and Treatment Care	3,846,367,974			286,494,854	-
Social Enablers	2,335	6,620,995		9,925,745	54,238,557
Programme enablers and HSS	-	429,429,772		329,702,334	852,025,754
Development synergies	-	1,616,732	-	-	28,336
HIV-related research		-		2175570.439	-
Grand Total	4,245,335,286	437,667,499	71,677,575	1,617,108,992	946,999,769

8.5.9. Production factors with Financing Entities (2022/23)

Production factors with Providers of Services (PKR, 2022/23)	Public sector providers	Private sector providers	International providers
Personnel costs	901,029,985	893,574,020	573,037,879
Operational and programme management	1,763,139,778	195,255,636	77,359,009
Medical products and supplies	1,484,767,026	380,783,349	2,613,378
Contracted external services		11,390,084	
Transportation related to beneficiaries	108,789,530	7,529	
Training related costs	21,626,360	52,678,914	10,108,188
Logistics of events, including catering	6,469,967	2,172,745	
Indirect costs	412,240,732	68,386,385	150,190,190
Building	49,523,013	1,634,700	18,824,176
Other capital investment	7,093,970	6,797,251	114,866,949
Vehicles		4,428,379	
Grand Total	4,754,680,360	1,617,108,992	946,999,769

8.5.10. Production factors with Providers of services (2022/23)

Program areas with Service providers (PKR, 2022/23)	Public Hospitals - ART centres	Government entities	Blood banks (public)	Non-profit providers	Multilateral agencies
Prevention	160,264,033		1,470,475	762,308,645	40,707,122
HIV testing and counselling (HTC)	238,700,944		70,207,100	226,501,844	-
HIV Care and Treatment Care	3,846,367,974			286,494,854	-
Social Enablers	2,335	6,620,995		9,925,745	54,238,557
Programme enablers and HSS	-	429,429,772		329,702,334	852,025,754
Development synergies	-	1,616,732	-	-	28,336
HIV-related research		-		2175570.439	-
Grand Total	4,245,335,286	437,667,499	71,677,575	1,617,108,992	946,999,769

8.5.11. Production factors with Providers of services (2022/23)

SCHEMES and their Financing Entities (PKR, million)	2022/23
SCH.01.01 Government schemes	2,574,100,913
FE.01 Public Entities	2,567,999,043
FE.03.02 Multilateral Organizations	6,101,870
SCH.02.02.01 Not-for-profit organisation schemes	4,174,578,781
FE.02 Domestic Private Entitites	1,321,000
FE.03.02 Multilateral Organizations	4,162,070,010
FE.03.01 Governments providing bilateral aid	9,067,771
FE.03.03 International not-for-profit organizations and foundations	2,120,000
SCH.03.01 Out-of-pocket excluding cost-sharing	570,109,427
FE.02.02 Households	570,109,427
Grand Total	7,318,789,122

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