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CAMBODIA'S FIFTH NATIONAL AIDS SPENDING ASSESSMENT (NASA), 2014-15

MARCH 2017

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*CAMBODIA'S
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ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral
ASC	AIDS Spending Category
BP	Beneficiary Population
FA	Financing Agents
FS	Financing Sources
HFG	Health Finance and Governance
HIV	Human Immunodeficiency Virus
IDU	Injecting Drug Users
KHANA	Khmer HIV/AIDS NGO Alliance
M&E	Monitoring and Evaluation
MOH	Ministry of Health
MSM	Men Who have Sex with Men
NAA	National AIDS Authority
NASA	National AIDS Spending Assessment
NCHADS	National Centre for HIV/AIDS, Dermatology and STDs
NGO	Non-governmental Organization
NSP	National Strategic Plan
PEPFAR	President Emergency Plan for AIDS Relief
PF	Production Factors
PLHIV	People Living with HIV
PMTCT	Prevention of Mother-to-Child Transmission
PS	Providers of Services
PWID	People Who Inject Drugs
PWUD	People Who Use Drugs



RGC	Royal Government of Cambodia
SC	Steering Committee
SHA	System of Health Accounts
STI	Sexually Transmitted Infection
SNA	System of National Accounts
UN	United Nations
UNGASS	United Nations General Assembly Special Session
WHO	World Health Organization
WLHIV	Women Living with HIV

Forward

The National AIDS program in Cambodia has been successful in reducing the HIV prevalence among adult general population from 1.7% in 1998 to 0.6% in 2015 with effective Three-One Principle under leadership and management of the National AIDS Authority (NAA).

After more than two decades of the fight against HIV and AIDS namely Scaling Up phase, and Control Phase, the Royal Government of Cambodia (RGC) has been embarking in the Elimination Phase which started since the beginning of 2015.

Cambodia HIV program is now focusing on the 90/90/90 UNAIDS targets by 2020 and on achieving virtual elimination of HIV transmission by 2025 (defined by less than 3 new infections/100,000 populations and Mother-to-Child Transmission below 5%).

Over the past 26 years Cambodia has been able to mobilize more than 700 Million US dollars for the fight against HIV and AIDS. As the RGC is committed to end the AIDS Epidemic by 2025, the comprehensive assessment of HIV-related expenditure to monitor of the invested resources in the multi-sectorial response to HIV and AIDS is an important responsibility of the National AIDS Authority.

This fifth report of the National AIDS Spending Assessment (NASA V) is part of NAA analytical work for evaluating and quantifying the multi-sectoral approach of the response, and also for identifying funding gaps and duplication of funding in the national response over the period 2014 and 2015.

Given the many challenges that need to be overcome in providing HIV services, an adequate level of funding will be needed to end the AIDS epidemic by 2025 especially in the unprecedented situation where Cambodia is moving from Low Income Country to Lower Middle Income Country and is dedicated to achieve 17 SDG goals by 2030.

All stakeholders should bear in mind that Cambodia has reached this point as a result of strong political commitment, community engagement and high levels of support, over more than two decades, from donors. However, the overall donor funding envelope for the HIV response is shrinking, and there is concern that Cambodia's growing economy, reflected in its new lower middle income status, will make it increasingly less eligible for Overseas Development Assistant (ODA). Globally, meanwhile, donor partners are pressing for greater contributions from domestic budgets. This is a main game changer for HIV and AIDS response in the next decade to come.

It is therefore imperative to have a clear knowledge of what is being spent on HIV and AIDS, to ascertain if the expenditures are targeted to the most cost-effective interventions and key priority areas. The NASA V provides an accurate map of financial sources and the use of funds for national AIDS responses. For improving the cost-effectiveness of investments in HIV and AIDS responses, the report addresses key issues that respond to the queries of all stakeholders which are involved in HIV and AIDS response. These are identification of financial sources and financial providers of HIV services, the total amount of resources devoted to particular HIV intervention areas, and the amount of resources allocated to a certain group of target population.



Knowledge of the total actual expenditure for the national response promotes greater transparency, efficiency, effectiveness and accountability to the RGC, public, donors and beneficiaries.

This report will be of much value to all stakeholders for a better understanding of the financial flows and gaps in the national AIDS response. It also demonstrates the commendable commitment from the RGC, the international partners and local and international NGOs for providing resources for the coordination and implementation of the national HIV and AIDS responses.

On behalf of the NAA, I strongly recommend that the information in this report will be used to the modelling exercise of the Investment Case so that we can predict funding that will be needed to sustain our responses based on the gains made to date. It is my sincere hope that all stakeholders in the multi-sectorial HIV and AIDS response from donors to service providers will use this report as a benchmark to inform their planning and resource allocation for all services or activities that will be implemented over the next decade to come in our joint effort to end HIV and AIDS in Cambodia.

In recognition of this, I call on all stakeholders to join the RGC to strategically use of available resources while preparing to assume an increasing share of the financial burden for HIV and AIDS response. We need to continue our effort in using targeted strategies, in expanding more efficient service delivery models and implementing greater synergies within and between public and community health systems in Cambodia.

Lastly, I would like to extend my sincere thanks to all ministries as the NAA members, Health Finances and Governance/USG, and to UNAIDS for their technical and financial support to the whole process of NASA V and especially to the Department of Planning, Monitoring, Evaluation and Research of the NAA secretariat staff who, Dr. Tep Navuth, Dr. Ly Chanravuth, Dr. Tan Sokhey, Ph. Cheng Tha and Ms. Chem Sreyrith, takes the lead in coordinating process to make such report well documented. We should be thankful to 40 institutions from Government, NGO, CSO and KP representatives who tried very hard in responding to our call to fill detailed information to more than 2,800 cells of the NASA V matrix. We owe our gratitude to Ms. Karishmah Bhuwanee and Mr. Aasit Nanavati, International Consultants and Dr. Kim Lee, local consultant for their remarkable efforts in the whole process of NASA V *Dr.*

Phnom Penh, 29th March 2017

Senior Minister and Chairman of NAA



Ieng Mouly

IENG MOULY

1. INTRODUCTION

1.1 Overview

Cambodia has made great strides in fighting the HIV/AIDS epidemic. The epidemic in Cambodia has been on a steady decline since the late 1990s, with HIV prevalence falling from around 1.7% in 1998 to 0.6% in 2015 (National AIDS Authority 2015). Antiretroviral treatment (ART) is used by an increasing proportion of people living with HIV (PLHIV), with 75.4% of PLHIV receiving ART at the end of 2015 (National AIDS Authority 2015). To achieve this, Cambodia has used a multi-sectoral response to HIV and AIDS, which has enabled it to successfully prevent HIV infections among high-risk groups such as People Who Inject Drugs (PWID), men who have sex with men (MSM), and female entertainment workers. The government of Cambodia is aiming to eliminate new HIV infections by 2025, by achieving 90-90-90 targets by 2020, i.e., 90 percent of people living with HIV diagnosed, 90 percent of those diagnosed on Antiretroviral Therapy (ART), and 90 percent of those on treatment are virally suppressed.

Cambodia faces challenges in achieving its ambitious targets in working toward an AIDS-free generation. The World Bank's recent revisions of income classifications in 2016 changed Cambodia's status from low-income to lower-middle income (World Bank 2016). Funding for the country has already decreased in the last few years and the change in its income-status risks further reductions in this funding. As resources for HIV/AIDS become scarcer, Cambodia will need to make strategic decisions about how to invest the remaining resources in order to achieve the objectives stated above. Such decisions require reliable and up-to-date information on the resources available and how these resources are being used. It is in this context that the National AIDS Authority (NAA) has conducted its fifth National AIDS Spending Assessment NASA (NASA V) to analyze fiscal years 2014 and 2015.

The NAA is responsible for coordinating the national AIDS response in Cambodia, working with the Ministry of Health's (MOH) HIV/AIDS Program and with other financial and technical partners such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), and various United Nations organizations. Recognizing the importance of accurate data on AIDS spending to inform programming decisions, the NAA has completed four NASA exercises since 2007, analyzing spending between 2006 and 2012.

NASA V will provide evidence on AIDS spending in 2014 and 2015, allowing HIV/AIDS stakeholders to calculate financing gaps for HIV/AIDS overall, and for specific interventions across the HIV/AIDS prevention, care, and treatment spectrum. NASA V will help stakeholders understand how the AIDS response is being financed and help Cambodia plan how it will raise financing from domestic sources going forward.

NASA V also will help identify trends in the allocation of AIDS resources. Having evidence on which interventions are being funded, and their value-for-money, will help Cambodia prioritize



cost-effective interventions to get maximum results. NASA V data will enable decision makers to evaluate progress made against NASA IV recommendations to improve the effectiveness of AIDS spending. Specifically, the data will enable the NAA to:

- Monitor and evaluate the objectives of the National Strategic Plan IV (20015-2020) (NSP)
 - Is Cambodia spending in the specific areas which are prioritized under the NSP?
 - Is HIV/AIDS spending sufficient to achieve NSP objectives?
- Identify and report on progress of adopted goals such as the Global AIDS Response Progress Report
- Highlight gaps in funding to increase domestic resource mobilization.

1.2 NASA V Report

The next chapter (2) of this report explains the NASA framework used to measure spending on HIV and AIDS. It also describes the methodology and process used to gather and finalize data used for the NASA V report. Chapter 3 presents the key results for 2014 and 2015 AIDS spending. Chapter 4 presents observations and possible implications for HIV/AIDS strategy. Finally, Chapter 5 provides methodological recommendations to improve the accuracy of NASA exercises going forward.

2. METHODOLOGY AND PROCESS

NASA is a framework developed by UNAIDS (UNAIDS 2009a) to measure the amount and flow of spending for a country's national AIDS response in a given year; that is, how much is being spent, by whom, for whom, and for what purpose. NASA is based on, and therefore consistent with, other global resource tracking frameworks such as the System of Health Accounts (SHA) 2011 and System of National Accounts (SNA). The NASA framework is internationally standardized, which enables Cambodia to compare its AIDS spending with other countries that have produced NASAs.

The benefits of NASA are maximized when it is used in combination with other datasets (epidemiological, utilization, costing data). This secondary analysis allows for stakeholders to:

- **Assess trends in the amount and mix of AIDS spending.** Over time, NASA spending data can be used to understand the trend in total spending for AIDS and how those funds are being used
- **Calculate the AIDS funding gap.** The NASA classifications are consistent with the globally estimated resource needs for the AIDS response (UNAIDS 2005). This alignment allows countries to compare resource needs and real spending, in order to calculate the resource gap. The breakdown of spending by financing sources also enables governments to understand and plan the most effective mix of domestic and international financing
- **Monitor the implementation of a country's national HIV/AIDS strategic plan.** Spending allocations from NASA can help to see if they reflect what was planned and whether reallocations are necessary to meet the targets in strategic plans
- **Enable country reporting on internationally adopted goals.** NASA estimations can be used to measure progress toward the goals of the
 - *Declaration of Commitment on HIV/AIDS* (U.N. 2001), and
 - The 2016 High Level Meeting political declaration including the indicator on *Domestic and international AIDS spending by categories and financing sources*. (UNAIDS 2016).

Spending data also provide evidence of compliance with the principle of additionality, required by some international agencies.

- **Understand potential efficiency challenges.** Comparing spending with outputs achieved can help to identify potential inefficiencies and flag issues for deeper analysis. Countries can use NASA to benchmark themselves with neighboring countries or countries with similar spending levels, to learn how more can be achieved with the same resources.

2.1 NASA Framework

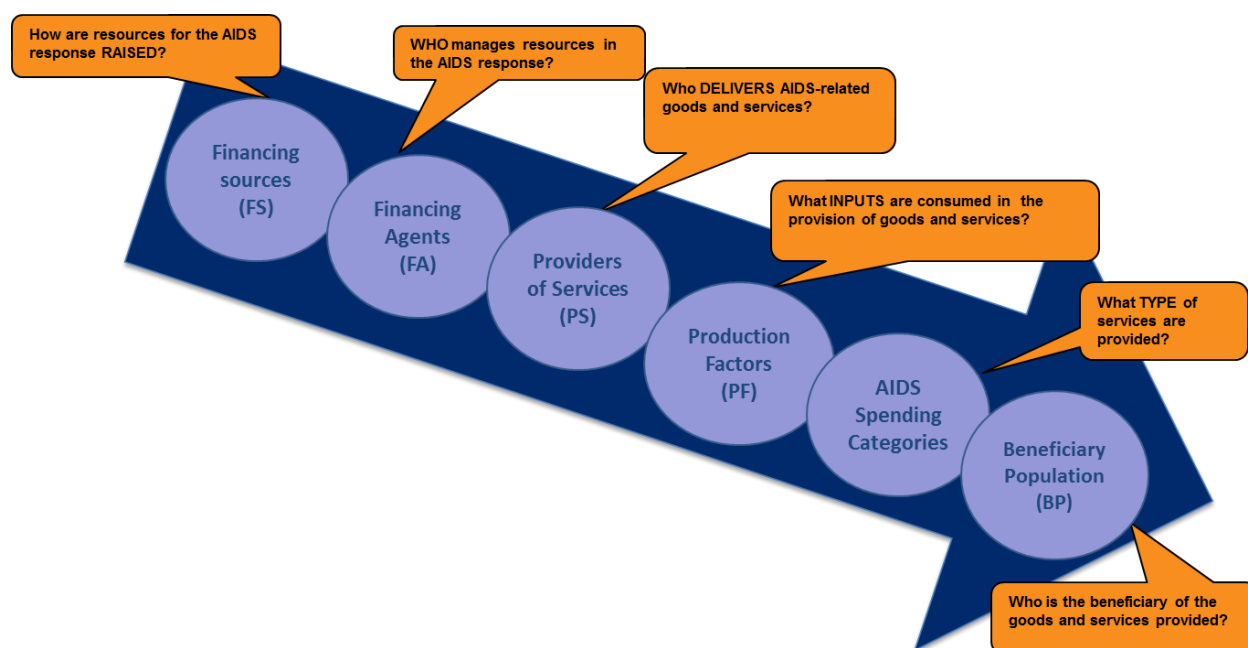
NASA measures spending for the final consumption of goods and services in the AIDS response. Whenever possible, spending data are used because they give the most accurate picture of what was invested in the AIDS response. Spending data contrast with budget, disbursement, or procurement data, which do not always equate to what was finally used. That said, these latter data are sometimes used as a proxy when spending data are unavailable.

Recognizing the multi-sectoral nature of the AIDS response, NASA captures spending across the “full continuum of HIV/AIDS activities that may or may not be health related, including those that occur in education (e.g., school programs on stigma reduction), social development (e.g., empowerment activities), welfare (e.g., income-generating activities), and so forth” (Health Systems 20/20 Project et al. 2009). For this reason, NASA spending figures may differ from AIDS expenditure estimates from a Health Accounts exercise, since the former generally includes health and health-related spending for AIDS.

The scope of NASA is broad and covers all sources of spending for the AIDS response, both current and capital spending and cash and in-kind contributions. It measures spending that is directly earmarked for HIV/AIDS as well as some general health spending that indirectly supports the HIV/AIDS response. The NASA framework uses a functional definition to ascertain which spending should be included or excluded; any spending where the primary objective “includes the categories of prevention, care and treatment, and other health and non-health services related to HIV” (UNAIDS 2009b) should be included.

NASA tracks the flow of spending from its origin to the final beneficiary, through six classifications (Figure 1). Total spending is therefore classified in these six different ways.

Figure 1: NASA’s Six Classifications



Each of these classifications has detailed sub-categories; therefore each spending line must be allocated to six codes. Each classification also includes a sub-category (.98 “not elsewhere classified”) for any spending that cannot be specifically identified. Definitions of the six classifications and examples are in Table 1.

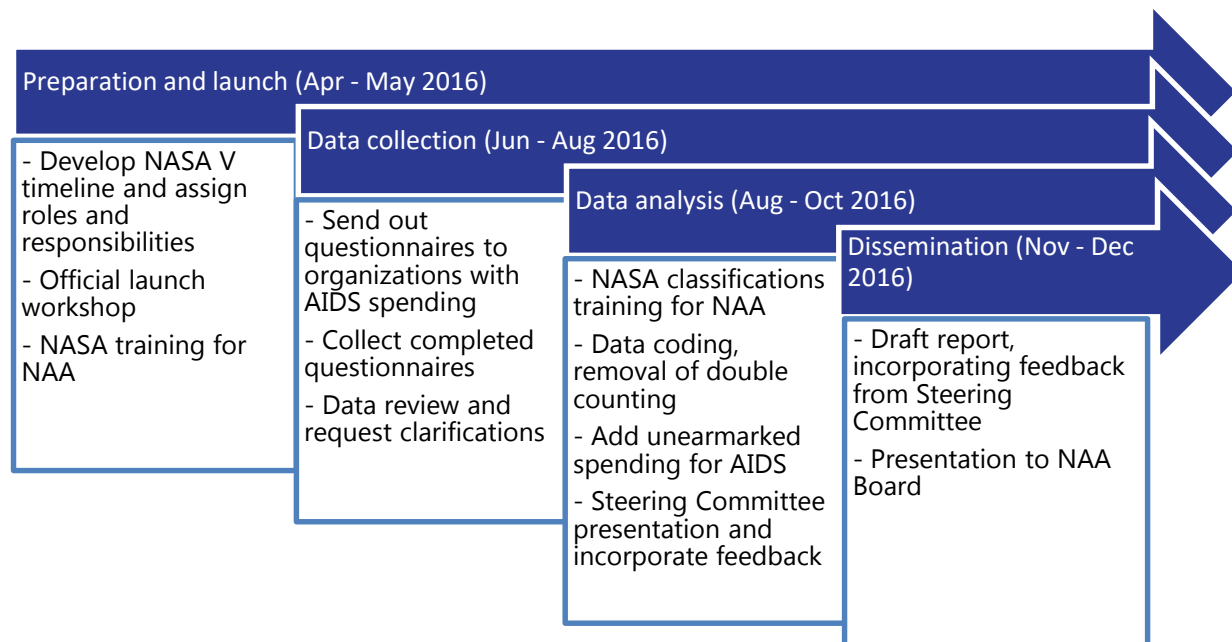
Table 1: Definition of NASA Classifications

NASA Classification	Definition	Examples of Sub-categories
Financing sources	Organizations that provide the resources to fund goods and services for the AIDS response	Public funds, household funds, international funds (such as bilateral or multilateral agencies)
Financing agents	Organizations that pool funds from sources and transfer them to providers of services to purchase goods and services. NASA considers the agent as the organization that transferred funds/ in-kind resources to the final provider of services	Central/ state/ local government authorities, NGOs, bilateral or multilateral agencies
Providers of services	Entities that provide goods and services for final consumption. Providers may be within or outside of the health sector	Public sector providers (such as hospitals and ambulatory care providers), nonprofit and nonprofit faith-based providers, bilateral and multilateral agencies
Production factors (Inputs)	Inputs used in goods and services for final consumption	Current: labor, supplies, services Capital: buildings, equipment
AIDS spending categories	These describe the primary purpose or objective of the spending	Prevention, care and treatment, enabling environment
Beneficiary population	Targeted, or intended, beneficiary group for specific activities. These are the final beneficiary in the flow of funds	PLHIV, MARPs, other key populations, general population, non-targeted interventions

2.2 NASA V Process

Figure 2 summarizes the activities and timeline of the NASA V process.

Figure 2: NASA V Activities and Timeline



Production of NASA V was led by Cambodia's NAA, with support from a Steering Committee. The committee comprised representatives of the NAA, the Ministry of Health (MOH), USAID, UNAIDS, and civil society. It met regularly throughout the NASA process to provide feedback on the methodology, results, and reporting; it also suggested solutions for challenges encountered during data collection and analysis. Technical support was provided by USAID's Health Finance and Governance project (HFG) and UNAIDS. HFG provided technical support and mentorship to the NAA throughout the NASA V process to build their capacity and empower them to conduct NASAs in the future.

A Note on Double Counting

In some cases, two sources of data were collected for the same spending; for example the Khmer HIV/AIDS NGO Alliance (KHANA) provided the NASA team details of its own spending and amounts transferred to other NGOs. These other NGOs also reported spending money that they received from KHANA. Including both spending figures would constitute double-counting and overestimate total spending. In such cases, the NASA team compared the two sources side-by-side to confirm if the spending was indeed the same (e.g., the same project name or project description). The team then contacted the two sources to clarify why the reported spending was different; for example, the entity closest to the spending may have incurred spending using carry-over funds from the previous year. If the team did not receive feedback from both sources,

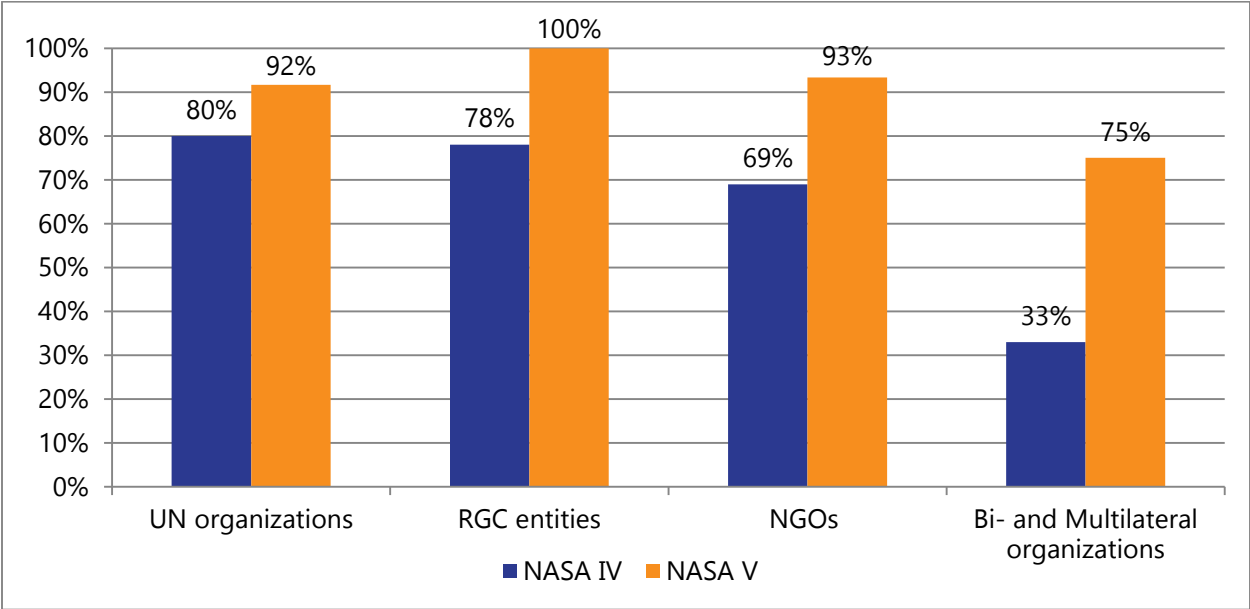
the data source that was closer to the final spending was included and the other source was excluded. Most double-counting occurred between donors and NGOs. Thus, applying the principle of the entity closest to the spending, the NGOs spending data were included in the NASA estimation.

2.3 Strengths of the NASA V Process

NAA ownership. In addition to producing valuable information on HIV/AIDS spending, the NASA V process built NAA technical capacity to understand the NASA framework and methodology so that it can implement future NASA exercises with limited external support. Technical assistance included didactic classroom training, “on-the-job” training (during data collection and coding), and coaching. The NAA coordinated the NASA V process and took leadership in presenting and communicating with stakeholders, for example during regular Steering Committee meetings, the NASA launch workshop, and the NAA Board Meeting.

High response rate. NASA V requests for organizations’ 2014 and 2015 HIV/AIDS spending data enjoyed a strong response rate, between 60% and 100% of requests made and much improved from NASA IV (Figure 3). In total, 30 NGOs, 13 UN organizations, 9 government entities, and 3 donors provided their data. This was the result of NAA efforts over five NASA exercises to engage with stakeholders and explain the value of NASA. Also contributing to the high response rates was the launch workshop in May 2016, which helped stakeholders understand the importance of their providing spending data and how they should complete the questionnaires. Annex C provides a full list of organizations contacted for data collection.

Figure 3: Response Rates for NASA IV and V



Inclusion of unarmarked spending for AIDS. The MOH makes general health expenditures that are not directly attributable to specific diseases, but that contribute indirectly. For example,

government payment of health care worker salaries supports the prevention and treatment of diseases, including HIV and opportunistic infections. Therefore, some of this should be reflected in NASA, to fully capture the government's contribution to AIDS spending. Health Accounts distribute general health spending by disease using an internationally standardized methodology recommended by the World Health Organization (WHO), which calculates proportions using utilization and unit cost weights. These are called "distribution keys." The NASA V team followed a similar logic and used the distribution keys developed by the Health Accounts team to allocate a proportion of the unearmarked spending to AIDS. Unearmarked spending accounted for 11% of total spending in 2014 and 2015. Further details are provided in Annex D.

Strong engagement of Steering Committee. NASA V benefitted from strong engagement of the Steering Committee members, who (i) provided the NASA team with the key policy questions for NASA V to focus on, (ii) facilitated data collection when NASA team members encountered non-responses, and (iii) provided feedback on the preliminary analysis and directed the team where to focus revisions.

2.4 Challenges

Lack of availability of disaggregated data. The nature of AIDS programming and service delivery has become more integrated over time. At the same time, NASA classifications require spending to be broken down to a level of detail that does not always reflect how services are delivered. For example, "Continuum of Care" interventions include activities that cut across multiple AIDS spending categories (ASCs) such as Prevention, Care and Treatment, and Social Protection and Social Services. Many NGOs could not disaggregate their spending to these ASCs. Wherever possible, the NASA team worked with the organization to understand the primary objective of the intervention to determine the ASC code, but in some instances it had to make assumptions.

Limit to comparability of spending by classification with NASA IV. Wherever possible, coding was kept consistent with NASA IV. However, upon review of the spending data, the NASA team interpreted the ASC 04 category to be for program management and administration for the overall AIDS response, and not for project-level administration. As a result, spending allocated to ASC 04 in NASA V is lower than that in NASA IV.

Further details of the methodology used, including adjustments and assumptions made, are provided in Annex E.

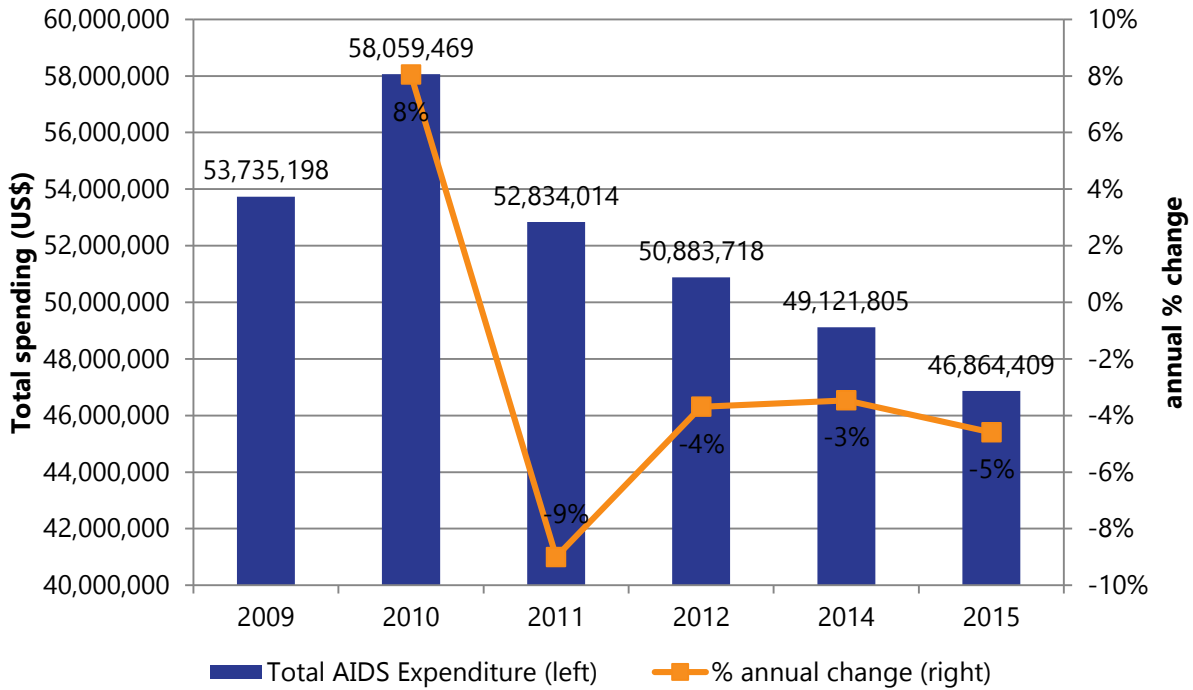
3. NASA V RESULTS

The Steering Committee discussed the years of analysis with the NASA team and it was agreed that NASA V would cover the fiscal years 2014 and 2015. NASA V was being conducted in 2016 and there was a big risk that many implementing partners from 2013 would no longer be in-country to provide the 2013 spending data, and data which was provided by existing partners might not be of high quality because of the time lag. In addition, the Steering Committee confirmed that there were no significant HIV/AIDS-related financing or policy changes in 2013 that would cause spending to be out-of-sync with the general trend. The important trend which stakeholders wanted to analyze was the fall in financing since 2015. Therefore, all time series data presented in the report exclude 2013. Detailed NASA V tables are available in a separate document (HFG project, NAA and UNAIDS/Cambodia, 2017). Additional comparison of the results presented in this section with NASA IV is provided in Annex A. Spending for HIV and AIDS broken down by objectives of the 2011-15 National Strategic Plan for Multi-sectoral and Comprehensive response to HIV and AIDS is also provided in Annex B.

3.1 Overview of Total Spending for AIDS Response

Total reported HIV/AIDS spending in Cambodia peaked at US\$58.1 million in 2010. Total spending has trended down since then, decreasing by 11% between 2009 and 2015 (Figure 4). This represents a compounded annual reduction rate of 2.3%.

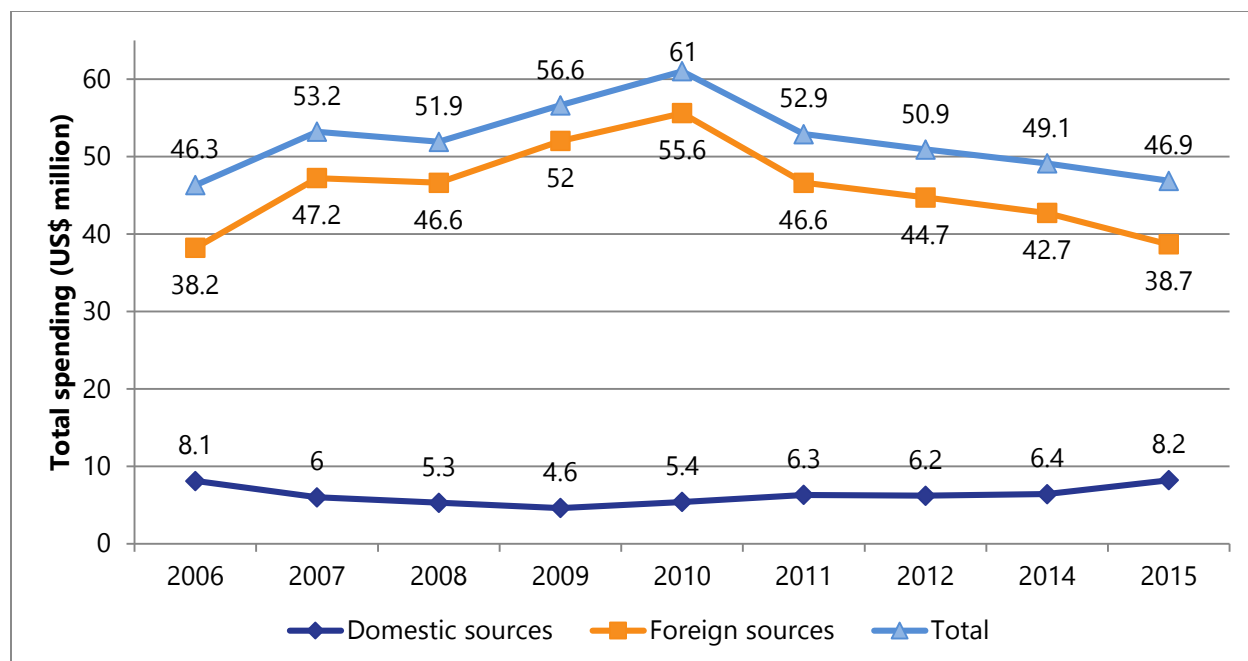
Figure 4: Total Spending and annual change (%), 2009-2015 (excluding 2013)



3.2 Who funds the HIV/AIDS response in Cambodia?

The Royal Government of Cambodia (RGC) has steadily increased its contribution to the AIDS response since 2009 (Figure 5). In 2015, the contribution increased significantly, by 28%, including for the first time funds (approximately US\$1 million) for the purchase of antiretroviral drugs (ARVs) and drugs for opportunistic infections. Despite this increase in domestic funding, Cambodia’s AIDS response remains reliant on external sources of funding. External sources have represented more than 80% of total spending since 2009, although their proportion of total spending has fallen, from 92% of total spending in 2009 to 83% in 2015.

Figure 5: Trend in Domestic and Foreign Sources of Spending for AIDS, 2006-2015 (excluding 2013)



As indicated below in Figure 6 and Table 2, the Global Fund is the single largest source of spending for Cambodia's AIDS response. In 2014, funding under the Global Fund's Single Stream of Funding was approved for 2014 and 2015. However, the introduction of its New Funding Model in March-April 2015 extended this two-year funding allocation to four years (2014-2017), essentially cutting the Global Fund annual contribution in half. However, a large procurement of ARVs in 2014 helped to fund the ARV needs in 2015. The spread of this procurement over 2014 and 2015, together with increases in RGC and PEPFAR contributions somewhat compensated for the decrease in Global Fund contributions, limiting the decrease in total spending in 2015 to US\$2.3 million.

The Global Fund remains the single biggest source of HIV/AIDS financing in Cambodia (41% in 2015). 2015 spending by the Global Fund fell by 23% in 2015 to \$19.4 million. As explained above, the higher than expected spending in 2015 is partly due to a portion of the ARV procurement spending in 2014 allocated to 2015 to reflect real consumption. The RGC's share increased from 13% to 17% in 2015. PEPFAR's share increased from 23% to 29% in 2015 (\$11.4 million to \$13.7 million). Other bilateral contributions, from the Government of Australia, Belgium, Germany, Japan and Sweden, fell by 67% to \$332,604 in 2015 (or 0.7% of spending). The U.N.'s spending stayed consistent between 2014 and 2015, at \$2.3 million (4.7% of spending in 2014 and 5.0% in 2015). Contributions from international NGOs' own funds fell slightly from US\$2.4 million in 2014 to US\$2.3 million in 2015, representing 5% of spending in both years.

Figure 6: Breakdown of 2014 and 2015 Spending by Financing Source

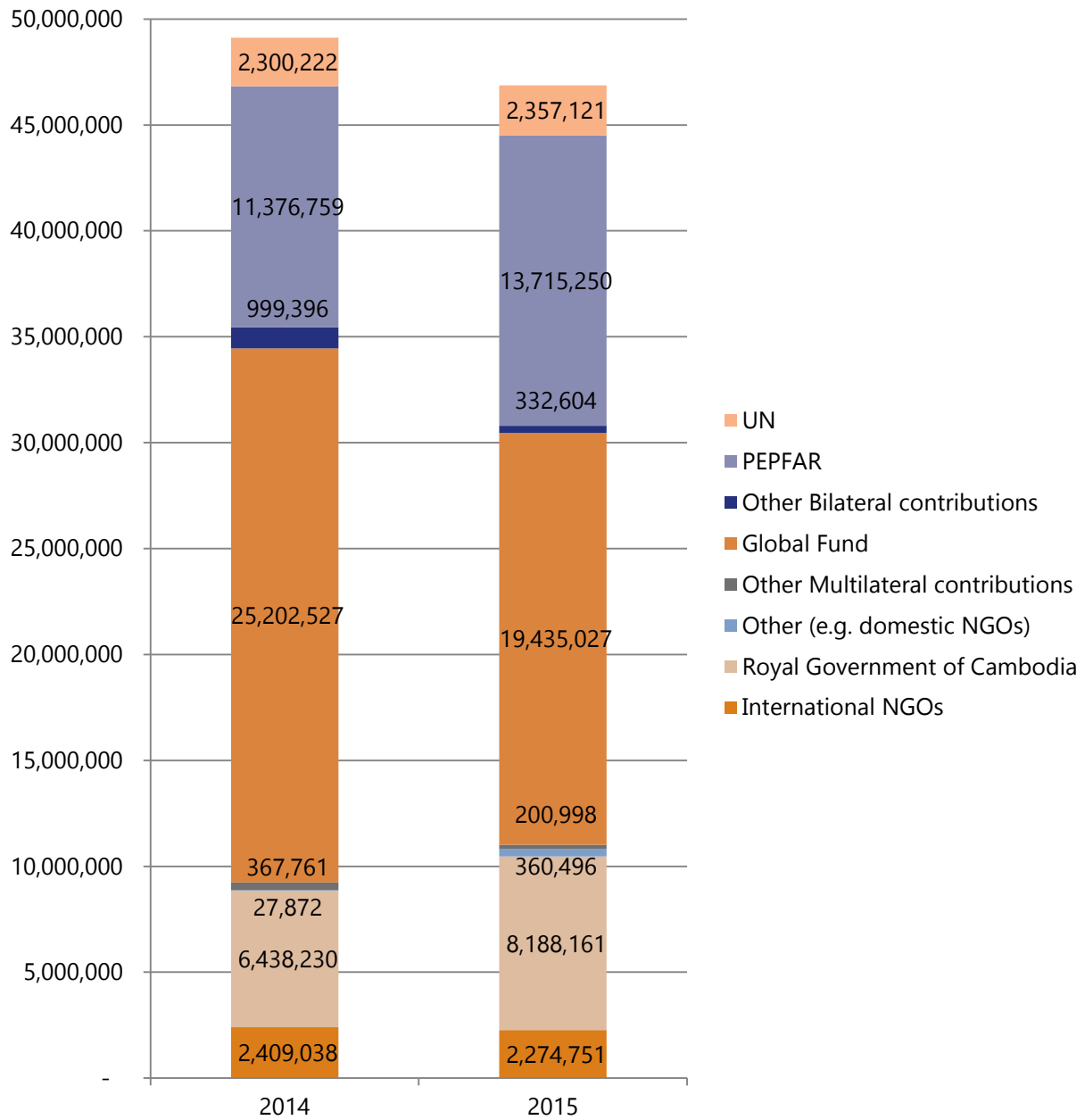
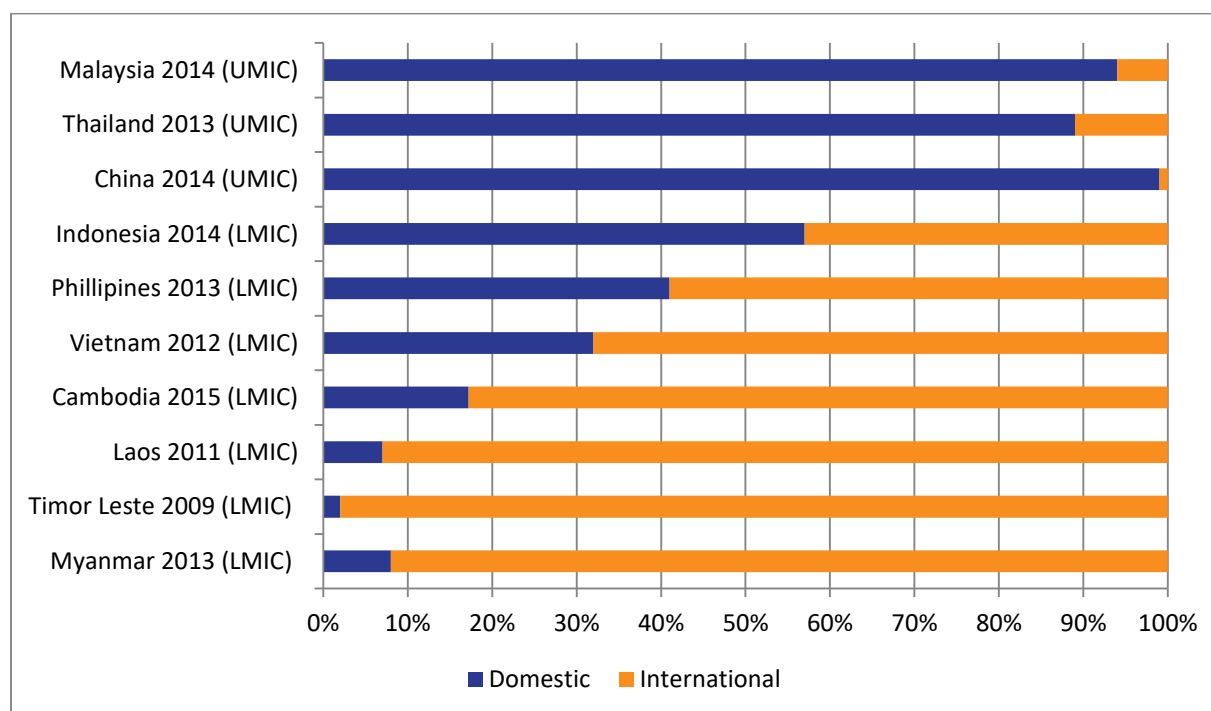


Table 2: Breakdown of Total HIV/AIDS Spending by Financing Source, 2009-2015 (excluding 2013), US\$ and percent

Financing Sources	2009		2010		2011		2012		2014		2015	
	\$USD	%	\$USD	%	\$USD	%	\$USD	%	\$USD	%	\$USD	%
Global Fund	19,023,377	35%	22,711,245	39%	19,989,582	38%	20,211,078	40%	25,202,527	51%	19,435,027	41%
Bilateral Agencies	15,565,137	29%	15,662,525	27%	15,293,344	29%	15,872,375	31%	12,376,155	25%	14,047,855	30%
Royal Government of Cambodia	1,703,403	3%	2,436,832	4%	5,300,118	10%	5,212,931	10%	6,438,230	13%	8,188,161	17%
United Nations Agencies	7,547,437	14%	8,382,652	14%	5,731,892	11%	4,320,352	8%	2,300,222	5%	2,357,121	5%
International NGOs	9,119,295	17%	7,516,331	13%	3,736,224	7%	2,855,882	6%	2,409,038	5%	2,274,751	5%
Other Multilateral Organizations (excl. GF & UN)	612,307	1%	1,043,168	2%	1,564,247	3%	1,396,650	3%	367,761	1%	200,998	0.4%
Private Domestic	36,955	0.1%	51,540	0.1%	963,952	1.8%	956,837	1.9%	24,723	0.1%	262,750	0.6%
Private International	127,286	0.2%	255,175	0.4%	254,654	0.5%	57,619	0.1%	3,149	0.0%	97,745	0.2%
Total	53,735,197	100%	58,059,468	100%	52,834,013	100%	50,883,724	100%	49,121,805	100%	46,864,409	100%

Figure 7 compares domestic and foreign contributions to the AIDS response in selected countries in Southeast Asia, using the most recent NASA exercises publicly available. Cambodia is at the median of lower middle-income country domestic contributions (18%). However, some lower middle-income countries such as the Indonesia and Philippines are contributing domestic resources for up to 57% of HIV/AIDS spending. Upper middle-income countries such as Malaysia finance nearly all AIDS spending from domestic sources.

Figure 7: Domestic and Foreign Sources of Funding for Countries in the Southeast Asia Region

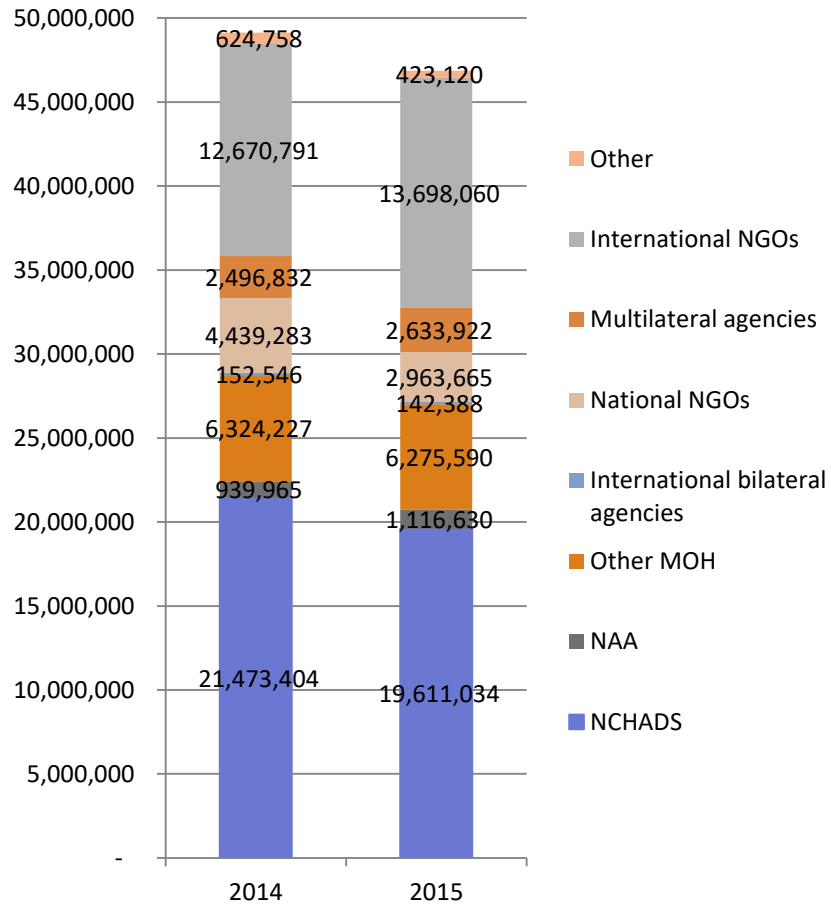


Source: www.aidsinfoonline.org and WHO and UNAIDS (2015) and Stuart et al (2015)

3.3 Which Entities Allocate AIDS Funding to Providers of Services? (Financing Agents)

The NASA framework also breaks down spending by the entities that manage AIDS funding (known as financing agents); that is, they collect funds from financing sources and allocate them to providers of services. The government continues to be the primary financing agent in Cambodia, managing more than 58% of AIDS spending in 2015 (Figure 8). The MOH's National Centre for HIV/AIDS, Dermatology and STDs (NCHADS) manages 42%; it is the Principle Recipient and is responsible for care and treatment of PLHIV in all HIV/AIDS centers in Cambodia. Other units of the MOH manage 13%, and the NAA 2%. Less than 1% of total spending is by other ministries. International entities (multilateral and bilateral agencies, and international NGOs) increased the share of spending they manage, from 31% in 2014 to 35% in 2015. National NGOs managed approximately 6% of total spending for AIDS in 2015.

Figure 8: Breakdown of 2014 and 2015 Spending by Financing Agent

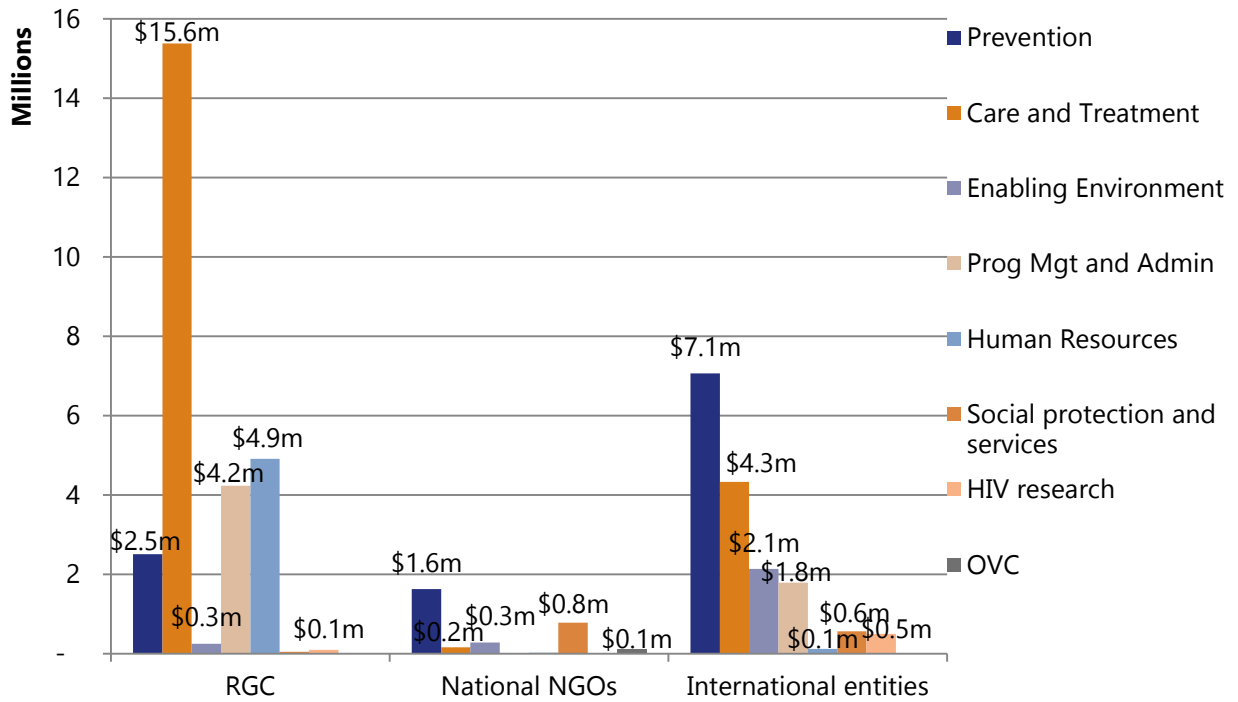


3.3.1 Spending by Agent and by AIDS Spending Category

Figure 9 shows which activities are managed by the RGC, national NGOs, and international entities (multilateral and bilateral agencies, and international NGOs) and the dollar amounts spent on them. The government of Cambodia manages primarily care and treatment activities, which represents 56% of the spending that it manages. This is followed by payment of staff incentives (18%) and program management activities (15%).

National NGOs manage primarily prevention activities (47% of their spending is for direct provision of prevention services and 8% for technical assistance for prevention services), followed by social protection and social services (26%) and enabling environment (10%). Forty-three percent of spending managed by international entities is for prevention activities: 39% for direct provision of prevention services and 3% for technical assistance for prevention services. Care and treatment services represent 26% of their spending: 22% for direct provision of care and treatment and 4.6% for technical assistance in care and treatment. Enabling environment activities represented 13% of spending managed by international entities.

Figure 9: 2015 Spending by Financing Agent and AIDS Spending Category

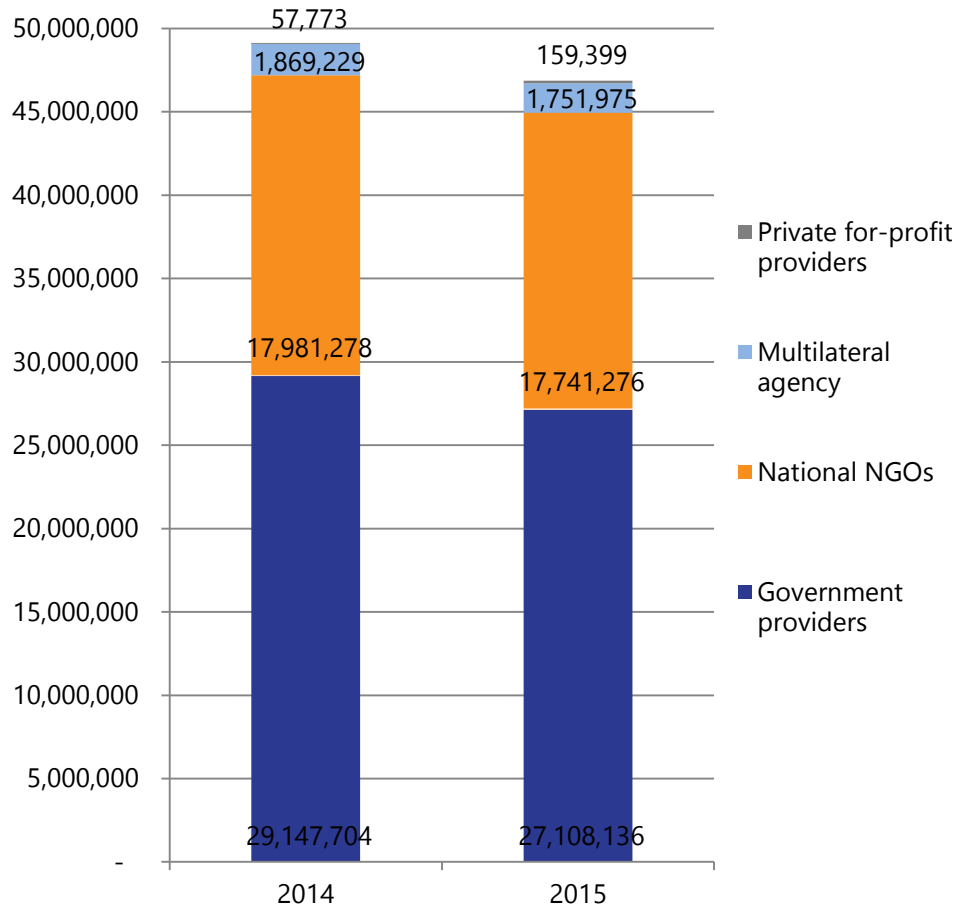


3.4 Which Entities Provide AIDS-related Goods and Services?

Figure 10 illustrates the breakdown of spending by the entity providing AIDS-related services in 2014 and 2015. Spending by government in its role as funding agent and as service provider are approximately the same (58% of spending in 2015). This indicates that the government uses the funds under its programmatic control to provide goods and services directly, instead of transferring funds to other providers. As such, the government is still the primary provider of goods and services for the AIDS response: it provides care and treatment services for PLHIV, including the provision of ARVs, treatment of opportunistic infections, and provider-initiated testing and counselling through government facilities.

Multilateral agencies managed 6% of spending in 2015 but represent 4% of spending as a service provider, suggesting that they use the majority of the funds that they control programmatically to provide services directly. This includes activities in collaboration with the MOH and the NAA at the national level that support policy development, monitoring of policy implementation, strengthening of the use of strategic information, and other health system strengthening work. Bilateral agencies do not appear prominently as a financing agent nor service provider, because most of their spending is managed through local and international implementing partners. International NGOs are a prominent financing agent (26% of spending in 2014 and 29% in 2015) but are not a significant service provider, suggesting that many international NGOs receive funding for AIDS but transfer the money to national NGOs, who are the direct service providers. National NGOs are the second largest provider of services, representing 38% of total spending in 2015. Cambodian NGOs are known to be very active in the AIDS response, providing prevention services to key populations and support to self-help groups, and tracking PLHIV among other activities.

Figure 10: Breakdown of 2014 and 2015 Spending by Service Provider



3.5 What Are the Inputs Used to Provide AIDS-related Goods and Services?

NASA V collected information on the inputs used in the provision of AIDS services in 2014 and 2015. This is the first time the Cambodia NASA has analyzed this breakdown. Table 3 shows the results of the analysis. The human resources category represented just under one third of spending (32%) in both years. This category represents three types of spending: (i) salaries and wages of government, donor and NGO staff working full time on HIV and AIDS activities (ii) incentive payments of staff (approximately 2,000 HIV/AIDS field coordinators, Community Service Volunteers, Community Service Officers, and others) who are involved with HIV/ AIDS activities on a direct and full-time basis (KHANA 2016), and (iii) a portion of the salaries of general health care workers, who spend a portion of their time treating HIV/AIDS cases (see Chapter 2 and Annex D for more details on unearmarked spending).

Total spending for ARVs was \$7.8 million in 2014 and \$7.7 million in 2015 (16% of total spending in both years). This reflects real consumption i.e. despite the fall in Global Fund contributions between 2014 and 2015, the large \$12.7 million ARV procurement in 2014 was allocated between 2014 and 2015 to reflect the years in which they were consumed. The ARV needs in 2015 were partially paid for by RGC, who started contributing to the purchase of ARVs in 2015. However, the government contribution will need to increase significantly in order to fill the shortfall that will be created by reduced Global Fund procurement.

Spending on reagents fell significantly, from \$2.1 million in 2014 to \$0.8 million in 2015. However, this may be partly due to the lack of disaggregated data in 2015 to classify reagents separately. Technical assistance spending increased from \$4.1 million in 2014 to \$4.5 million in 2015. Spending on other supplies and services, 16% of spending in 2014 and 18% in 2015, includes condoms, non-medical materials (food and nutrients, uniforms, IEC materials) and services (logistical services for events (e.g. workshop-related costs) and maintenance and repair services). It also includes supplies and materials that could not be disaggregated. Since this is the first time production factor data were collected, it is hoped that there will be sufficient disaggregated data on inputs to health services in future NASA rounds to allocate this spending to more specific categories.

Capital spending (i.e., investments such as equipment and building maintenance, whose benefits are consumed for more than the year) represents a small proportion of total spending (3% in 2015).

Table 3: Breakdown of 2014 and 2015 Spending by Input, %

	2014		2015	
Human resources - salaries and wages	10,873,213	22%	11,511,265	25%
Human resources - incentive payments	4,837,243	10%	3,497,841	7%
ARVs	7,839,181	16%	7,702,571	16%
Other pharmaceuticals	674,015	1%	2,630,860	6%
Reagents	2,133,299	4%	803,951	2%
Technical assistance	4,105,161	8%	4,452,982	10%
Transport services	3,259,651	7%	3,006,396	6%
Proc. and supply management costs	3,208,332	7%	266,232	1%
Other supplies and services and not disaggregated	7,918,836	16%	8,566,109	18%
Current expenditure not disaggregated	3,360,879	7%	3,105,942	7%
Capital	901,356	2%	1,320,259	3%
Production factor not disaggregated	10,639	0.02%	-	0%

TOTAL	49,121,805	100%	46,864,409	100%
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3.6 What HIV/ AIDS-related Goods and Services Are Purchased?

Figure 11 provides the 2015 breakdown of spending by the standard AIDS spending category of the NASA framework. Table 4 provides details of spending for 2011 and 2012 (NASA IV), and 2014 and 2015 (NASA V), with some AIDS Spending Categories combined. NASA V found Care and Treatment (ASC 02) to be the biggest category of spending (42% in 2015). The NASA framework considers as Care and Treatment certain categories of spending that combine several ASCs, for example, Continuum of Care services. Of note, the NASA guidelines assign treatment of sexually transmitted infections (STIs) to the Prevention category. The Antiretroviral Therapy (ART) category includes all costs associated with delivering ART services i.e. commodities (ARVs and other drugs) and human resource costs.

Prevention was the second largest spending category in 2015. Prevention spending remained at approximately US\$11 million or 24% of total spending in 2015.

It should be noted that assignment of spending to the Prevention and Care and Treatment categories was challenging, due to the nature of service delivery in Cambodia (as is the case in many countries). Delivery of services in these two categories has become more integrated, and so, in many cases, organizations were not able to disaggregate the spending. In such cases, the NASA team tried to identify the primary purpose of the activity, or the project, for which the expenditure was made in order to classify the spending to an ASC.

Program Management and Administration (ASC 04) fell from US\$8.8 million in 2014 to US\$6.0 million in 2015, or 13% of spending in 2015. For NASA V, this category was strictly defined as administrative spending that occurs outside of the health facility and that benefits the entire AIDS-related sector. Therefore, administrative spending by hospitals or NGOs that provide care and treatment, or prevention, services was classified to those respective AIDS Spending Category, and not ASC 04. The fall in spending for ASC 04 since 2011 is partly due to efficiency initiatives undertaken by the RGC and its technical and financial partners, as well as the stricter interpretation of this category for NASA V. This category is therefore not directly comparable with NASA IV. The ASC 04 category was used for spending for policy development, monitoring and evaluation of the overall AIDS sector, operations research, and strategic information development and use. Policy development, Planning and Coordination was the biggest component of this category – US\$3.4 million in 2014 and US \$3.8 million in 2015 (Table A-4 in Annex A). The large ARV procurement in 2014 resulted in higher spending in this category for procurement and logistics support – US\$3.3 million in 2014 vs. \$266,907 in 2015. Monitoring and Evaluation, including Strategic Information activities, increased from US\$901,200 in 2014 to

\$1.0 million in 2015 (from 10% to 17% of Program Management and Administration spending respectively). More details can be found in Table A-4 in Annex A.

The Human Resources category (ASC 05) refers specifically to incentives over and above salaries. Spending in this category was approximately US\$5 million in 2014 and 2015, or 11% of total spending. Over 85% of this spending category was for incentive payments funded by the Global Fund for staff working in HIV/AIDS. This demonstrates that financial incentives played an important role in retaining staff for prevention and service provision until 2015. This category also includes pre-service training, but excludes in-service “on-the-job” training, which is coded to the primary objective of that training.

Spending on enabling environment represented 6% of total spending in 2015 (\$2.7 million). Social protection services, such as income-generation activities and social services such as school materials and transportation services, fell from US\$2.7 million (4%) to US\$1.5 million (3%) over the same period. HIV-related research excluding operational research represented a small proportion of total spending (1% in both years).

Figure 11: 2015 Spending by AIDS Spending Category

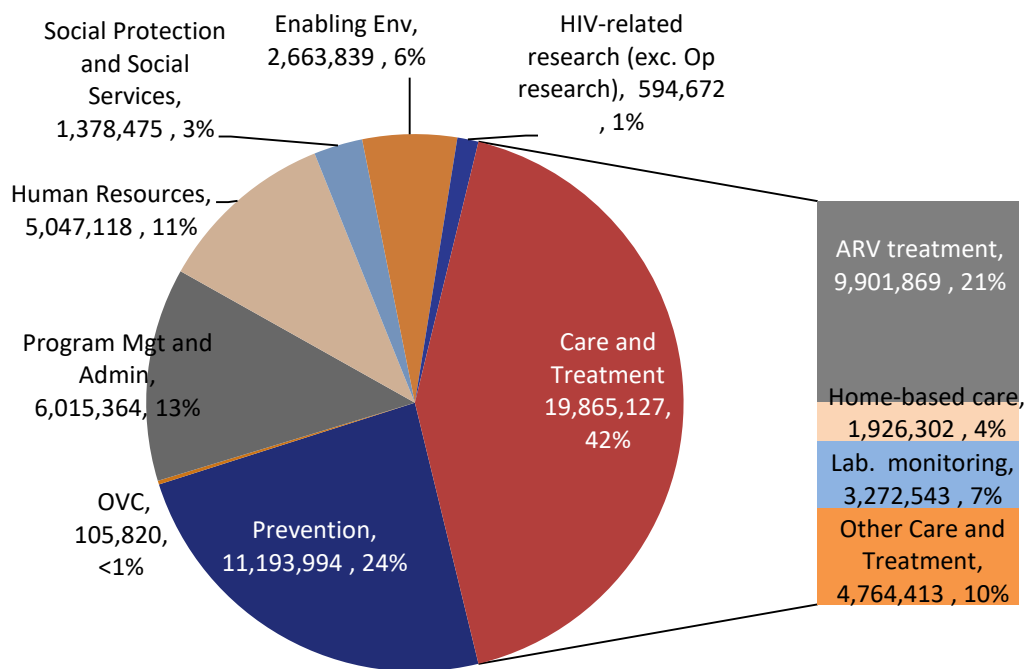


Table 4: Spending by AIDS Spending Category, 2011-12, 2014-2015

AIDS Spending Categories	2011		2012		2014		2015	
	\$USD	%	\$USD	%	\$USD	%	\$USD	%
Prevention	14,783,848	28%	14,608,119	29%	10,850,297	22%	11,193,994	24%
Care and Treatment	10,111,442	19%	11,046,316	22%	18,722,478	38%	19,865,127	42%
ART	5,097,777	10%	6,337,675	12%	9,652,498	20%	9,901,869	21%
<i>Home-based care, Nutritional and Psychosocial support, Patient Transportation, Palliative Care</i>	2,188,794	4%	2,018,648	4%	2,056,840	4%	2,457,247	5%
<i>OI Prophylaxis and Treatment</i>	1,183,576	2%	1,193,878	2%	-	0%	228,169	0%
ARV Laboratory Monitoring	673,393	1%	789,750	2%	2,973,573	6%	3,272,543	7%
<i>Outpatient and inpatient care - not broken down</i>	697,916	1%	443,169	1%	994,148	2%	431,007	1%
<i>Care and Treatment - not broken down</i>	269,985	1%	263,197	1%	3,045,418	6%	3,574,291	8%
Program Management and Administration and HIV Research	14,504,091	27%	14,556,205	29%	9,228,345	19%	6,610,036	14%
Human Resources (training and incentives)	4,207,039	8%	3,550,469	7%	5,495,629	11%	5,047,118	11%
Social protection and social services, including OVC	8,076,805	15%	6,144,732	12%	2,654,524	5%	1,484,295	3%
Enabling Environment	1,150,790	2%	977,878	2%	2,170,532	4%	2,663,839	6%
Total	52,834,015	100%	50,883,719	100%	49,121,805	100%	46,864,409	100%

3.6.1 Spending on Care and Treatment by Financing Source, Inputs and AIDS Spending Category

More than half of spending in the Care and Treatment category in 2015 (54%) came from the Global Fund (Figure 12). The second largest contributor to the category was PEPFAR (20%), followed by the RGC (18%). The RGC contributed to care and treatment services predominantly through (i) a proportion of government health worker salaries and supplies (see Annex D for more details on the methodology for calculating this), and (ii) from 2015, contributions to ARV and drugs for opportunistic infections. The high proportion of care and treatment funding coming from external sources (83%) demonstrates the reliance on foreign sources to provide services such as ART, treatment of opportunistic infections, nutritional support, psychological support, and home-based care.

Figure 12: Care and Treatment Spending by Source of Financing, 2015 (US\$ 19,865,127)

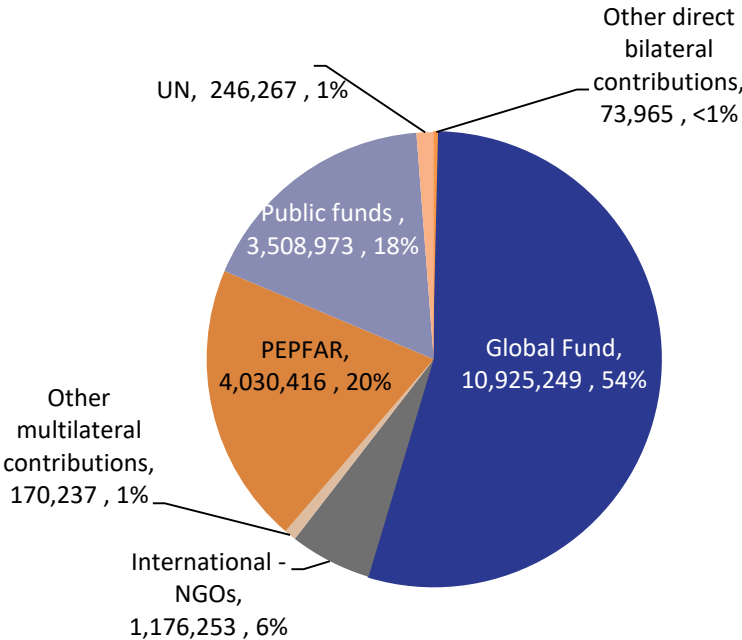


Figure 13 shows the breakdown of Care and Treatment spending by inputs in 2015. The largest input to care and treatment services was ARVs, representing 39% of total Care and Treatment spending. Salaries and wages for Human Resources was the second largest input, representing one fifth of Care and Treatment spending. Twelve percent of Care and Treatment spending was for other drugs and pharmaceuticals (excluding ARVs) and 6% for technical assistance. This disaggregation excludes incentive payments, which are categorized separately in the NASA classifications. Thirteen percent of Care and Treatment spending could not be disaggregated to a specific input.

Figure 13: Care and Treatment Spending by Inputs, 2015 (\$19,865,127)

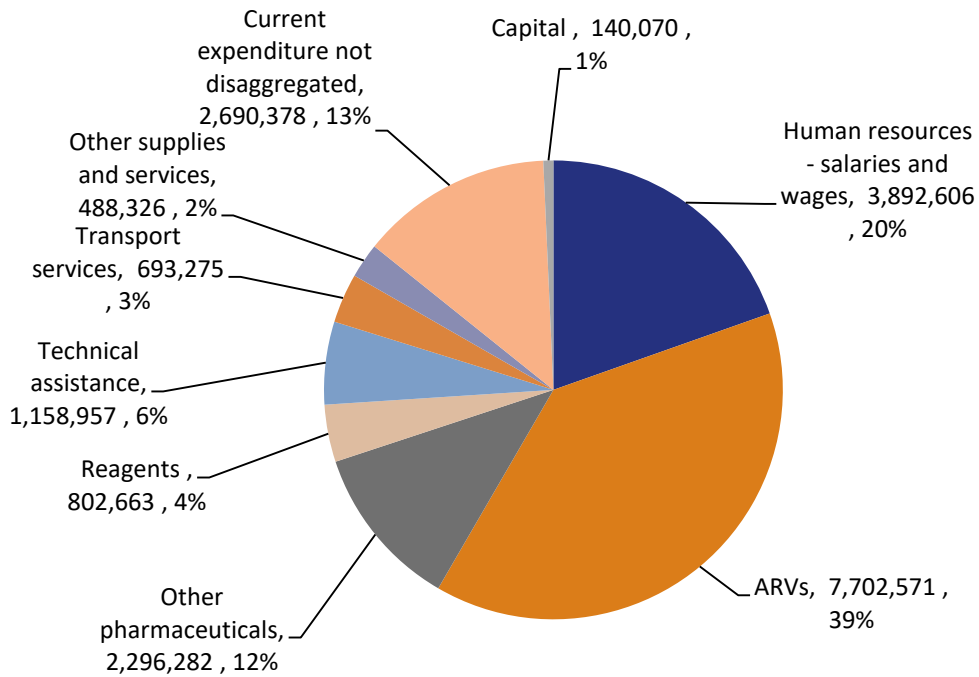
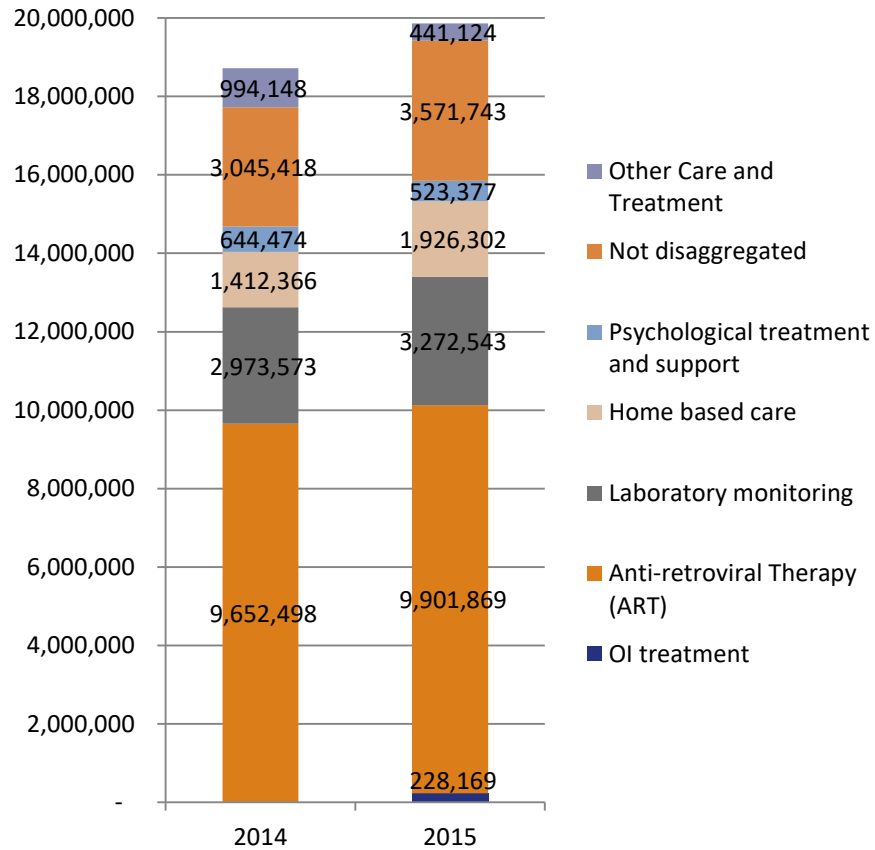


Figure 12 provides more detail on the types of Care and Treatment services paid for in 2014 and 2015. The majority of spending on Care and Treatment, 50% in 2015 is for ART. Laboratory monitoring consumed 16% of Care and Treatment spending in 2015, and home-based care consumed 10%. 3% of Care and Treatment spending is for psychological treatment and support. Just under one-fifth of spending (18%) in the Care and Treatment category could not be disaggregated to more detailed ASC codes.

Figure 14: Care and Treatment Spending, 2014 and 2015 (US\$19,865,127)



3.6.2 Spending on Prevention by Financing Source, Inputs and AIDS Spending Category

Figure 15 shows the breakdown of prevention spending by source of financing in 2015. Prevention funding is largely financed by bilateral agencies, especially PEPFAR (52%), and the Global Fund (21%). The U.N. contributes to 7% of prevention spending, and other international sources (e.g., NGOs) contribute 12%. As with the financing of care and treatment activities, external sources still dominate the financing of prevention activities in Cambodia (93% in 2015).

Figure 15: Prevention Spending by Source of Financing, 2015 (\$11,193,994)

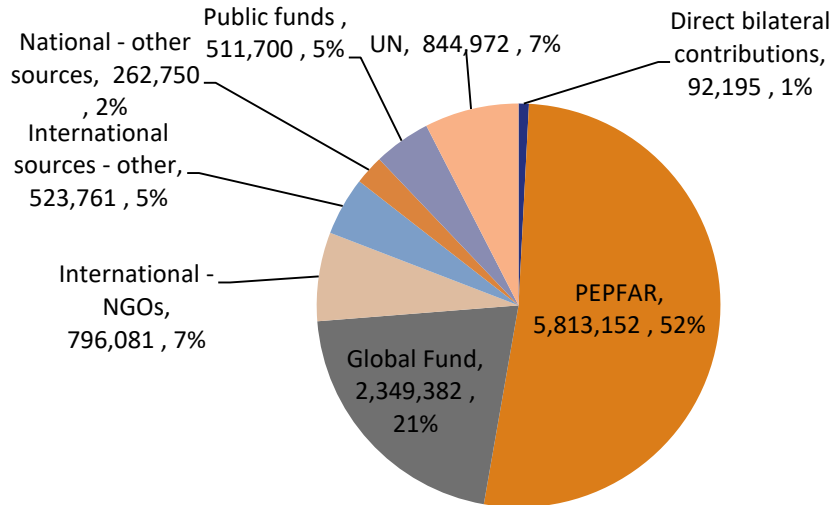
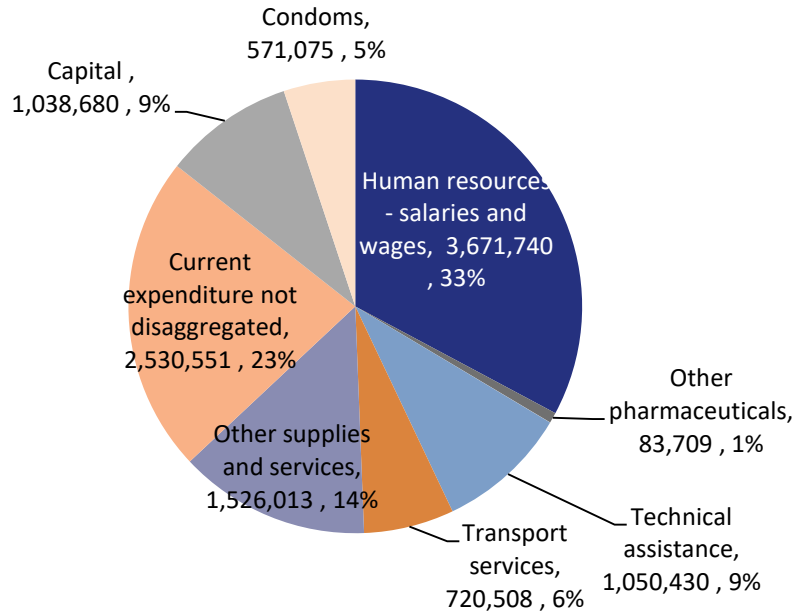


Figure 16 disaggregates prevention spending by the inputs used. The largest input used to provide prevention services is human resources, which represented one third of prevention spending. Nine percent of prevention spending was for technical assistance and 5% for condoms. Other supplies and services (including medical supplies, logistical costs, and other services) represented 14% of prevention spending. For the first round of calculating spending by inputs, approximately one quarter of prevention spending could not be disaggregated. This disaggregation excludes incentive payments.

Figure 16 Prevention Spending by Inputs, 2015 (\$11,193,994)



The largest prevention activities were prevention activities for sex workers (28%), Prevention of Mother-to-Child Transmission (PMTCT) activities (14%), prevention activities for MSM (12%), and voluntary counselling and testing (10%).

3.7 Which Population Groups Benefit from HIV Services?

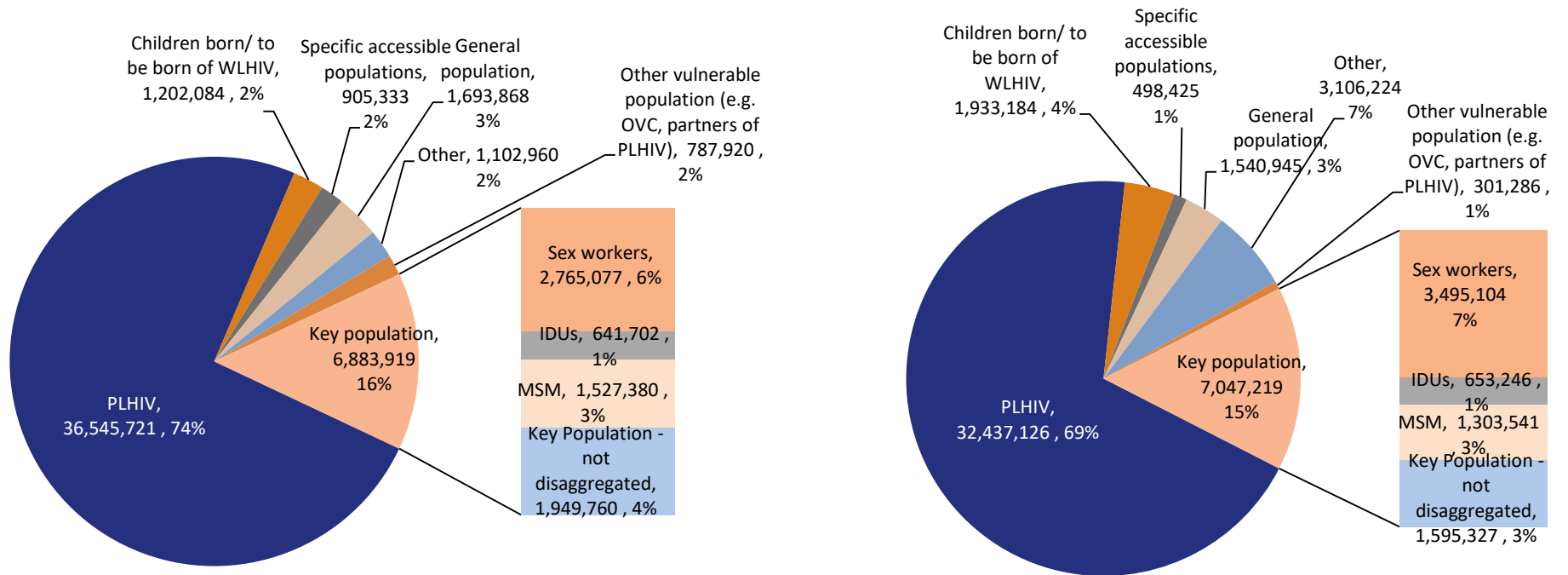
The NASA framework defines Beneficiary Population as the intended or targeted recipients of spending. The NASA team interpreted this to mean the “final” beneficiary. For example, the Beneficiary Population for training provided to health care workers for prevention of mother-to-child transmission (PMTCT) services were classified as children born/ to be born of women living with HIV (WLHIV), and not the health care workers who received the training.

The vast majority of AIDS spending is for PLHIV, with 69% of total spending targeted to this group in 2015 (Figure 17). This is largely driven by care and treatment spending, which is targeted almost solely (99%) to this group. Spending for key populations (PWID, MSM, sex workers) maintained its level of approximately US\$7 million in 2014 and 2015, or 15% of total spending. Spending for children born or to be born of women living with HIV increased by 61% in 2015 to US\$1.9 million, largely driven by spending on PMTCT activities. Specific accessible populations (including the police, military, and students) were the targeted beneficiaries of 1% of spending in 2015 and the general population 3%. This allocation of spending by beneficiary group reflects the targeted nature of Cambodia’s spending for AIDS to groups who are most at risk.

The NASA team agreed that Care and Treatment spending could be classified to PLHIV where disaggregated data were not available, because they are the most common beneficiary of these services. Just under seventy percent of prevention spending was for key populations including

16% for PLHIV and 52% for other key populations. Approximately equal proportions of prevention spending are spent on prevention activities for vulnerable populations and the general population (14% of prevention spending each).

Figure 17: Breakdown of 2014 and 2015 Spending by Beneficiary Population

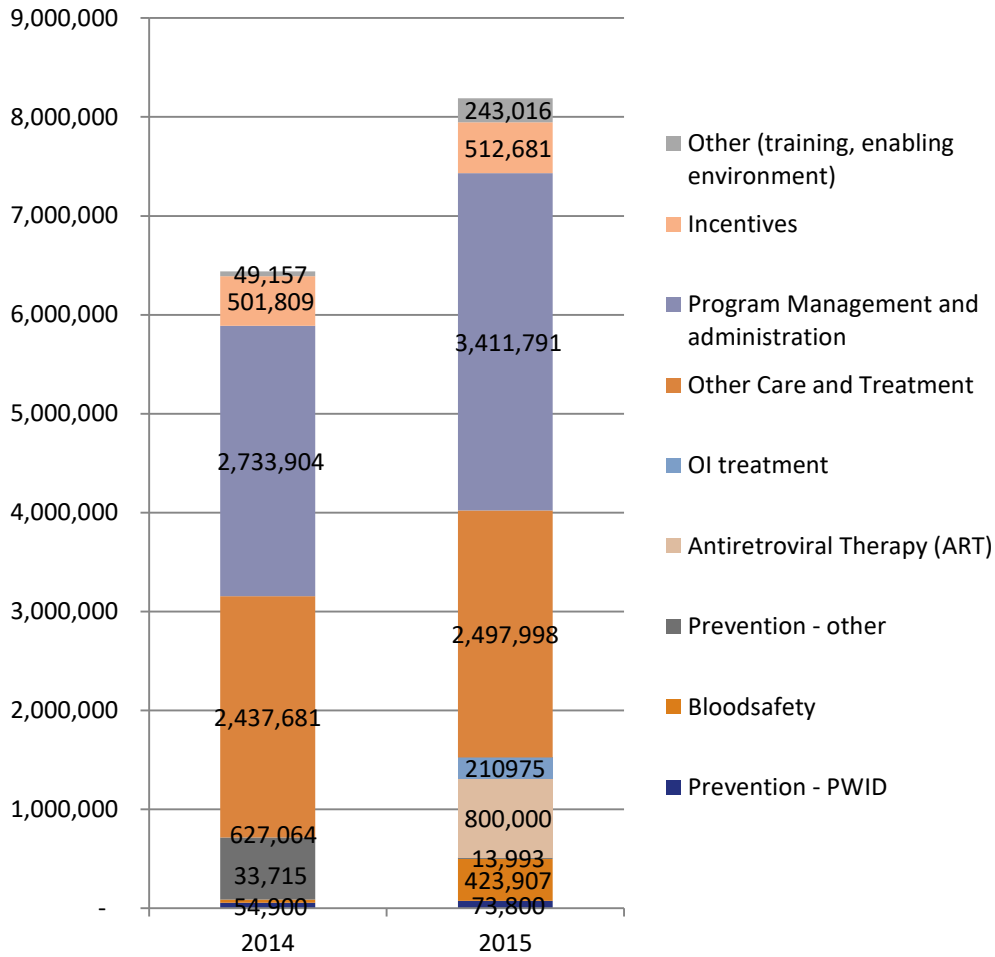


3.8 A Closer Look at Government Spending for the AIDS Response

Program Management and Administration was the second largest spending category, accounting for 42% of government funds in 2015. This category includes activities such as policy development, planning, stakeholder coordination, developing norms and standards, strategic information systems, and monitoring and evaluation. As steward of the national AIDS response, the RGC is clearly investing its resources in planning, coordination, and strengthening health systems to facilitate HIV/AIDS interventions.

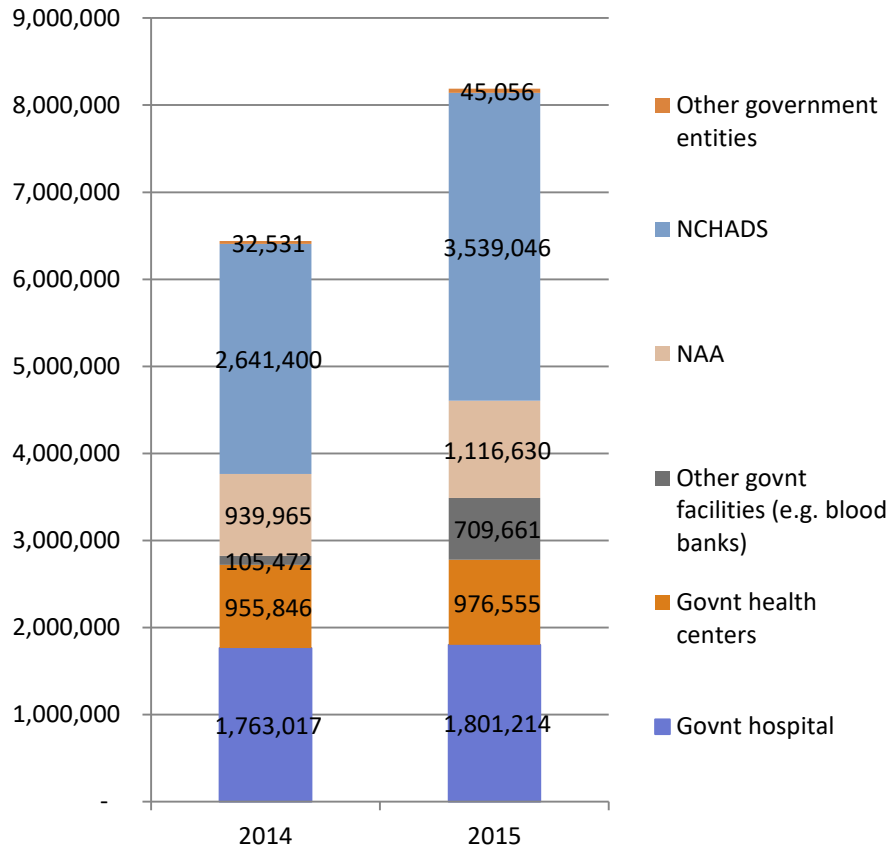
Figure 18 shows spending for RGC funds by AIDS Spending Category for 2014 (US\$ 6.4 million) and 2015 (US\$ 8.2 million), i.e. government as a financing source and not as a financing agent. Care and Treatment accounted for the largest proportion of spending (43% in 2015). This category includes the introduction of ARV procurement (10% of 2015 government funds), procurement of OI drugs, and a proportion of unearmarked health spending that can be attributed to HIV/AIDS. The latter, which was sourced from the Health Accounts, includes the government's contribution to general health spending (e.g., salary payments for non-specialized health care workers and general health supplies), a proportion of which can be attributed to HIV/AIDS. Program Management and Administration was the second largest spending category, accounting for 42% of government funds in 2015. This category includes activities such as policy development, planning, stakeholder coordination, developing norms and standards, strategic information systems, and monitoring and evaluation. As steward of the national AIDS response, the RGC is clearly investing its resources in planning, coordinating, and strengthening health systems to facilitate HIV/AIDS interventions.

Figure 18: Government Spending by AIDS Spending Category



As shown in Figure 19, the largest provider of services for government-sourced spending in 2015 is NCHADS (43% of government-sourced spending). The network of government HIV/AIDS clinics provide prevention, and care and treatment services. The staff for these clinics are affiliated with (and are paid for and report to) NCHADS, hence the high proportion of government spending allocated to NCHADS. The provider that received the next largest tranche of government funding in 2015 was government hospitals (22%), followed by health centers (12%). As previously explained, these spending sub-categories comprise staff salaries and general supplies at general government health facilities, a proportion of which is allocated to HIV and AIDS. In 2015, 14% of government spending was used for services provided by the NAA and 9% by other government facilities (such as mental health facilities and blood banks).

Figure 19: Government Spending by Service Provider



4. OBSERVATIONS AND POLICY IMPLICATIONS

4.1 Key Observations

4.1.1 Who Funds the HIV/AIDS Response in Cambodia?

- External financing sources continue to dominate spending for AIDS (83% of total spending in 2015), compared to domestic sources.
- The Global Fund's contribution fell by 22% from 2014 to 2015 (and is expected to continue to decrease). Still, it remains the biggest source of spending (41% in 2015).
- Bilateral contributions, 93% of which is from PEPFAR, are the second biggest source of funding (30% in 2015) followed by the RGC (17.5% in 2015).
- National funding for the HIV response is showing an upward trend since 2010, including an increase of 28% from 2014 to 2015 due to government contributions for ARVs and drugs for treatment of opportunistic infections.

4.1.2 Who Manages AIDS Funding to Allocate to Providers of Services?

- The RGC continues to manage over half of AIDS spending, which reflects the government's important role in deciding how AIDS funds are allocated to providers of services. The RGC oversaw \$28.7 million for HIV/AIDS goods and services in 2014, and \$27.0 million in 2015 (59% of spending in 2014 and 58% in 2015). This is encouraging and should continue to ensure continued provision of a comprehensive package of services and strong coordination of HIV/AIDS services in the country.
- International entities are the second largest category having programmatic control over funds for AIDS-related services (overseeing 35% of spending in 2015). This is driven by an increase in spending of \$1 million managed by international NGOs (from \$12.7 million in 2014 to \$13.7 million in 2015).
- The government as an agent predominantly manages spending for care and treatment (56% of the spending that they managed) whereas national NGOs and international entities predominantly manage prevention activities (55% and 43% of their respective spending), technical assistance included.

4.1.3 Which Entities Provide AIDS-related Goods and Services?

- Government is the main provider of AIDS-related services, receiving 58% of total funds. This represents spending by government facilities to provide care and treatment to PLHIV. It also represents policy development and other health system strengthening activities conducted by the MOH, the NAA, and other government entities.
- National NGOs are the second largest service provider, spending 38% of all AIDS funds in 2015. These organizations provide prevention services, community outreach, support to strengthen self-help groups, and tracking of PLHIV. They are a significant contributor to the national AIDS response.

4.1.4 What Are the Inputs Used to Provide AIDS Goods and Services?

- Labor spending remained constant, at approximately US\$15 million, in 2014 and 2015. As a proportion of total spending, this category represents 32%. Labor income represents spending for staff “earmarked” to provide HIV/AIDS services and full-time staff as well as general health staff who spend a proportion of their time providing HIV/AIDS services.
- Spending on ARVs was approximately \$7.8 million in 2014 and \$7.7 million in 2015, or 16% of total spending in both years. ARV consumption in 2015 was largely financed by the Global Fund’s ARV procurement in 2014 and RGC contributions in 2015. However, procurement of ARVs by the Global Fund in 2015 was significantly less (\$3.3 million in 2015 vs. \$12.7 million in 2014) – this fall is likely to be reflected in the NASA for 2016, if other contributions did not cover this shortfall.
- Capital spending, for equipment and building maintenance, represents a small percentage of spending (3% in 2015).

4.1.5 What HIV/ AIDS Goods and Services Are Paid For?

- Care and Treatment spending increased from US\$18.7 million in 2014 to US\$ 19.9 million in 2015 (38% to 42% of total spending respectively), reflecting the increased treatment coverage from 48,920 in 2014 to 51,088 in 2015. Care and Treatment remains the largest category of spending.
- Prevention spending (including technical assistance) was the second largest spending category: spending for this category was \$10,850,297 in 2014 and \$11,193,994 in 2015. This represents a decrease from approximately \$14.8 million in 2011, 2011 mainly due to unit cost rationalization although key population coverage also increased during this period. As a proportion of total spending, prevention activities fell from 28% in 2011 to 24% in 2015.
- Program management and administrative expenditures to strengthen the systems for HIV/AIDS service provision fell from US\$8.8 million in 2014 to US\$6.0 million in 2015, due to cost efficiency measures taken by the RGC and its technical and financial partners, and a

more specific re-classification of program management spending to its primary purpose. Incentives for staff working in the management and provision of HIV/AIDS services remains important in retaining staff, representing 11% of total spending in 2015.

- Spending on both care and treatment and prevention remains dependent upon external sources of financing (82% of care and treatment spending is from external funds and 93% of prevention spending in 2015).

4.1.6 Who Are the Population Groups that Benefit From HIV Services?

- The vast majority of AIDS spending (69% in 2015) is targeted to PLHIV, which decreased from 74% in 2014.
- Despite the decrease in total spending in 2015, spending for key populations (excluding PLHIV) was sustained at US\$7 million. This represents 15% of spending in 2015.
- Children born or to be born of WLHIV benefitted from a 61% increase in funding, or by \$730,000. This is largely due to increases in funding from PEPFAR and the Global Fund project which started in 2015 – “Health System Strengthening of Maternal and Child Health Care Programs”. Other specific accessible populations (e.g. military, police, students, police) and other vulnerable populations (e.g. OVC and partners of PLHIV) each represented 1% of total spending.

4.2 Policy Implications

4.2.1 Increasing domestic contributions to AIDS response is crucial as external support falls

Funding from bilateral, multilateral, and other international sources fell 10%, from US\$43 million to US\$38 million, between 2014 and 2015. Despite the significant (22%) fall in Global Fund contributions in 2015, it is important to note that when analyzing real consumption for the NASA, the decrease was less significant. It is likely that the full impact of the decrease in Global Fund resources has not yet been felt. Global Fund procurement for ARVs in 2015 (US\$3.3 million) was significantly less than in 2014 (US\$12.7 million), most of which was fully consumed in 2015. Without significant carry-over funds or ARV drugs from 2015, the full cost of ARV consumption from 2016 will need to be supported by domestic sources and decreased contributions from the Global Fund.

The level of external funding seen between 2009 and 2014, coupled with the government's good stewardship of the response, was instrumental in the gains seen in reducing the prevalence rate, increasing the number of people on ART, and preventing new infections among high-risk groups. With Cambodia's recent growth positioning it as a lower-middle income country, the external community will expect the government to increase its financing of the HIV/AIDS response. For instance, the Global Fund, which in 2015 funded nearly one half of the country's AIDS response, has a new funding model that ties funding to a country's disease burden and income status. Cambodia's reduced adult HIV infection and new income status will put it among countries that will transition out of Global Fund support in the near future. NASA V demonstrates that this transition process was somewhat "buffered" by ARV purchases in 2014, which carried over into 2015, but its impact will be more significantly felt in 2016.

Other partners are likely to follow the Global Fund's trend, which will require the government to increase its contribution if Cambodia is to reach its 90-90-90 targets. A fiscal space analysis will help to understand the ability of the government to maintain, if not contribute more, resources to AIDS. For example, economic growth in Cambodia has been strong in recent years, averaging 7.2% annually since 2010 (World Bank 2016). Alternatively, other domestic sources should be explored and tapped, such as employer-based programs and Corporate Social Responsibility programs.

The costing of the NSP IV (2015-2020) compared with spending from NASA V will help to demonstrate the financing shortfall. However, further analysis (such as AIDS epidemic modelling) is required to make the case for increased government funding for HIV/AIDS. Competing priorities for government resources is likely to increase, and the ability to contribute more funds to HIV/AIDS will depend partly on the strength of analysis used to demonstrate what has been achieved with current government contributions and the health impacts if funding for AIDS decreases.

4.2.2 Increase use of cost-effectiveness and cost-benefit analysis to help identify where scarcer resources should be allocated

The NASA V results demonstrate that Cambodia is allocating its resources strategically to interventions and beneficiaries that will have the most impact on the AIDS epidemic. In 2015, care and treatment accounted for 43% of total spending, reflecting the significant efforts made to provide services to nearly 68,499 PLHIV and ART to over 51,000 people (NCHADS 2016). Prevention spending represented 24% of total AIDS spending; 16% of this targeted PLHIV and 52% targeted other key populations. As resources become scarcer, the ability of Cambodia to continue to focus its resources will be an important factor in reaching its targets. NASAs to monitor spending, coupled with cost effectiveness analyses to see which interventions are the most cost-effective, should continue. Cost-benefit analysis will also help to understand whether the interventions being paid for are reaching the most needy beneficiaries. These types of analyses will help the NAA and MOH to demonstrate the impact that HIV/AIDS funding is having when negotiating for increased resources. They will also help decision makers to make informed decisions about how resources should be allocated to achieve maximum results.

4.2.3 Look more closely into government allocation of spending to ensure coordinated response.

In 2015, 13% of total AIDS spending in Cambodia was for program management and administration activities. This is in line with the Asia and Pacific region, where spending for this category was 18% (UNAIDS 2013). Spending in this category has fallen significantly, from US\$14.5 million in 2011 to US\$6.6 million in 2015, partly attributable to cost-saving initiatives to improve efficiency in program management and administration. Most of the spending in this category (57%) uses Royal Cambodian government's own resources. As the government's role in financing the AIDS response is expected to increase, the allocation of its resources warrants a closer look to ensure an appropriate mix between spending for management and coordination activities (that are necessary to coordinate the national response and strengthen the underlying health system) and service delivery. For example, increasing coordination between different agencies involved in the national response, streamlining financial and administrative functions, and integrating HIV/AIDS into general health services should be explored for their ability to free up scarce resources.

5. RECOMMENDATIONS FOR FUTURE NASA EXERCISES

5.1 Automate NASA Coding for Stakeholders with Large NASA Spending

The NASA V process benefitted from a very high response rates from government, donors, NGOs, and employers. Many of these stakeholders have been involved in several rounds of NASA and understood the data collection form well. Sometimes stakeholders were not able to disaggregate spending but nonetheless in most cases they were responsive and provided data relatively quickly. The most time-consuming task for the NASA team was in coding the spending data. For future exercises, it would save much time if the data for the largest sources of spending could be automatically coded within the data collection form. For example, PEPFAR data were quickly coded using the crosswalk between NASA categories and PEPFAR Expenditure Analysis categories. The same process for Global Fund data (i.e., using the crosswalk between NASA and the Enhanced Financial Reporting system) and for government (e.g., mapping government budget codes to NASA codes) would help to generate a large proportion of the data much more quickly in future NASA exercises.

5.2 Increase Coordination with Other Resource Tracking Exercises to Reduce Production Time and Ensure Consistency of Health Resource Tracking Data

The framework used to produce NASA is very similar to the SHA 2011 framework used to produce Health Accounts. There is overlap in the data collected, and many organizations are surveyed for each exercise. Going forward, coordination of the teams producing NASAs and Health Accounts would help to avoid survey fatigue by respondents and increase response rates and the quality of data received. Joint data analysis between these two teams would also help to build the technical capacity of a larger group of government staff in resource tracking methodologies. Increased coordination, in addition to greater automation of coding, highlighted above, would result in NASA analysis that is produced quicker and more regularly (ideally every year), so that it can be incorporated into annual planning and budgeting cycles.

ANNEX A: NASA IV (2011-12) AND NASA V RESULTS (2014-15)

Table A-1: Breakdown of Spending by Financing Agent

	2011		2012		2014		2015	
Public sector entities	25,945,485	49%	27,029,565	53%	28,737,595	59%	27,003,254	58%
National NGOs	5,786,377	11%	5,134,466	10%	4,439,283	9%	2,963,665	6%
Bilateral agencies	1,636,289	3%	1,763,109	3%	152,546	0.3%	142,388	0.3%
Multilateral agencies	6,040,515	11%	4,450,995	9%	2,496,832	5%	2,633,922	6%
International NGOs	13,425,347	25%	12,505,583	25%	12,670,791	26%	13,698,060	29%
Other agents not disaggregated	-	0%	-	0%	624,758	1%	423,120	1%
Total	52,834,013	100%	50,883,718	100%	49,121,805	100%	46,864,409	100%

Table A-2: Breakdown of Spending by Service Provider

	2011		2012		2014		2015	
Government providers	23,907,323	45%	25,654,872	50%	29,147,704	59%	27,108,136	58%
National NGOs	15,105,656	29%	13,139,903	26%	17,981,278	37%	17,741,276	38%
Private for-profit providers	-	0%	-	0%	57,773	0.1%	159,399	0.3%
Bilateral and multilateral agencies	2,592,732	5%	2,257,966	4%	1,935,050	4%	1,855,598	4%
Private international (inc. NGOs)	11,213,730	21%	9,830,977	19%	-	0%	-	0%
Other (NCAIDS - China, TSF-SEAP)	14,573	0.03%	-	0%	-	0%	-	0%
Total	52,834,014	100%	50,883,718	100%	49,121,805	100%	46,864,409	100%

Table A-3: Breakdown of Spending by Beneficiary Population

	2011		2012		2014		2015	
PLHIV	14,535,993	28%	14,767,712	29%	36,545,721	74%	32,437,126	69%
Children born/ to be born of WLHIV	3,406,777	6%	4,425,737	9%	1,202,084	2%	1,933,184	4%
Specific accessible populations (military, police, students)	922,398	2%	1,228,187	2%	905,333	2%	498,425	1%
General population	1,457,598	3%	1,561,725	3%	1,693,868	3%	1,540,945	3%
Other (non-targeted, not disaggregated)	16,054,865	30%	14,985,417	29%	1,102,960	2%	3,106,224	7%
Other vulnerable populations	653,416	1%	382,843	1%	255,291	1%	199,690	0.4%
Key Population (MSM, PWID, MSM)	11,125,383	21%	10,181,154	20%	6,883,919	14%	7,047,219	15%
OVC	4,677,584	9%	3,350,943	7%	532,629	1%	101,597	0.2%
Total	52,834,014	100%	50,883,718	100%	49,121,805	100%	46,864,409	100%

Table A-4: Breakdown of Program Management and Administration Spending

	2011		2012		2014		2015	
Policy development, Planning and Coordination	5,798,130	40%	5,178,810	36%	3,443,186	39%	3,805,744	63%
Administration and Grant Management	3,808,139	26%	3,241,130	22%	350,123	4%	238,175	4%
M&E, including Strategic Information	2,379,752	16%	3,767,103	26%	901,209	10%	1,006,387	17%
Infrastructure	1,597,250	11%	1,112,865	8%	596	0.01%	11,563	0.2%
Drug supply system	723,962	5%	825,000	6%	3,316,828	38%	266,907	4%
Information Technology	125,402	1%	266,407	2%	376,579	4%	301,618	5%
Program management and administration - not disaggregated	71,456	0.5%	144,889	1%	388,419	4%	384,971	6%

TOTAL	14,504,091	100%	14,536,204	100%	8,776,940	100%	6,015,364	100%
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ANNEX B: SPENDING BY OBJECTIVES OF THE 2011-15 NATIONAL STRATEGIC PLAN FOR MULTI-SECTORAL AND COMPREHENSIVE RESPONSE TO HIV AND AIDS

2014	RGC	Profit Making Institutions	Private Financing	Direct Bilateral Contributions	Multilateral Agencies	International Non-Profit Orgs.	International Profit-Making Orgs.	Other sources	TOTAL
Care and Treatment	2,437,681		14,723	4,044,101	15,649,519	1,380,629			23,526,653
Coordination, management and Administration	3,254,270			1,099,595	1,652,907	17,736		-	6,024,508
Impact Mitigation				583,813	12,646	182,153			778,613
Legal and Policy Enabling Environment	30,600			413,333	833,347	9,236		-	1,286,516
M &E, Research Surveillance				1,657,012	3,776,468	959			5,434,440
Prevention	715,679	10,000		4,561,572	4,312,672	592,092	1,945	1,204	10,195,164
Resource Mobilization				16,728	1,632,952	226,231			1,875,911
TOTAL	6,438,230	10,000	14,723	12,376,155	27,870,510	2,409,038	1,945	1,204	49,121,805



2015	Government	Non-profit making institutions	Direct Bilateral Contributions	Multilateral Agencies	International Non-Profit Orgs.	International Profit-Making Orgs.	Other sources	TOTAL
Care and Treatment	3,508,973		5,236,233	15,089,220	1,445,159			25,279,585
Coordination, management and Administration	4,136,426		1,018,068	1,027,094	14,750		8,332	6,204,670
Impact Mitigation			223,964	26,482	138,355			388,801
Legal and Policy Enabling Environment	31,063		1,335,686	517,977	7,820		1,626	1,894,171
M &E, Research Surveillance			1,440,499	824,453	675			2,265,627
Prevention	511,700	262,750	4,773,495	3,573,153	527,174	86,945	843	9,736,061
Resource Mobilization			19,910	934,767	140,817			1,095,494
TOTAL	8,188,161	262,750	14,047,855	21,993,146	2,274,751	86,945	10,800	46,864,409



ANNEX C: ORGANIZATIONS CONTACTED FOR DATA COLLECTION

Financing Source	
Bilateral	Government of Australia, Government Of Belgium, Government of the United States, Government of Japan, Government of Sweden
Global Fund	Global Fund R7, Global Fund R9, Global Fund R10, Global Fund R11, Global Fund R12, Global Fund R13, Global Fund R14, Global Fund R15, Global Fund R16, New Funding Model, Single Stream of Funding
Multilateral (Excluding Global Fund)	European Commission
Private	Garment Manufacturers Association in Cambodia
Public	Royal Government of Cambodia
United Nations	UNAIDS Secretariat, United Nations Children Fund (UNICEF), United Nations Development Program (UNDP), United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Office on Drugs and Crime (UNODC), United Nations Population Fund (UNFPA), International Labor Organization (ILO), World Health Organization
Private International	Deutsche Bank , Cartier Foundation
International NGO	AIDS Healthcare Foundation (AHF), Care International, Catholic Relief Services, Plan International, Clinton Foundation, International Red Cross, International Planned Parenthood Federation, Family Health International, Asia Pacific Business Coalition on AIDS, OneWorld UK, DAN Church AID, Swedish Association for Sexuality Education

Financing Agents	
Bilateral	Government of Australia, Government of Germany, Government of the United States
National NGOs	Cambodian Red Cross, Buddhists for Development, CBCA, Cambodian Women for Peace and Development, CPN+, HACC, KHANA, KHEMARA, KORSANG, Men's Health Cambodia, Men's Health Social Services, Mith Samlanh, Save Incapacity Teenagers, Buddhism for Social Development Action, Caritas, Cambodian Children Against Starvation and Violence, MODE
Public	Ministry of Education, Ministry of Labor, Ministry of Health, National AIDS Authority, National Center for HIV/AIDS, Dermatology and STD (NCHADS), Population Services Khmer, Reproductive Health Association of Cambodia
United Nations	International Labor Organization (ILO), UNAIDS Secretariat, United Nations Children's Fund (UNICEF), United Nations Development Program (UNDP), United Nations Office of Drugs and Crime (UNODC), United Nations Population Fund (UNFPA), World Health Organization
International NGOs	Catholic Relief Services, Plan International, International Planned Parenthood Federation

Service Providers	
Bilateral	Government of the United States, Government of Germany
Private National	Cambodia Business Coalition on AIDS, Action for Health Development, ART Users Association, Buddhists for Development, BWAP, Cambodia-ASEAN International Institute, Cambodia Health Committee, Cambodia People Living with HIV/AIDS, Cambodian Women for Peace and Development, Coordination of Action Research on AIDS and Mobility Cambodia, CHETRIG, CLA, CPR, Cooperation for Social Services and Development, HIV/AIDS Coordinating Committee, Khmer Buddhist Association, Khmer HIV/AIDS NGO Alliance (KHANA), KORSANG, KWA, Mission of Generous Cambodia Alliance, NAPA, NAS, OCC, Poor Family Development, PSOD, SABC, SEADO WOMEN
Public	National AIDS Authority, Ministry of Health, Ministry of Education, Youth and Sport, Ministry of Women's Affairs, CRC, Government Hospitals, Government health clinics, ART/OR sites, ANC clinics, National Center for HIV, Dermatology, and STD (NCHADS), Institute for Public Health, SoMAC/MOLVT, TCC/MoLVT, Government Mental Health & Substance Abuse Facilities, Labs and imaging facilities, Government Blood Banks
United Nations	International Labor Organization (ILO), United Nations AIDS Secretariat, United Nations Children's Fund (UNICEF), UNDP, UNODC, WHO, UNWomen
Public International	International Development Association

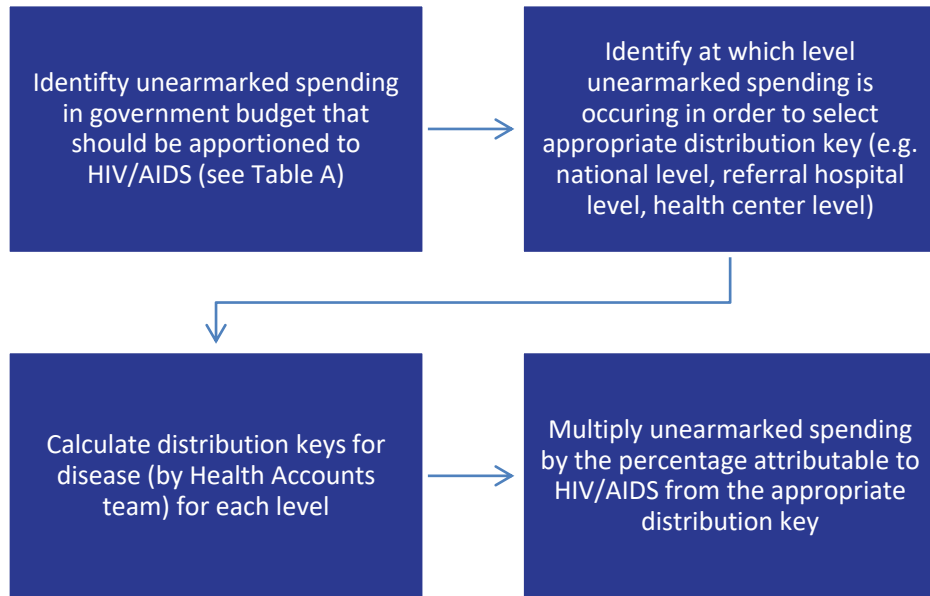
ANNEX D: APPORTIONING UNEARMARKED SPENDING TO HIV/AIDS

As highlighted in Section 2 Methodology and Process, there are two types of spending that are attributable to HIV/AIDS. The first is known as *earmarked spending*, that is, spending directly attributable to HIV/AIDS, for example, spending for ARV treatment, test kits, and incentives for field volunteers working on HIV/AIDS activities full-time. The second type is *unearmarked spending*, payments made for general health, but for which we know a proportion can be allocated to HIV/AIDS. For example, health care workers in government facilities may treat the STIs of a PLHIV; spending to do this is allocable to HIV/AIDS spending but it may be difficult to track during NASA data collection because it is not directly earmarked to HIV/AIDS. Similarly, government spending on general operating costs for facilities is also used to treat these STIs, but again it is difficult to track this to HIV/AIDS during data collection. It is important to allocate a proportion of these types of unearmarked spending to HIV/AIDS in order to correctly measure the contribution of the government to the national AIDS response.

Health Accounts uses a standardized methodology to distribute unearmarked spending across different diseases or health areas, including HIV/AIDS. The NASA team used the analysis conducted by the Health Accounts team to calculate the proportion of unearmarked spending that should be allocated to HIV/AIDS. For the health worker example above, the Health Accounts team developed a distribution key to disaggregate the unearmarked spending using utilization that is weighted by average unit costs of providing the health services at the facility. These keys, or ratios, were applied to the unearmarked personnel and general operating costs at the facilities.

Figure A-1 outlines the process for calculating the amount of unearmarked spending that should be incorporated into the NASA figures.

Figure A-1: Process for Apportioning Unearmarked Spending to HIV/AIDS



The NASA team agreed that using a standardized methodology that is consistent with other resource tracking exercises such as the Health Accounts should be used to apportion unearmarked spending to HIV/AIDS. It is hoped that the accuracy of the distribution key data will improve over time. However, the methodology used represents a methodical process that can be easily updated in future NASA exercises. The NASA V team spoke with the NASA IV team to understand the methodology used to apportion unearmarked spending in the previous exercise. The NASA IV team also agreed that the methodology used in NASA V is more systematic and would be preferable to use going forward. Table A-1 outlines the final amounts of unearmarked spending that was allocated to HIV/AIDS and that are included in the NASA. 11% of total spending in 2014 and 2015 were apportioned using the methodology outlined above.

Table A-5: Unearmarked Spending and Amounts Allocated to HIV/AIDS

Government Spending Line	2014 Amount Allocated to HIV/AIDS (US\$)	2015 Amount Allocated to HIV/AIDS (US\$)
Central government health administration agencies (excluding NCHADS and NAA), Operational District Office, and Provincial Health Department Office	2,450,766	2,503,863
National hospitals	36,392	37,180
Referral hospitals	1,726,625	1,764,033
Health centers	955,846	976,555
TOTAL	5,169,629	5,281,631

ANNEX E: KEY ASSUMPTIONS

The NASA is organized into three dimensions; financing, provision, and consumption. The NASA Classifications and Definitions (UNAIDS 2009b) provide standard descriptions of each of these NASA dimensions and sub-categories; in some instances, the NASA V team had to make some adjustments and assumptions in the absence of disaggregated data. Further details of these are provided below.

AIDS Spending Categories

The Integrated Care and Prevention project funded by the Global Fund was disaggregated by inputs but not by activity. After discussion, the NASA team agreed to use the service provider as a proxy for determining the ASC. If a project was implemented by an NGO that does not provide clinical services (such as the Integrated Care and Prevention project), the spending was classified as Prevention. For other projects that provided integrated care and prevention activities, the same principle was used. That is, if the service provider was an NGO that does not provide clinical services, the spending was coded as Prevention. The NASA team followed up several times with NGOs for more data. The approach highlighted here was used where further disaggregated data were not given by the data provider.

Spending for resource mobilization and strategic information activities were coded as Planning, Coordination and Program Management (ASC 04.01). It was agreed that these activities have the primary purpose of facilitating the overall planning and management of the national AIDS response.

Beneficiary Population

The Beneficiary Population is the population that is the targeted recipient of spending. If there is no intended recipient population, the expenditure was considered a Non-targeted Intervention (ASC 06). The NASA V team made specific decisions in line with NASA IV as seen below:

People Who Inject Drugs (PWID) vs. People Who Use Drugs (PWUD). Similar to NASA IV, the Beneficiary Population for PWID was coded as Injecting Drug Users (IDU) and Their Sexual Partners (BP.02.01). PWUD was classified as Other Key Populations (not broken down by type).

Male Sex Workers: Given the Cambodian context of male sex workers, the NASA V team coded this population under Men Who have Sex with Men.

Transgender: The decision was made that transgender would be coded as Male Transvestite Sex Workers and Their Clients based on the Cambodian context of male sex workers.

Condom Social Marketing: Dependent on the beneficiary of the intervention, the decision was taken to categorize either as Most At Risk Population Not Broken Down by Type if the

expenditure was for a key population, or General Population if the beneficiary was not further disaggregated.

Prevention and Treatment of STIs: For spending for Prevention, Diagnosis and Treatment of Sexually Transmitted Infections (STI), the NASA V team decided to use the beneficiary group Most At Risk Population Not Broken Down by Type rather than People Attending STI Clinics as the assumption is made that most STI treatments are for key populations and their clients and partners.

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