Rationale and background information

This policy brief was commissioned by the National AIDS Control Council to:

i) cost the implementation of the HIV Research Agenda;

ii) analyze the current financing landscape of HIV research;

iii) identify feasible and practical domestic financing options and

iv) make an investment case on return on investment of the HIV research agenda.

Kenya has made significant progress in the fight against HIV and AIDS. This includes a decrease from the peak of 10.5% prevalence in 1995-1996 to a rate of 5.3% in 2014\(^1\) and from 163,000 annual AIDS related deaths in 2003 to 58,000 in 2013\(^2\). Total new HIV infections are estimated to have declined by about 15% in the last five years; from about 116,000 in 2009 to around 100,000 in 2013. A combination of behavioral, implementation and biomedical research have significantly contributed to such gains.

However, major challenges still exist in the use of science to combat HIV and AIDS, including;

1) heavy reliance on donor funding (over 90% of total in-country HIV research financing);

2) limited engagement of researchers with policy needs and makers, resulting in weak translation of research findings into policies and practices and

3) limited capacity among local researchers to address existing research gaps, particularly with regards to understanding drivers of the epidemic and evaluating effectiveness and efficiency of various interventions\(^3\).

In light of this, Kenya developed the HIV and AIDS Research Agenda (2014-2019). It identified high-impact research priorities to achieve the Kenya AIDS Strategic Framework (KASF 2014-2019) goals of: reducing new HIV infections by 75%; AIDS mortality by 25%; AIDS related stigma and discrimination by 50%; and increasing domestic financing of the HIV response to 50%.

1 UNAIDS

Policy highlights

1. The Kenya HIV and AIDS Research Agenda (2014-2019) identified top priority areas and is costed at USD 109 million of gross resources needs.

2. 90-95% of HIV and AIDS Research funding in Kenya is largely donor funded and is projected to reach a 20% annual reduction by 2019—this threatens the scientific gains and goals of ending AIDS. The top five Kenya philanthropies spend USD 13 Million per year. Only an estimated 10% of this goes to HIV.

3. To fill the financial gap of USD 43 million to fully resource and implement the HIV research agenda, a mix of 10 public, private and philanthropic domestic funding options passed the contextual feasibility and economic viability tests. This mix is capable of raising the domestic HIV research financing pool to 45-50% by 2019 of the total research financing up from the current 5-10% local financing.

4. Return on investment from implementation and funding of the research agenda could result in 5-8 times cash returns on investment with behavioral and implementation research providing short-term return and biomedical research providing higher and long-term return. Up to 130 USD million of saving could be realized in the next 5 years

Policy Directions

To materialize such financing targets and return on investment, the following steps need to be undertaken:

1. The National AIDS Control Council (NACC) will work to ensure that commitments of allocation of 2% of GDP to the National Research Fund (NRF) and 10% of total HIV spending to HIV research are materialized with clear roadmap for progressive implementation and accountability. Such commitments need to be translated in the national and county budget cycles and discussions. Policy frameworks needed to incentivize domestic philanthropy and private-public financing will be explored.

2. The NACC will facilitate better coordination of HIV research funding in order to increase productivity, impact and alignment with national priorities. A coordinated mechanism for data sharing, transparency and co-funding with the Government of Kenya (GoK) will be developed.

3. Health R&D advocates, researchers and research stakeholders need to be a part of a coordinated advocacy agenda for domestic financing for HIV R&D that targets multiplicity of decision makers in Government; philanthropists; private sectors; and boards and leaders of public and private university institutions.
Analyses of primary and secondary data of key research institutions and of the national database of research projects informed the costing of the research agenda and financial projections. Domestic financing options were evaluated using a participatory approach with decision makers and stakeholders using prioritization criteria of operational, political and economic feasibility. A mix analysis of projected productivity and efficiency gains guided the investment case analysis.

Cost of implementing the Kenya HIV and AIDS Research Agenda

The Research Agenda proposes a set of biomedical, behavioral, and implementation research interventions to be implemented from 2014-2019. The cost of implementing the various interventions under the Kenya HIV and AIDS Research Agenda are summarized in the Exhibits 1 and 2.

Exhibit 1 - Total HIV Research Funding Gap in Kenya

<table>
<thead>
<tr>
<th>Fiscal Year Ending</th>
<th>Total Resource Needs</th>
<th>Available Funding</th>
<th>Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>15,342,258</td>
<td>24,365,913</td>
<td>-9,023,655</td>
</tr>
<tr>
<td>2015</td>
<td>22,114,246</td>
<td>33,133,333</td>
<td>-11,019,087</td>
</tr>
<tr>
<td>2016</td>
<td>21,932,246</td>
<td>32,380,333</td>
<td>-10,448,087</td>
</tr>
<tr>
<td>2017</td>
<td>20,932,246</td>
<td>32,380,333</td>
<td>-11,448,087</td>
</tr>
<tr>
<td>2018</td>
<td>19,932,246</td>
<td>31,680,333</td>
<td>-11,748,087</td>
</tr>
<tr>
<td>2019</td>
<td>17,880,246</td>
<td>26,880,246</td>
<td>-8,998,000</td>
</tr>
<tr>
<td>2020</td>
<td>17,880,246</td>
<td>26,880,246</td>
<td>-9,000,000</td>
</tr>
<tr>
<td>2021</td>
<td>17,880,246</td>
<td>26,880,246</td>
<td>-9,000,000</td>
</tr>
<tr>
<td>2022</td>
<td>17,880,246</td>
<td>26,880,246</td>
<td>-9,000,000</td>
</tr>
<tr>
<td>2023</td>
<td>17,880,246</td>
<td>26,880,246</td>
<td>-9,000,000</td>
</tr>
<tr>
<td>2024</td>
<td>17,880,246</td>
<td>26,880,246</td>
<td>-9,000,000</td>
</tr>
</tbody>
</table>


There is an estimated total research financing gap of USD 43 million over the 2015-2019 period as the gross resource needs are projected to increase from USD 15 million in 2014 to USD 19 million in 2019. The financing based on the currently available sources of financing is projected to decrease from USD 15 million in 2014 to USD 12 million in 2019.

Of the total gross resource needs (USD 109 million), USD 33 million would be required to implement the scale up proposed in the HIV and AIDS Research Agenda in 2015-2019, with the remaining USD 76 million representing base line HIV and AIDS research activities.

Financing landscape for HIV and AIDS research in Kenya

An estimate of 1% (USD 15 million) of the total expenditure on HIV and AIDS is reported to have been spent on HIV and AIDS research in 2014 in Kenya4. HIV and AIDS research in Kenya has been largely dependent on donor financing, with 90-95% of financing from international sources (as highlighted in Exhibit 3). The remaining 5-10% financing is from local sources. The current pools of resources are projected to decline from USD 15 million (2014) to USD 12 million in the next five years.

4 NACC, Kenya AIDS Progress Report, 2014
Domestic financing of HIV and AIDS Research in Kenya

Given the financing gap, there is a need for diversification of the sources of funding, especially domestic, and widening of the scope of stakeholders.

Multiple alternative domestic financing options were subjected to the rigor of feasibility and practicability criteria. These included government budgetary allocations, tax levies across various industries, forms of debt financing such as bonds, individual and informal sector contributions, private sector and learning institutions contributions, and allocation of interest from dormant funds. Out of these, a package of five major categories of domestic financing (with up to 10 unique sources combined) met the criteria. The base case amounts and impacts are as follows:

<table>
<thead>
<tr>
<th>Source</th>
<th>Target*</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>1. National Research Fund</td>
<td>USD 5M (68%) 10% of the 2015/2016 GOK HIV and AIDS response budget of USD 24 Million should go into HIV Research as per KASF commitment</td>
</tr>
<tr>
<td></td>
<td>2. KASF proposed innovative sources</td>
<td>USD 2M (27%) –5% (out of the proposed 10%) of the resources mobilized through five of the strategies proposed under the KASF are allocated to HIV and AIDS research namely: debt swap, an AIDS lottery, interest from dormant funds, and contributions from the informal sector. Additional amounts (0.5%) could also be raised if the proposed 0.5% levy on all construction projects valued above USD 50K is effected.</td>
</tr>
<tr>
<td></td>
<td>3. Health related levies</td>
<td>USD 375K (5%) 0.5% levy on tobacco and alcohol industries are effected for health research, and 5% of this specifically channelled towards HIV and AIDS research.</td>
</tr>
<tr>
<td>Private</td>
<td>4. Philanthropic contributions</td>
<td>USD 540K (7%) Local major foundations which have the health sector as part of their areas of focus such as Chandaria, Safaricom, Kenya Commercial Bank, Equity Group Foundation, M-Pesa Foundation and other foundations, channel 10% of their CSR health budgets towards HIV and AIDS research. Current estimated total CSR budgets for the five foundations is USD 13 million annually.</td>
</tr>
<tr>
<td></td>
<td>5. Public-Private University contributions</td>
<td>USD 380K (5%) Universities allocate USD 10 to health research per year for every student undertaking a science course, out of which USD 5 (50%) would be ring-fenced for HIV research. These amount could be allocated from existing budgets or raised as contributions, without necessarily increasing student fees.</td>
</tr>
</tbody>
</table>

* Percentages are expressed as the amount that can be raised as a proportion of the 2019 funding gap.

The above package of five major sources is capable of raising a total of USD 8.4 million in 2019, financing 100% of the projected HIV and AIDS research need financing gap (USD 7.5 million). Cumulatively, these sources raise the domestic HIV research financing pool to 45-50% of the total research financing up from the current 5-10% local financing.
Investment case for financing HIV and AIDS research

Short term wins are largely attributed to improved efficiency around HIV and AIDS programming resulting from scale up of behavioral and implementation research from 2014-2019.

Up to USD 130 million in savings could be realized over five years (2014-2019), attributable to efficiency gains (65%), economic productivity gains (20%) and savings on ART costs (15%). This translates to an expected cash return of five to eight times on an investment of USD 25 million during the period.

The long term gains (post KASF period to 2050) in HIV and AIDS research largely result from both the development of a preventive HIV and AIDS vaccine, microbicides, and implementation of pre-exposure prophylaxis (PrEP).

On a macro-level, increased reliance on debt financing for HIV and AIDS is resulting in major fiscal liabilities without proportional decrease in the medical calamity – what has been referred as the transition “from death sentence to debt sentence”. Kenya’s HIV and AIDS debt-to-GDP ratio already stands at 13% (vs total debt-to-GDP ratio of 38%), significantly higher than South Africa’s 7% (vs a total of 47%). There is therefore a clear need for sustainable investment in HIV and AIDS and by extension HIV and AIDS research.

---

5 A conservative 10% of wins from achievement of KASF goals (reduction of new infections by 25%, and mortality by 25%) is assumed to be directly attributable to HIV and AIDS research.

6 The research gains encompass productivity gains, efficiency gains and net gains due to savings on ARTs; these result from the reduction of the number of new infections and HIV and AIDS related deaths. In the calculation of productivity gains an assumption is made that an HIV-infected person is 25% less productive as compared to a healthy person and hence reducing their output to the economy measured by GDP per capita.

7 M. Ncube, 2015, “From Death Sentence to Debt Sentence: Kenya’s Long-term Liabilities from HIV and How to Finance Them”

8 Ibid.