CASE STUDY | 2013

Efficient and Sustainable HIV Responses:

Case studies on country progress

UNAIDS

UNAIDS/JC2450 (English original, January 2013)
ISBN 978-92-9253-007-5

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Efficient and sustainable HIV responses: Case studies on country progress

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INTRODUCTION

As the world economic landscape changes, so too does the HIV funding landscape. Donor funding has stagnated (1), and the limited resources available require more emphasis on value for money: funds spent for the greatest impact and in the most efficient way. At the same time, countries have made significant progress in increasing domestic funding and exploring options to diversify funding sources. In 2011, domestic spending for HIV became larger than all donor assistance combined. As of 2011, 56 of 99 middle income countries are funding more than half their HIV response (1).

The increased political commitment towards country ownership, efficiency and sustainable financing is reflected in the 2012 adoption by African leaders of the *African Union Roadmap for Shared Responsibility for AIDS, TB and Malaria (2), and globally, by the United Nations 2011 Political Declaration on HIV and AIDS: Intensifying Our Efforts to Eliminate HIV and AIDS* (3). However, country experiences are rarely shared, even though countries have interesting stories to tell. Some of these are small-scale or pilot in nature but in other cases the approaches are large-scale.

This case study report consists of eight case studies written by country experts. It highlights countries' progress in making their HIV response more efficient or increasing domestic HIV funding, contributing to sustainability, increased scale-up and country ownership. Case studies were produced to inform the 2012 UNAIDS report, *Together We Will End AIDS* (1). This report consists of the unpublished versions of those case studies and is structured around two main themes. The first examines efficiency gains: countries that have re-allocated resources towards interventions that are cost-effective ("allocative efficiency") and countries that have made their HIV programmes more efficient ("technical efficiency"). The second theme highlights countries that have increased domestic resources for the HIV response ("sustainable financing").

- Cambodia and Myanmar have re-allocated resources towards high-impact interventions in their country-specific contexts, using cost effectiveness analyses, resource tracking, epidemiological studies and impact modeling of targeted interventions on the HIV epidemic to inform priority setting.
- South Africa and Swaziland have saved millions of dollars by improving their antiretroviral drug tendering processes.
- Kenya, Namibia, Malawi and Kazakhstan have taken active steps for a future with fewer external funds by developing options to increase and sustain funding for the HIV response.

Each country has learned lessons and evolved strategies that other countries may apply to their particular context. The ultimate aim of this report is to catalyse country-driven action to make efficiency and sustainably funded HIV services the reality in the HIV response.

1. RE-ALLOCATING HIV RESOURCES FOR GREATER IMPACT

Cambodia: *Changing mindsets*

Summary: Overcoming stakeholder resistance to change is a major challenge. In Cambodia, stakeholders were reluctant to agree on a highly focused HIV response. But, after the cost effectiveness of different interventions was assessed, stakeholders, taking into account the limited resources available, agreed to prioritize interventions. Total costs of the revised National Strategic Plan (NSP) III decreased, whereas its strategic focus on key populations improved. The national prioritization exercise also resulted in a reduced and more realistic cost estimate of prevention interventions for key populations.

Cambodia has had notable success managing what was initially a generalized epidemic peaking at 1.3% [0.9-1.8] prevalence in people aged 15-49 years in 1998 to an epidemic now concentrated in key populations (4). While HIV prevalence stands at 0.6% [0.5-0.9] in the general population, it is 24.4% among people who inject drugs (5) and 13.9% among high risk[1] entertainment workers (6).

Total HIV spending in Cambodia was US$ 58.1 million in 2010 (7). Since 2006, 96% of total HIV spending in Cambodia has come from external sources. The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) currently pays for all treatment services and constitutes the largest source of financing. Bilateral and multilateral donors also play a significant role, e.g. in funding HIV prevention interventions. Increasing the level of domestic resources dedicated to the HIV response is critical, especially as the GFATM now requires countries to demonstrate cost-share in grants.

Prioritization of HIV services

In 2010, Cambodia's National AIDS Authority (NAA) invited government institutions, civil society organizations, development partners and the private sector to participate in reformulating the NSP III. The aim was to prioritize services and focus strategically on key targets but many stakeholders were not prepared to abandon the all-inclusive approach of previous strategic plans. The resulting plan was very broad and costly with a projected five-year cost of US$ 516.3 million, almost double the spending of US$ 263.3 million over the previous 5 years and with a projected resource gap of US$ 244.3 million. (8)

In September 2011, given the stagnation in international HIV funding, the cost-sharing and performance based approach required by the GFATM and the projected resource gap, it was agreed to revisit the NSP III using a national prioritization exercise involving line ministries, civil society partners, NGO service providers, community networks and development partners. This work was informed by Cambodia's June 2011 National Ownership

1 Defined as entertainment workers with more than 14 clients per week. Because of the 2008 ban on brothels, the HIV Sentinel Surveillance (HSS) can only survey "entertainment workers" and tries to identify those at high risk through their reported number of sexual partners per week. The group with an average of more than 14 clients per week is believed to most closely match the group that previously worked in brothels, called "direct sex workers".

Consultation which used, among other resources, the recommendations of Cambodia's 2031aids Study and the 2010 Functional Task Analysis of the national response (9) (10). The studies recommended focusing Cambodia's response on interventions proven to be cost effective; to improve programme efficiency; to better manage external aid flows; and to increase domestic funding for HIV. After reviewing these findings, participants agreed that the NSP III was too costly, and not sufficiently focused. It was agreed that the Cambodian government and development partners would develop a fiscal management plan for better tailoring the HIV response to the concentrated epidemic, to analyse the cost-effectiveness of current interventions, and to refocus the NSP III to reflect resource needs more accurately.

The first steps in the prioritization exercise were a review of progress against Cambodia's 2010 Universal Access (UA) targets followed by the selection of a new set of UA indicators. Targets for 2013 and 2015 were set to meet commitments under the United Nations 2011 Political Declaration on HIV and AIDS (3). Following this, in November 2011 a triangulation exercise using data from a wide range of sources to model scenarios assessing the epidemiological impact of different mixes of prevention and impact mitigation interventions over the period 2010 to 2020, was held. It was found that the highest reductions in new infections would be achieved by focusing interventions on key populations and pregnant women, while maintaining the current coverage levels of existing general population interventions. (11)

The modelling exercise was then used to inform a cost-effectiveness analysis. Different mixes of prevention interventions were assessed for their cost-effectiveness and discussed by technical working groups including government, NGOs, civil society and donor representatives.

Coverage, costs, HIV infections averted and cost-saving threshold (2012-2017)

Prevention Interventions	Coverage Increase	Cost Increase in US$	HIV Infection Averted (HIVA)	Cost-Saving Threshold
Entertainment Workers (EW)	1,314	547,482	75-150	102 HIVA
MSM & TG*	6,540	4,161,541	25-50	774 HIVA
People who inject drugs**	950	976,793	75-100	182 HIVA

* MSM: Men who have sex with men, TG: Transgender people

** a mix of needle syringe programmes (67%) and methadone maintenance treatment (33%)

Notes: Coverage targets increased from 27,750 EWs in 2012 to 29,064 in 2017, MSM & TG: from 7,500 in 2012 to 14,040 in 2017, People who inject drugs: 570 in 2012 to 1520 in 2017. The cost estimates for scale-up: EWs: from US$ 33,000 in 2012 to US$ 157,481 in 2017; MSM & TG: from US$ 184,600 to US$ 946,288 in 2017; The costs for people who inject drugs were calculated on a mix of Needle Syringe Programme (NSP, 67%) and Methadone Maintenance Treatment (MMT) interventions (33%), unit cost estimates for NSP interventions: US$ 205 per user per year, MMT: US$ 735 for 2012-13 and US$ 393 for 2015-17.

Source: National AIDS Authority (NAA). *Costs and cost-effectiveness of HIV prevention and impact mitigation strategies in Cambodia*. Kingdom of Cambodia, 2012.

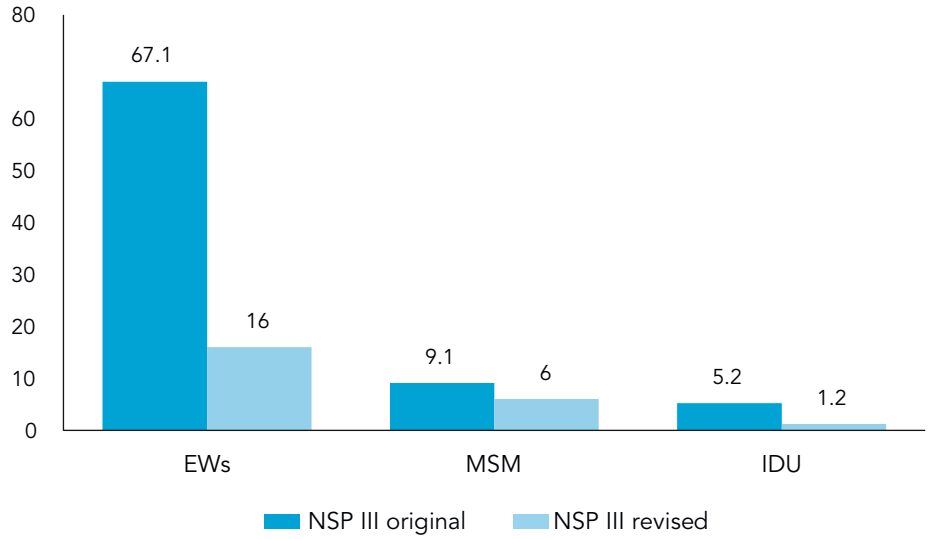
Prevention interventions for entertainment workers (EWs),[2] including HIV education, condoms and referral to HIV testing and Sexually Transmitted Infections services were found to be the most cost-effective, followed by interventions targeting people who use drugs and men who have sex with men or transgender people. (8)

The analysis found that the allocative efficiency will be substantially improved by scaling up coverage of prevention interventions for EWs from 80% to 85% by 2017. These interventions are expected to avert 75-150 new infections in the next five years and will become cost-saving when they avert 102 new HIV infections. Interventions targeting MSM and people who inject drugs are less cost-effective than for EWs, but discussions to identify the best mix of interventions for these key populations in Cambodia are ongoing.

Revised cost estimates

The prioritization exercise and cost effectiveness analysis led to a reduction in the costing of the revised NSP III (see Figure below). The cost estimates for prevention interventions decreased from US$ 81.4 million in the original NSP III to US$ 23.2 million in the revised NSP III for the period 2012-2015. The differences that led to this reduction were revised population estimates, a revision of coverage targets to focus more strategically on key populations; and a different approach to estimating unit costs.

Differences in costing estimates of prevention interventions in the original and revised NSP III, 2012-15 (in millions of USD)



Sources: National AIDS Authority (NAA). The National Strategic Plan for Comprehensive and Multi-sectoral Response to HIV/AIDS III (2011-2015). Kingdom of Cambodia, 2010; costing data on NSP III.

2 A broader term that includes sex workers. The group with an average of more than 14 clients per week is believed to most closely match the group that previously worked in brothels, called "direct sex workers".

Lessons Learned

The prioritization exercise led to stakeholder acceptance of cost-effectiveness analysis as an effective tool for achieving better value for money. Wide dissemination and discussion of evidence among all relevant stakeholders was crucial for the approval of a more focused and less costly strategic plan. Commitment from government and stakeholders to continue conducting costing studies and using HIV spending data on a regular basis has been crucial. The results of the cost-effectiveness analyses will guide the development of Cambodia's first Financial Management Plan for the HIV response.

A revision of programme interventions and unit costs of treatment and care is now planned to quantify resource needs and gaps. Recently, the Royal Government of Cambodia declared its commitment to expanding domestic financing of the national HIV response in order to fill the resource gap.

Myanmar: *Targeting resources*

Summary: Recognizing that a detailed, agreed national planning framework based on good epidemiological, resource and capacity data was needed, Myanmar embarked on a review of their first National Strategic Plan (NSP) 2006-2010, which led to a highly targeted NSP II, covering 2011 to 2015. In the new NSP II, over 80% of funding for prevention interventions is now allocated to programmes targeting sex workers, men who have sex with men and people who inject drugs.

Myanmar has an epidemic concentrated in specific populations. According to HIV sentinel surveillance data the HIV prevalence in 2011 was 9.4% among female sex workers, 7.8% among men who have sex with men and 21.9% among people who inject drugs (12).

Reviewing progress and priorities

In 2010, Myanmar embarked on a review of their first National Strategic Plan (NSP I 2006-2010) and used this to develop their NSP II, covering 2011 to 2015. The review found that:

- Gains in preventing HIV transmission among sex workers needed to be sustained and strengthened,
- Prevention programmes addressing men who have sex with men and people who inject drugs needed more investment,
- Prevention interventions for other groups should only target those at highest risk.

The Technical and Strategy Group on AIDS (TSG), a body made up of representatives from government, civil society and people living with HIV led the review of the NSP I and approved the findings. The TSG had specific technical working groups, for instance the Strategic Information and M&E Working Group used the most recent epidemiological data to model the impact of targeted prevention on the number of new infections using the Asian Epidemiological Model. It was crucial that findings and recommendations were shared with all stakeholders from the beginning and were used to inform the decision-making process.

This review led to the development of clear guidelines for resource allocation for targeted prevention interventions. An annual monitoring system assessing both service coverage and expenditure for each priority group has further refined resource allocation.

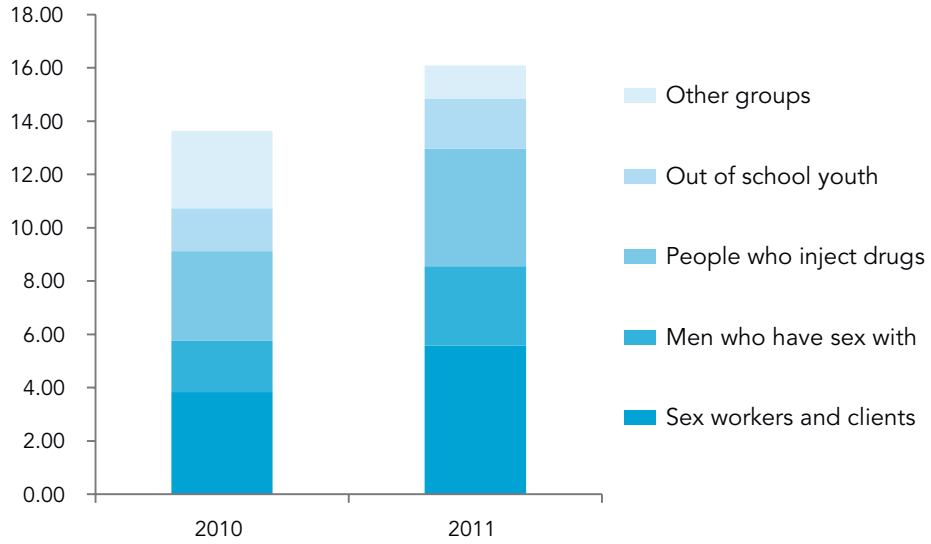
Persuading partners to change priorities

During the planning process, partners needed to be convinced that investments should focus on the areas where HIV transmission is highest and could be addressed with targeted programme interventions. This was not immediately accepted by partners with programmatic interests in youth, workplace and migration issues that often go well beyond

HIV. The findings from the NSP I review and the modelled scenarios provided by the Asian Epidemiological Model were instrumental in the prioritization debate. They helped policy makers to visualize the impact of different priorities on the epidemic and proved essential for convincing partners that a targeted approach was necessary in Myanmar. This debate, which took place in 2010, had been preceded by a 2009 grant application to the GFATM that had targeted investments focusing on the three key populations. The discussion and approval of the epidemiological data and modelling provided for the NSP I review, as well as the approach taken by this 2009 GFATM proposal set the scene for stakeholders to approve a NSP II with highly targeted prevention interventions. The prioritization of key interventions is now reflected in the new NSP II that shows increased coverage targets for sex workers, men who have sex with men and people who inject drugs.

Myanmar uses data collected directly from implementing partners to track resources against the key intervention areas of the NSP annually. These data confirm a general increase in funding for prevention interventions to highly targeted prevention programmes for sex workers and their clients, men who have sex with men and people who inject drugs. The amount allocated in 2011 to sex workers and their clients, increased by one third, to almost US$ 6 million, up from US$ 4 million in 2010. Resources allocated to MSM and people who inject drugs also increased. In relative terms, over 80% of funding was allocated to these three priority areas in 2011, compared to less than 70% in 2010.

Resource allocation for prevention programmes, 2010 and 2011 (in US$ millions)



Source: National AIDS Programme. National Progress Report 2010, Myanmar 2011[3]; National AIDS Programme. National Progress Report 2011, Myanmar, 2012 (in press).

3 http://www.aidsdatahub.org/dmdocuments/Myanmar_progress_report_2010.pdf

Lessons learned

The prioritization exercise in Myanmar showed that it is possible for all relevant stakeholders to agree on a highly prioritized National Strategic Plan. Several lessons can be drawn from this. There is a need for early and wide dissemination of findings and frank discussion of epidemiological modelling and resource tracking data facilitated by country experts. A transparent process is crucial for arriving at commonly agreed principles. Finally, political leadership in the planning and prioritization process and ownership by stakeholders are important drivers for success.

The agreed highly-focused NSP was essential for implementers and donors alike. Donors were provided with agreed priorities that were costed, while implementers were provided with guidance on the focus their programmes were expected to take.

2. ACHIEVING EFFICIENCY THROUGH MAXIMIZING OUTPUTS AND MINIMIZING COSTS

South Africa: *Saving millions of dollars*

Summary: South Africa has reformed its tender process to increase competition among suppliers and improve transparency. Savings amounted to ZAR 4.7 billion (US$ 640 million[4]) between 2011 and 2012 allowing the Government to treat twice the number of people. The new tender achieved a 53% overall reduction of ARV costs.

South Africa has more people living with HIV (estimated 5.6 million [5.3-5.9] in 2011) than any other country (13). In 2011, the estimated HIV prevalence was 17.3% [16.6-18.1] among adults, 15-49 years. However, the incidence rate of HIV infections among adults, decreased considerably in the last decade, from 2.4% [2.2-2.6] in 2001 to 1.4% [1.3-1.6] in 2011 (14). Despite having the world's largest antiretroviral treatment programme, South Africa had been paying substantially more for its antiretroviral drugs (ARVs) than most other low and middle-income countries. Bound by the terms of its existing tender for the procurement of ARVs, the Government purchased only one third of all products at internationally competitive prices in 2010.

In December 2009, the Government of South Africa made a landmark set of commitments to increase HIV case finding and expand access to antiretroviral therapy (ART), aiming to start treating close to one million new patients with ARVs in the next two years. This promised to significantly increase demand for, and spending on, ARVs. The drug prices set by the 2011-2012 tender would be a major determinant of the Government's ability to achieve these aggressive scale-up goals.

How the ARV tender was changed

Working closely with partners, the South African Government was able to implement interventions that achieved price benchmarking, robust allocation of preference points, price stability, reliability of need estimates, and transparency of the process.

- ***Benchmarking***: The Government introduced a list of reference prices for all products on the tender, in order to communicate price expectations to suppliers and incentivize competitive bidding. Benchmark figures were based on the most competitive pricing from Supply Chain Management Systems, the WHO Global Price Reporting Mechanism, (15) and the Clinton Health Access Initiative. (16)
- ***Allocation of preference points:*** When evaluating tender bids, the Government awards 10% of points based on non-price factors, including preference points for local manufacturing. Previously, preference points were awarded at a single level to any product with local content. In the new tender, points were awarded in tiered increments, based on the percentage of content or processing that is sourced or

4 At an exchange rate of 7.4 ZAR/USD

performed locally for a given product. Not only did this enable a more equitable allocation of preference points, it also levelled the playing field for suppliers and sent a signal that the Government was serious about achieving lower prices.

- ***Price stability:*** Mechanisms governing mid-contract price adjustments were revised to ensure that prices would remain competitive throughout the contract period. Any increase has to be justified by proof by the supplier of an unavoidable rise in costs for raw material, processing, or distribution.
- ***Reliability:*** Due to unreliable estimates under the previous tender, actual procurement volumes differed from forecasted quantities by more than 100% for some drugs. The National Department of Health and its partners refined ARV quantification methods and improved estimates. These efforts increased confidence among suppliers, allowing them to optimize production planning and transfer the resulting efficiencies to decreased bid prices.
- ***Transparency:*** The Government actively encouraged internationally competitive suppliers to participate in the new tender and implemented mechanisms to ensure that the evaluation and adjudication processes would be fair and transparent. The Government established clear guidelines for determining appropriate disqualification of bids and introduced a step-by-step methodology for systematically determining contract winners and volume allocations. This included confirmation of registration status, organized review of laboratory samples and calculation of total points based on a predefined formula.

This new approach led to a 53% overall reduction in the cost of ARV drugs and projected savings over the two-year contract period of ZAR 4.7 billion (US$ 640 million). (17) These savings came at a crucial time in South Africa's response to HIV and have made an ambitious treatment scale-up possible. In 2010 and 2011, almost 800,000 new patients began treatment with ARV drugs, resulting in a total of 1.7 million South Africans initiated on antiretroviral treatment by December 2011 (18).

The South African government has built on this achievement, successfully applying these reforms to other tenders, including those for anti-tuberculosis drugs and anti-infectives, and achieving additional significant savings.

Lessons learned

A key to South Africa's tender success was the careful review of tender language to ensure that it encouraged lower prices. This process – and the strategies that resulted and have been highlighted in this case study – helped South Africa significantly reduce ARV drug prices, and can be adapted to other countries to mitigate high prices and facilitate the stable supply of ARV drugs.

Swaziland: *Achieving competitive drug pricing*

Summary: Swaziland has increased its antiretroviral drugs tender efficiency by introducing ceiling prices, supplier performance data and more reliable quantification methods, resulting in internationally competitive prices and high-quality products. The revised tender process led to savings of US$ 12 million between January 2010 and March 2012, an overall cost reduction of 27%.

Swaziland has the highest HIV prevalence in the world, 26% [24.8-27.2] of all adults 15-49 years, were HIV positive in 2011 (19). AIDS is the leading cause of mortality, with an estimated 6,800 [6,100-7,800] deaths in 2011. The Swazi Ministry of Health has rapidly scaled up antiretroviral treatment (ART), and an increasing proportion of Swaziland's predominantly rural population has gained access to services. By December 2011, 82% [78-87] of eligible patients (72,402 people) were receiving antiretroviral treatment (19).

The cost of fighting this epidemic is crippling for this small country with a population of just over one million. In 2010 the HIV response cost 4.4% of Swaziland's gross domestic product (GDP) (20), a figure projected to rise to 6.8% of GDP by 2020. The Swazi Government has committed to funding all required HIV-related medicines. In the coming fiscal year and beyond, nearly all ART-related external funds will come to an end.

Having committed to increasing access to antiretroviral treatment, while facing the loss of donor programmes, Swaziland has sought ways to reduce drug costs. Though the Swazi Government purchased 81% of its adult ARV drugs at international competitive prices in 2009, some contracted prices exceeded 130% of the prices listed in the Clinton Health Access Initiative (CHAI) ceiling price list, which functions as a benchmark for competitive pricing. More expensive ARV products, such as Tenofovir 300mg and Didanosine 400mg, offered opportunities for significant cost savings.

How tendering reforms were achieved

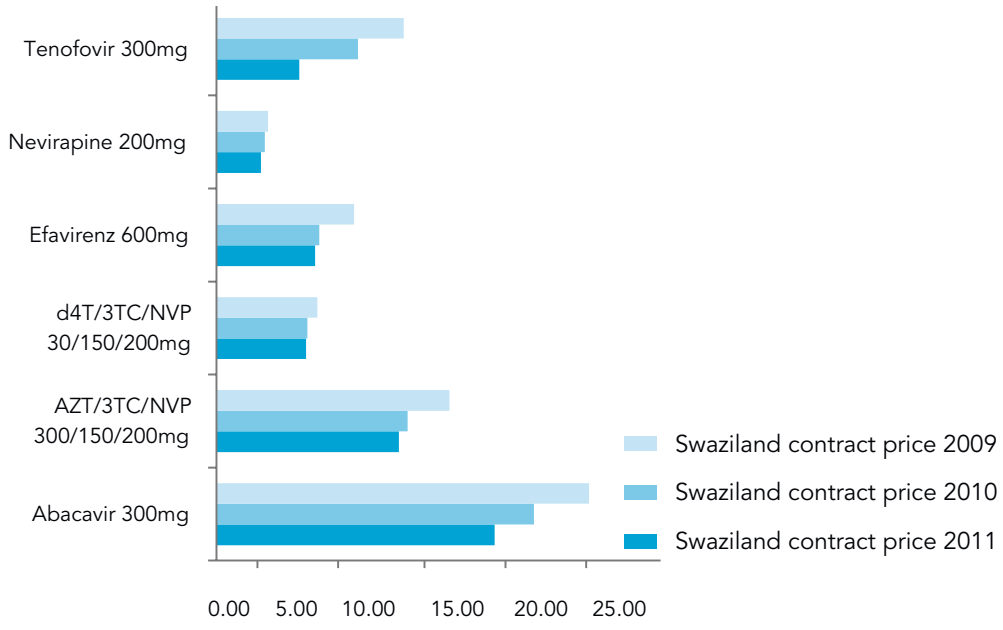
The Government worked closely with partners to develop and implement procedures that would strengthen the tender process and achieve lower prices. Key interventions included price benchmarking, evaluating supplier performance, improving the reliability of estimates and increasing the efficiency of the process as described below:

- ***Benchmarking:*** CHAI ceiling prices were used as benchmarks for optimal pricing and published with the request for bids. These references indicated price expectations and incentivized competitive bidding among suppliers.
- ***Supplier Performance Measurement:*** Historical supplier performance as measured by delivery times was incorporated into the evaluation criteria.

- ***Reliable Quantification:*** ARV volume estimates were improved by developing a more reliable quantification methodology (e.g. a more robust morbidity/mortality methodology using CHAI-CHART and the Quantimed tool developed by Management Sciences for Health). The refined methodology increased confidence among suppliers and allowed them to optimize production planning.
- ***Process Efficiency:*** This involved strengthening and streamlining the adjudication process methodology, including the consideration of non-price factors such as supplier financial capacity, and a more systematic scoring methodology. The Evaluation committees completed a full assessment of suppliers and products with regard to price and other evaluation criteria. Suppliers were ranked and final recommendations made for contract awards.

Following these interventions, Swaziland secured prices below the benchmark for 93% of its ARVs, and no contract price was more than 103% of the CHAI ceiling price in 2010. Over the 15-month tender period, January 2010 to March 2011, these price decreases reduced Swaziland's ARV drug costs by 27%, compared to 2009 tender prices. This reduction amounted to cost savings of US$ 4.91 million from January 2010 to March 2011. The figure below shows the incremental savings gained in the 2010 and 2011 tenders. The Government increased the savings during the next tender covering April 2011 to March 2012. ARV drug costs during this period achieved a 33% overall reduction compared to 2009 prices, with total savings amounting to US$ 7.09 million. Overall, from January 2010 to March 2012, total savings amounted to US$ 12 million.

Swaziland contract prices for key antiretroviral drugs, 2009-11 (in US$, per pack)



Source: Swaziland Ministry of Health. Contracts with ARV Suppliers, 2009-2011.

To achieve and maintain universal ART access using the WHO 2010 recommended eligibility criteria (21) Swaziland must sustain and build upon these pricing efficiencies. The Government of Swaziland is working to strengthen linkages among ARV drug forecasts, tender quantities and orders. Most importantly, the Government is working to ensure that these robust tender practices are institutionalized within the Ministry of Health as part of its long-term procurement strategy for ARVs and other essential medicines.

Lessons learned

The experience in Swaziland shows that revising ARV drug tenders can yield substantive cost savings, even in the short term. A key lesson is that regular revision of tenders enables governments to take advantage of global price decreases in a timely manner. Although it may be logistically easier to sign multi-year contracts, the economic benefits of yearly tendering can be high and outweigh the administrative savings of multi-year contracts. Swaziland has saved (and continues to save) considerable amounts from revising contracts every year. An important element is the existence of a sufficiently strong evidence base permitting comparison of country-level procurement data with other country-level and global statistics. Establishing systems to capture commodity prices and procurement data routinely, and applying this data to forecasting methods can significantly improve efficiency.

3. ACHIEVING SUSTAINABLE FINANCING

Kenya: *Operationalizing innovative funding*

Summary: Kenya has depended heavily on external funding for HIV for many years. Donor funds are expected to decline beginning of 2013 as a result of the global financial crisis and new donor priorities. A significant funding gap is emerging. As Kenya continues its progress toward attaining middle-income status, donor resources may decline further, exacerbating this situation. Kenya has taken active steps to explore and operationalize sustainable domestic funding options, including earmarking 0.5% to 1% of ordinary government revenues to an HIV Trust Fund.

In 2011, Kenya reported a 6.2% [5.9-6.3] HIV prevalence rate among adults aged 15-49, with 1.6 million [1.5-1.7] people living with HIV (22). An estimated 29% of adult mortality, 24% of all morbidity, 20% of maternal mortality and 15% of under-5 mortality is HIV-related (23).

In 2011 ART coverage reached 72% of eligible adults and children (1) with around 106,000 more adults receiving treatment in 2011 than in 2010. In 2010 an estimated 83% of pregnant women were tested for HIV. By 2011, 67% [59-75] of pregnant women living with HIV received the most effective antiretroviral regimen for preventing the transmission of HIV to their babies (24).

A looming funding gap

Despite having a growing economy, Kenya is heavily dependent on donors to fund its HIV response. Kenya is expected to achieve middle income country status by 2030 with an average gross domestic product growth of 6.5% per annum expected between 2010 and 2030. A recent study (25) found that if the country achieves its projected economic growth and allocates a higher share of government expenditure to HIV it should be able to make the transition to sustainable domestic funding. However, it will still require continued external support, complemented by alternative sources of funding during this transition period.

Although Kenya has greater than average potential to fund its HIV response, the funding gap[5] is significant. It is estimated that the cost of the HIV response will increase by 114% between 2010 and 2020 (22) and that the funding gap will reach US$1.75 billion between 2010/11 and 2019/20, comprising 0.3% of GDP by 2020. By 2015, the gap may equal 25% of the HIV budget (22). In November 2012 the Kenyan Minister for Public Health and Sanitation announced a national campaign to stop new HIV infections among children by

5 The funding gap is defined as the gap between resource needs and resource availability. Resource needs to finance the Response were estimated and projected up to 2030. The available resources were then extrapolated over the same period in a 'baseline' scenario that does not consider any additional financing sources, nor any major changes in existing sources, yielding a 'baseline resource gap' – here referred to as "funding gap". In a next step, a number of strategies that can generate additional resources for AIDS were identified through discussions with stakeholders in Kenya, under firm direction by the NACC and including the Ministry of Finance to fill the gap.

2015 and keeping their mothers alive, and to move to lifelong treatment for HIV-positive pregnant women (known as option B+). This will significantly reduce new HIV infections, it will be cost-effective as well as life-saving in the long term but requires significant new resources in the long term.

The health spending context is also problematic. While health spending has increased in real terms, its share of government expenditure is shrinking from 6.9% in 2009/10 to 6.3% in 2010/11 (26) . At the same time, expenditure on the HIV response is growing. A 2010 analysis of the HIV Sub-Account of the National Health Accounts found that spending on HIV grew from 0.93% of GDP in 2001/02 to 1.3% in 2009/10 (27) at which time HIV spending comprised 24.4% of total health expenditure. The Domestic Investment Priority Index, which measures the investment priority governments set for supporting HIV responses, is 0.05 in Kenya, indicating that Kenya considers this a middle-level priority.

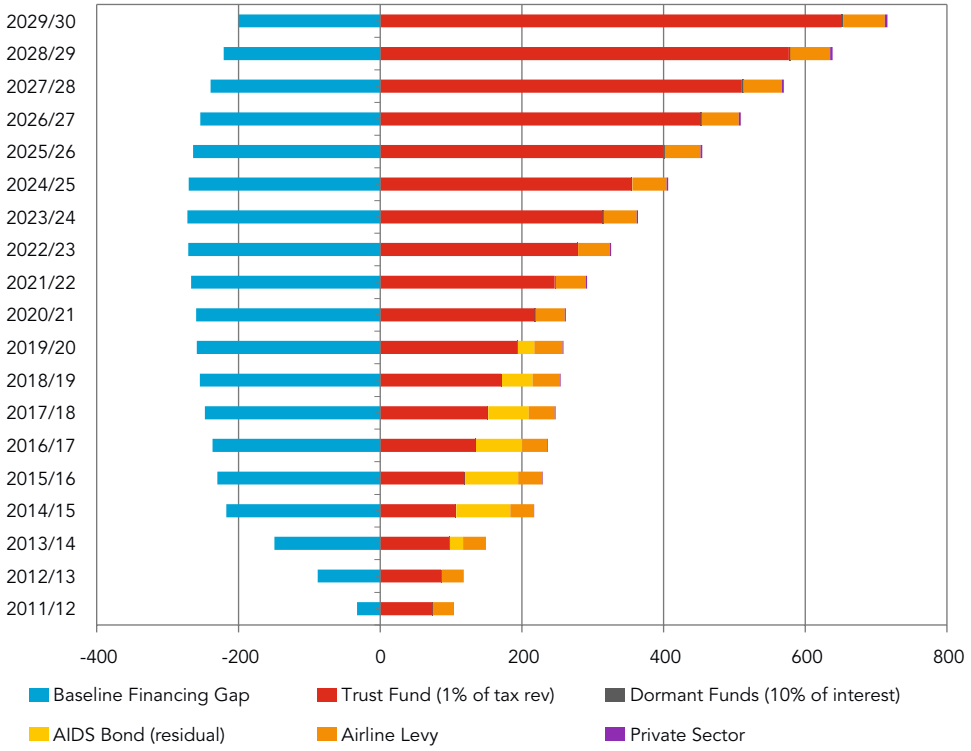
Increased government spending

In order to tackle the funding gap, Kenya has established a High Level Steering Committee for Sustainable HIV Financing. The Steering Committee is supported by a technical working group focused on the development of a National HIV Sustainable Financing Strategy, which has been generating proposals for sustainable domestic financing of the HIV response. The key proposal is the establishment of an HIV and Non-Communicable Diseases Trust Fund that would pool additional public and private resources. The current proposal is for the allocation of 0.5% to 1% of government ordinary revenues to the Trust Fund, which may enhance its income by additional innovative financial strategies such as an airline levy. Over time, as other funding sources become available, this public money could be diverted to fund health-related priorities through the Mid Term Expenditure Framework, or the expansion of the National Health Insurance Fund as it evolves into a social health insurance scheme. The revenue in the Trust Fund should represent an increase in Kenyan Government HIV spending. It has been calculated that this will fill 70% of the HIV funding gap between 2010 and 2020, and 159% of the gap between 2020 and 2030 (25). A Cabinet memorandum containing this proposal has twice been submitted for discussion. Treasury is currently considering the option.

A study of Kenya's ability to achieve sustainable financing for the HIV response (25) investigated and costed a number of promising income-generating concepts including:

- the HIV Trust Fund,
- an airline levy,
- a dormant fund (utilizing property which had been unclaimed for a defined period, mainly from commercial accounts),
- a mobile phone air time levy,
- AIDS lottery,
- boosting private sector contributions.

Kenya's Estimated Funding Gap for HIV, 2011/12 to 2029/30 and options for alternative financing (in US$ millions)



Source: Lievens T, Kioko U for Oxford Policy Management. Sustainable financing for HIV/AIDS in Kenya. s.l. :, Oxford, 2012.

Moreover, to ensure better value for money, a programme efficiency review is currently ongoing. The work is due to be completed in mid-2013 in time for the development of Kenya's new National AIDS Strategic Plan (NSP) IV. This presents an opportunity to apply an investment approach to the NSP IV thereby resulting into optimal allocation and utilization of resources. In turn, the efficiency gains will further directly reduce the HIV financing gap.

Lessons learned

Kenya has been an African trailblazer both through its state of alert to the looming HIV funding crisis, and its extensive actions to address it. It is well placed to generate a funding model relevant to other countries in the same predicament. Funding options have been explored in detail, and costed and realistic proposals to meet funding needs are now in place. Its HIV financing story is one of incremental intensification of focus as the financial realities have unfolded, and its position is now information-rich, with the political debate well advanced.

Malawi: *Sharing financial responsibility*

Summary: Malawi, a low-income country with a significant HIV epidemic, is heavily dependent on donor financing for an effective response and therefore highly vulnerable to donor withdrawal. Finding ways to increase domestic resources has become a matter of urgency, yet external donor support will still be necessary to fill the resource gap.

Malawi has a population of 15.9 million (July 2011 estimate) facing a severe HIV epidemic, with an adult HIV prevalence rate of 10% [9.5-10.6] in 2011. (28) Although Malawi's economy is growing, the country remains very poor. It has a GDP per capita of US$ 800 per annum and is placed at 171 out of 187 countries on the UNDP's 2011 Human Development Index.

Despite its limited financial resources, donor support has enabled Malawi to successfully scale up its programmatic response to the HIV epidemic. Numbers of new infections have decreased from 51,000 [43,000-61,000] in 2010 (33,000 adults and 18,000 children) to 46,000 [40,000-56,000] new infections in 2011 (31,000 adults and 16,000 children). The number of people living with HIV and receiving treatment has increased from 29,087 in 2005 to 322,209 at the end of 2011 accounting for around 67% [63-73] of the people needing treatment (28). These gains will be under significant threat if donors retreat.

Costs outstripping income

The cost of running these programmes is rising faster than projected resources available. Achieving universal access will increase costs further. (28) According to one study, annual resource needs are projected to increase from US$ 225 million in 2012/13 to US$ 592 million in 2020/21.[6] (29) The 2012/13 financing gap is equivalent to 0.7% of GDP, and 2.6% of total government expenditure, figures projected to rise to 2.2% of GDP and 7.9% of government expenditure by 2015 (29). In 2011, only 5.7% of the national budget was spent on health. The Domestic Investment Priority Index, which measures how governments prioritize national responses to HIV and AIDS, is 0.005, indicating that very low priority is given to such spending.

While the need for ongoing significant donor support for the HIV response seems inevitable, the pressure is also on to tackle inefficiencies and to generate increased domestic funding to apply to the response. An assessment of potential efficiency gains at service delivery level found that Malawi delivers services at low costs, with the lowest direct treatment costs and personnel costs of five countries studied. (30)

6 UNAIDS estimates are significantly lower

Innovating to fill the gap

The urgent need to find innovative ways to generate funding in Malawi has stimulated research into potential strategies for achieving sustainable financing, such as public sector mainstreaming, private sector contributions, introduction of airline and mobile phone airtime levies. For Malawi, three potential approaches have been identified:

Expanding public sector mainstreaming: this would make it compulsory for each ministry to allocate a budget for HIV activities both in its workplace and as part of its operations. The current directive asking public agencies to spend at least 2% of their budgets on HIV mainstreaming could be made mandatory and a specific line item budget for HIV mainstreaming introduced, allowing monitoring of public agency spending on HIV. If mainstreaming activities increase from 2% to 3%, the additional revenue gained would amount to US$ 12.2 million in 2012/13, increasing to US$ 20.4 million in 2020/21. This represents 10% of the 2012/13 financing gap but would only cover 5% of the financing gap in 2020/21. Advantages include minimal set-up costs; drawbacks include a lack of data on current spending (which may be, in some ministries, over 2%), activities not necessarily being part of the National Strategic Plan on HIV, and the need for adequate focus on programme design, to avoid wastage.

Introducing an airline levy on international flight departures is an innovative funding mechanism currently being implemented in several European and African countries and is currently being considered in Malawi. Introducing an airline levy in Malwi has the potential to raise between US$ 0.25million and US$ 5million in 2012/13 and between US$ 0.3million and US$ 6.1million by 2020/21, depending on the size of the levy.

Introduction of a telecommunications levy on net operating income or termination fees from international telecommunication traffic may raise considerable funds for the HIV response. Allocating 1% of the existing 5% levy on operating surpluses of telecommunication firms to HIV could generate an additional US$ 2.4 million in 2012/13, increasing to US$ 3.1 million in 2020/21. Applying a levy of 3 cents per minute for calls terminated in Malawi would generate US$ 5.3 million in 2012/13, rising to US$ 12.8million in 2020/21.

Although such initiatives help to reduce dependency on donors, it has been estimated that growth in these alternative sources of financing is significantly lower than resource requirements. The total gain has been projected to reach US$ 71 million in 2020/21, equivalent to 17% of the expected gap. Thus Malawi is expected to remain reliant on donor support, at least in the short term. However, the study provided a sound evidence base on domestic funding and the projected funding gap and will be instrumental in advocacy for continued donor support.

Lessons learned

Malawi is currently evaluating alternative financing options, in order to step up additional domestic funding. Although several sources have been identified, it is expected that external funding will still be required to scale up the HIV response. The research has generated the necessary awareness both at country-level and among donors of the urgent need to fill the resource gap and look for sustainable financing solutions. Moreover, the study has quantified the extent to which Malawi will be able to finance its own response and also the level of external funding that must be sought from donors. This valuable evidence will strengthen advocacy to ensure continued donor engagement.

Namibia: *Striving to sustain success*

Summary: Namibia has successfully managed its HIV response - achieving universal access to HIV treatment by December 2010 - but is now experiencing multiple pressures. These include the impact of the global financial crisis, a health budget competing with other pressing priorities, weaknesses in the health system, such as human resources shortages, and the loss of donor funding that accompanies attainment of middle-income country status.

Namibia has a mature, generalized HIV epidemic, with an HIV prevalence of 13.4% [10.8-16.4] in 2010/11, and has achieved ART coverage of over 95%. There were an estimated 190,000 [160,000-230,000] adults and children living with HIV in Namibia in 2010/11 (31). It has been calculated that more than 70,000 new HIV infections are being averted annually and the burden of children orphaned by AIDS has decreased by over 50,000 due to the ART programme (32). HIV prevalence among pregnant women peaks in the age group 35-39 years, of which 29.7% are HIV positive. In 2010/11, approximately 88% of women presenting for antenatal care received HIV counseling and 83% HIV counseling and testing (33).

Namibia's performance in addressing HIV has been impressive. It achieved universal access to HIV treatment on target, by December 2010, one of only ten low and middle income countries globally, and three in Africa, to do so (24). Namibia faces a unique and challenging situation in relation to HIV funding. Donors are actively withdrawing significant levels of support. The community service organization (CSO) sector, which relies heavily on donor-generated income, is disproportionately affected. The HIV response continues to consume much of the health budget and a funding shortfall is looming.

An upper-middle income country with extreme income disparity

Namibia has the world's most extreme income disparity. Although classified as an upper middle income country, 49% of Namibians live in poverty (defined as an income of less than US$2 per day) (34) and adult unemployment exceeds 50% (35).

The Namibian Government during the financial year 2008/09 funded 45.5% of the nation's HIV response (36), which consumed over 28% of the total health budget. Donors are slowly withdrawing from funding the remaining 54.5%. PEPFAR/USAID has announced a staged 50% reduction in spending until at least 2015, while the GFATM has only made commitments lasting to 2016. Those two funders account for 90% of donor contributions to HIV in Namibia (37). The departure of funders has impacts beyond financial losses – taking with them evidence, technical assistance and networks.

Managing the funding transition

A number of key processes enabling the transition from external to domestic funding are well underway in Namibia:

- The 2010/11-2015/16 National Strategic Framework has been aligned with the outcomes of the *United Nations 2011 Political Declaration on HIV and AIDS* (3); targets have been costed, and the domestic contribution has been identified for each target.
- In August 2010, the Office of the President submitted a Cabinet Action Letter '*Sustainable Funding of the National HIV/AIDS Multi-Sectoral Response*'; it directed the Ministry of Health and Social Services to consult the Ministry of Finance and other stakeholders and develop concrete proposals for achieving sustainable financing of HIV services in the country.
- In November 2011, civil society engaged in a process that developed a *Civil Society Position Paper on Financial Sustainability for the AIDS response*. Civil society is highly dependent on donor funding and is hardest hit by the reduced donor funding available. The position paper highlighted the urgent need for civil society organizations to actively explore sustainability strategies. It calls on all sectors, especially government and the private sector to consider solutions to sustain the civil society contribution to the national HIV response.

The Namibia Sustainable Financing Study followed in November 2011, and in the same month Cabinet reiterated the need for the issue to be examined further. A committee, chaired by the Prime Minister and including the Ministers of Finance and Health, was tasked with managing the transition process. The Namibian response to the funding gap has four key elements – generating new income from innovation, remoulding the role of civil society, transitioning spending from donors to government and making cost savings through more efficient HIV services.

Namibia's sustainable financing study proposed a series of actions to ensure sustainability, including:

- ***Private sector contributions*** through workplace HIV education programmes
- ***Airline levies*** with a US$5 airline levy per passenger on outbound flights estimated to yield US$4.1 million in 2020.
- ***Public sector mainstreaming*** is seen as an essential step in diversifying the financial base of the HIV response. This approach assumes that the share of discretionary spending allocated for HIV at Ministry level will increase to 1.5% by 2015/16 and 2% by 2020/2021 which would generate an additional US$ 55.7 million by 2020/21.
- ***Health insurance*** is a particularly attractive health financing mechanism since it converts out-of-pocket expenditure for health of those who can afford it, into pooled funding, thus increasing access to health services.

Efficiency and cost savings

The Namibia Sustainable Financing Study also examined the potential for efficiency in the HIV response. It found that in 2005 and 2007 the technical efficiency score of Namibia's AIDS programme was higher than that for other countries, reaching 53% in 2007, but leaving room for improvement. Two assumptions were made - that full efficiency would be reached by 2017, helped by improved service delivery technology, and that the rate of efficiency gain per annum would be lower in the period 2008-2017, at 6%, than in the period 2005-2007, at 17%. This would, if achieved, be a dramatic outcome, removing the HIV financing gap. The difficulty is to identify the areas where efficiency gains can be achieved. There is a need for efficiency and costing studies to be carried out in a number of service delivery areas, to estimate more precisely the potential for savings.

Lessons learned

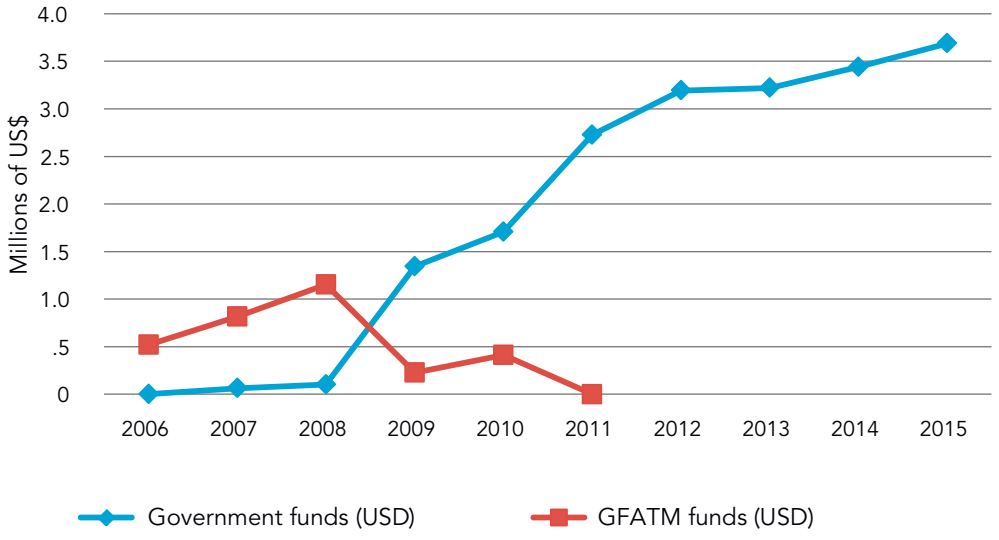
Namibia can achieve substantial savings through making strategic and programmatic choices using cost-effectiveness analyses of interventions. Such savings through improved efficiency, combined with higher allocations from public domestic revenue, some generated from newly tapped sources, should enable Namibia to make the transition from donor dependency to independence. Essential to this process is preparedness to compromise – for civil society to rationalize, for government to allocate more funds, for donors to withdraw in a transparent manner. And communities need to be consulted and given a genuine say.

Kazakhstan: *Taking over from the Global Fund (GFATM)*

Summary: Since being classified an 'upper-middle income' country in 2006, Kazakhstan has seen a reduction in foreign development aid. As of 2011 Kazakhstan may no longer apply for HIV grants to the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), which is the country's second largest funder - after the government itself - of HIV and TB programmes. Knowing that this would happen, the government of Kazakhstan has put in place strategies to fill the gap and has considerably increased domestic financing. The government's share of financing ARV drugs has grown from 7% in 2007 to 100% in 2011.

Kazakhstan's government has long expected that the country would lose its eligibility for development aid and has made provisions to gradually replace donor funding with its own. Although a GFATM grant enabled Kazakhstan to start providing antiretroviral therapy to people with HIV in 2005, the government has increasingly funded the treatment programme. For the first three years the GFATM was the principle supplier of ARV drugs, but the government's share has grown from 7% in 2007 to 100% in 2011, spending more than KZT 400 million (US$ 2.7 million[7]) in 2011 on ARV drugs (38).

Sources of funding for ARV drugs in Kazakhstan in 2006-2011 and projections until 2015 (in US$)



Note: GFATM=Global Fund for AIDS, Tuberculosis and Malaria

Source: GFATM Programme Implementation Unit, National AIDS Centre of Kazakhstan, Almaty 2012

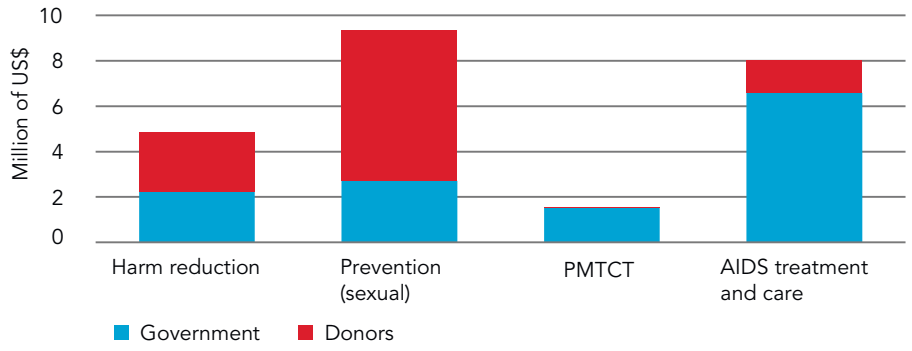
7 At an exchange rate of 1 KZT = 0.00667US$

Supporting civil society

Non-government organizations implement HIV prevention programmes among key populations and the government recognizes civil society as a crucial partner. This is exemplified by a 2005 law on purchasing social services from non-government organizations (NGOs) (39) created to enable non-government organizations to access public funds. For instance, the City of Almaty (the former capital and largest city) assigned US$ 0.54 million in 2011 and another US$ 0.58 million in 2012 to purchase social services from NGOs operating in that city.

On top of that, the state health progamme, "Salamatty Kazakhstan" aims to engage NGOs and businesses in health promotion from 2011 to 2015. To that end, the Ministry of Health has set up different funds to build the capacity of AIDS-service NGOs; to support work of NGOs working in prisons, and to support NGO projects including HIV–related projects.

Sources of funding for selected areas of the HIV response in Kazakhstan, 2006-2010 (in US$)



Source: Kazakhstan National AIDS Programme 2006-2010 Progress Report, Ministry of Health of Kazakhstan, Almaty 2011

However, the GFATM remains the major funder of prevention programmes among key populations. For this reason, the Government of Kazakhstan has commissioned a new national AIDS programme that will gradually take over the funding of HIV prevention programmes by 2015.

Lessons learned

Kazakhstan's government is gradually replacing donor funding for HIV, and health in general, with its own funding, thus responding to the reduction of external funds since it achieved 'upper-middle income country' status in 2006. This has been made possible by the country's strong economic growth over the last decades allowing the country to increase its public expenditure on health and HIV. Early transition planning to identify and explore domestic financing options and their implementation feasibility; good system for monitoring domestic health and HIV financing (e.g. National Health Accounts); political commitment and dialogue, and involvement of stakeholders and civil society; are critical for a smooth transition to not only for funding the HIV response but also for achieving sustainable financing.

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