Fiscal Space and Innovative Financing for the Tanzania Health Sector

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Preface and Acknowledgements

This report into innovative financing and fiscal space is one of several reports into key areas for reform identified by the Inter-Ministerial Steering Committee (ISC) overseeing the development of the Health Financing Strategy component of Health Sector Strategic Plan III. It has benefitted from the advice, data and information provided by the following organisations in Tanzania:

- PMO-RALG.
- Ministry of Health and Social Welfare (MOHSW).
- Ministry of Finance.
- Tanzania Revenue Authority.
- TACAIDS.
- NHIF (including CHIF).
- SSRA.
- African Development Bank (AfDB).
- IMF.
- World Bank.
- Health Budget Support Group.
- GiZ.
- USAID.
- Ifakara Health Institute.
- Tanzania Private Sector Federation (PSF).
- Association of Private Health Facilities in Tanzania (APHFTA).

Special thanks goes the ISC Secretariat as well as to the Health Financing Technical Working Group. We would like to thank the participants of the focus group discussions held in Dar es Salaam in July, 2014 for their questions and suggestions. Financial support from KfW and the AfDB is gratefully acknowledged.
Executive summary

Tanzania is committed to achieving universal health coverage (UHC). UHC is an ambitious health policy objective, which requires a series of interlinked health system reforms to be carried out, as well as a health financing strategy that not only delivers enough financial resources, but also ensures that revenue collection and spending is progressive, and resources for health are to a large extent pooled.

The central question that this paper addresses concerns the level of financial resources Tanzania can make available for health over the next 10 years? This takes into account the various far-reaching past and ongoing health financing initiatives. In order to get a sense of whether these resources could be enough to achieve UHC, we also compare resource availability with estimations of the cost of UHC (and, additionally, population-wide demand for health care). In doing so we hope that this paper will give Tanzanian policy makers a sense of how and over what time period their policy ambition of UHC can be achieved.

Fiscal space defined

A common definition of fiscal space refers to “the capacity of government to provide additional budgetary resources for a desired purpose without any prejudice to the sustainability of its financial position” (Heller, 2006). The concept has come to the fore in the debate regarding what constitutes sound fiscal discipline. The argument is that ‘fiscal space’ should be allocated to investments in areas which create productive assets that pay for themselves over the long term. This viewpoint draws criticism for its narrow focus on a purely fiduciary approach to public spending. Influential authors such as Roy (2007) suggest a more development-centred fiscal framework, one where well-designed public investment programmes target long term human development outcomes, while recognising the importance of a hard ‘current budget deficit rule’ that imposes limits on runaway government spending.

The literature identifies several sources through which a government can expand fiscal space. There is a large overlap between sources at centre-of-government and those at health sector level. Typically the following are part of the mix:

- Conducive macroeconomic conditions, in particular GDP growth and tax revenue, maximising domestic revenue mobilisation. Although largely outside the mandate of the ministries of health, health ministries benefit directly from increased public revenue that these policies generate;
- Reprioritisation of health within the government budget;
- Taxes earmarked for health and other health sector-specific resources;
- Improvements (efficiency savings) in expenditure efficiency;
- Official Development Assistance (ODA) (through aid and debt relief).

Less often referred to when talking about fiscal space for health are monetary expansion (printing money) to finance public programmes; and deficit financing through domestic and external borrowing.
One of the central questions in the debate is how much of public expenditure should be allocated to health\(^1\). The proportion of public expenditure allocated to health in low-income countries (data from 2007) ranges from 1.1% in Pakistan to more than 15% in Rwanda (Tandon & Cashin, 2012). This broad range provides little guidance.

Williams and Hay (2005) provide a simplistic but highly useful ‘back-of-the-envelope calculation’ for assessing fiscal space available for health. In most low-income countries, public expenditure rarely exceeds 30-35% of GDP. Moreover, the allocation of government spending on health tops out at around 15%. Together, spending 15% of 30% - 35% of GDP equates to government spending on health of not more than 4.5% to 5% of GDP.

A recent exhaustive review and analysis by McIntyre & Meheus: *Fiscal Space for Domestic Funding of Health and other Social Services* (2014) establishes more firmly grounded targets for the proportion of government spending to be allocated to health. They consider a range of costing studies, empirical relationships between expenditure and outcomes, and other (evidence based) attempts to set minimum health investment thresholds. They conclude that countries should strive over time to achieve government health spending levels of at least 5% of GDP, supplemented by a minimum target of $86 per capita government and donor funding in low-income countries in order to ensure basic PHC services in cases where meeting the 5% target alone would be insufficient.

It must also be noted that the Tanzanian Government is a signatory to the Tunis Declaration (2012). This goes further than the Abuja Declaration which aims to have 15% of the national budget allocated to health. The Tunis Declaration emphasises expanding access to and coverage of health services through the more effective and more efficient use of both existing and additional public and private resources.

**Revenue and expenditure environment for health in Tanzania**

Tanzania has had strong GDP growth and rising tax collections over the past ten years. Nevertheless, the fiscal deficit before and after grants worsened. This increases the debt stock and will ultimately constrain the room for public funding, including in health. With the annual fiscal deficit larger than 5% over the last couple of years, and debt to GDP ratios nearing 45%, debt financing for health is not an option. Tanzania remains a donor dependent country incurring volatility in aid disbursements. The lack of predictability is problematic for the government to implement medium term strategies such as UHC.

Government-wide spending priorities are guided by a set of long term development plans, many of which have health within their core areas. However, spending in the period 2007/8 – 2012/13 has been dominated by MKUKUTA, which doesn’t explicitly comprise health. This part-explains why Tanzania allocated only 9.4% of total public expenditure to health in 2012/13, about 1/3 short of the Abuja target of 15%.

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\(^1\) Note: the term ‘public expenditure’ or ‘government spending’ refers to spending by government only – i.e. coming from the national treasury. Where reference is made to government spending that includes ‘on-budget’ development partner support this will be indicated accordingly.
One challenge to advocating for larger allocations to health is the fact that budget absorption has typically been well below 100%. Development spending comprises both government and on-budget donor spending and the low development spending rate could be part-attributable to the unpredictability of donor funding for health. Within a highly donor-dependent environment and where donor funding is volatile from one year to the next there are concerns that investment in health is qualitatively suffering. This suggests that if the government wishes to implement a health strategy that requires qualitative and quantitative changes to the health system it needs to ensure not only greater fiscal space for health but also a more transparent and predictable budget. This requires medium term dependable commitments from the government and donors alike.

Tanzania has gone through a far-reaching fiscal decentralisation and almost 40% of health expenditure is managed by Local Government Authorities (LGA) who are financed by non-basked donor funding and retentions on locally collected contributions for health services. Similar to the total health expenditure, there is a high level of underspent (actual expenditures lower than budgeted expenditures), which suggests issues of planning, perhaps due to funding predictability.

There are three main sources of funding for health in Tanzania. Their relative contribution to total health expenditure has changed between 2002/3 and 2009/10 (the latest year with national health account data), with household contributions decreasing from 42% to 32%; and donor contributions increasing from 27% to 40%. Government contribution remained fairly constant at around 25%. Household contributions are mainly direct out-of-pocket expenditure at the point of service. Their relative share in total health expenditure has dropped because of the increase in donor spending. While this is a notably positive trend, the real longer term challenge will be to convert direct out-of-pocket contributions into predictable insurance premiums and/or reduce user fee levels through increased tax-funded supply side subsidy. Nominal public expenditure rose from USD 11 to 17 in the period 2006/7 to 2012/13 (+54%); whereas actual per capita expenditure rose from USD 7 to 9 (+28%).

Although the health sector ranks third in budget priority in Tanzania it still does not meet the targets of 10% of budget (national goal) or 15% of budget (Abuja Declaration). While there has been strong growth in the government health budget for most recent years, public health expenditure (excluding donors) has grown slower than the growth in tax revenue (accounting for about 90% of government revenue) and health is not considered a priority sector of the Big Results Now agenda that is currently directing Tanzanian policy.

This picture is partly mitigated by donor contributions, which may to some extent crowd out the allocation of public expenditure to health. Donor contributions are, however, volatile, and moreover there is a shift between aid instruments (budget aid, basket, project, etc.). This suggests that if Tanzania wants indeed to plan its gradual achievement of universal health coverage, it will have to improve the planning of its budgeting and expenditure for health, in terms of government priority, and across government and donor sources of funding.

**Future fiscal space: modelling approach**

Projecting economic variables over the long term is necessarily a matter of speculation. This is particularly the case with this exercise where macroeconomic figures are required 10 years into the future. To do so we construct a financial programming framework linking the different sectors of the economy (see annex for a full explanation). We populate this framework with macroeconomic data from the International Monetary Fund (IMF) which are agreed by the Tanzanian government so can
be viewed as official country data. For health data we use the National Health Accounts (NHA) which are carried out by the Government of Tanzania to a recognized international standard. The full methodology for health projections are set out in the annex.

This framework produces a series of macroeconomic and health financing indicators until 2024/25. Any policy interventions suggested by the analysis are then assessed against the macro restrictions in place, such as that the fiscal deficit should not exceed 5% of GDP; and public debt should be less than 45% of GDP. If a policy initiative, such as debt financing for health (through a government bond for example) would violate any of these restrictions, they are not been carried forward (which is the case for borrowing). Conversely, all policy interventions suggested in this text do not in any way jeopardize macroeconomic stability.

We also assess the impact of revenue from newly discovered natural resources on government revenues and GDP. Tentative projections show that there may be an impact on GDP from these industries from 2016/17.

To assess whether the resources generated under this ‘policy as usual’ scenario are adequate to achieve the funding challenge of the policy objective of universal health coverage we need to get a sense of the resources required to achieve UHC. Since a Tanzania-specific costing for health is not available, and outside the scope of this work, we construct two resource needs benchmarks. A first one we borrow from McIntyre and Meheus (2014) who, based on meta-analysis suggest that to achieve universal health coverage for a basic package of services, public spending (including mandatory health insurance and development partners) should be at least 5% of GDP; or USD 86 per capita, whichever is highest. Building on this threshold, we construct a second resource need which captures population-wide demand for health care, which we situate at 7.2% of GDP financed from any health financing source (including direct household contributions), or USD 124 per capita, whichever is highest. The latter threshold is not one which reflects revealed population-wide demand for health care, and as such corresponds with the funding challenge associated with universal coverage for a larger package of services.

Setting out resource availability, as obtained from the financial programming framework, against resource needs, produces a health funding gap, both for universal coverage for a basic package of services as well as for a population-wide demand for health services (referred to as the ‘wider’ health gap in this document.). These funding gaps are referred to as policy as usual because it takes the current financing strategy as constant over the 10 year study period (no major new health financing initiatives are taken).

We then consider a number of strategies that the government can put in place to increase resources for health:

- Government spending on health rises to 15% of general public expenditure by 2024/25, which is the Abuja Declaration target to which the government signed up;

- 50% of the population is covered by health insurance by 2024/25 (which is a conservative assumption and a reduction on the current coverage target);

- Innovative sources of funding including tax on remittances, mobile phone levy, alcohol levy, airline levy and public and private mainstreaming. Each are quantified separately in function of prevailing sector and fiscal feasibility;
- Efficiency savings derived from a multi-country data envelope exercise decreases the resource needs, as more can be done with less resources;

- Borrowing for health.

We quantify each of these policy interventions separately, and then considering only those that are politically and technically feasible, we reassess the financing gap.

This approach is summarised in the graph below.

**Approach in four components**

**Resource needs**
- 5% of GDP public spending or USD 86 per capita to ensure universal coverage for a basic package of services
- 7.2% of GDP total health expenditure or USD 124 per capita to cover implied population-wide demand for health care

**Resource gap ‘policy as usual’**
- If we go forward with a ‘policy as usual’ approach, will Tanzania achieve the policy objectives they committed themselves to? If not, what is the resource gap?

**Additional fiscal space for health**
- How much additional financial resources could policy makers in Tanzania make available for health if they would want to?
- We consider additional money from increased public spending, innovative sources of funding, health sector efficiency, and borrowing.

**Resource gap with ‘additional money for health’**
- If Tanzania mobilised all of the financial resources for health within their power, would they be able to achieve the policy objectives they committed themselves to?
Fiscal space for health in Tanzania: baseline resource gap

The analysis under the assumptions of ‘policy as usual’ show that there is lack of policy prioritisation for health via government budget; it remains around 6% of discretionary current expenditures throughout the ten year study period. Donor funding remains stable (in nominal terms) over the medium term and the amount of out of pocket household expenditures rises, albeit slower than public expenditure. Health insurance is rising slowly from 10% of Total Health Expenditure (THE) in 2012/13 to 13% in 2024/25. In this scenario total health expenditures per capita rise from the current 37 USD to 46 in 2024/25.

To get a sense whether this increase in resources suffices to achieve the goal of universal health coverage, we set this predicted resource availability out against the resource needs benchmarks (a basic UHC package; and population-wide demand for health care). The resulting financing gaps are shown in the graphs below.

The first graph (basic UHC) shows a large and widening gap into the future. Bearing in mind that current health expenditure from the government and donors is 26 USD per capita (2012/13) the difference with the estimated needs to supply basic health services (USD 86 per capita) is large. The gap equates to around 10% of GDP at the moment and could rise to reach 11% by 2024/25. This is 37% of the government budget and could grow to 46% by the end of the projected time period.

The wider financing gap (below) sets the available resources against the resource needs of 124 USD per capita. Bearing in mind that current health expenditure per capita is just less than 40 USD in Tanzania (2012/13) the difference is equally large. The gap equates to around 14% of GDP at the moment and could rise to reach 16% by 2024/25. This is around 50% of the budget and could grow to 65% by the end of the projected time period.

![Graph showing resource gap](Image)
Additional sources of funding

In light of the large financing gaps in the absence of new policy interventions, we explore what could be done to generate more resources for health. We discuss separately an increase in budget allocation and health insurance coverage rates, and the potential of innovative sources of funding and efficiency savings.

**Budget Allocation** - The current national Health Sector Strategic Plan has noted the financing gap and it states that the government will be “increasing the share in the total health budget to 10% by 2015” (MoHSW; 2009 (Pg.32). With the current health budget just announced at 6% of the total budget for 2014/15 that policy objective will not be achieved. Therefore the second modelled scenario starts from the hypothesis that the Government of Tanzania does prioritise the health sector and budget allocation is expanded gradually over the next ten years to meet the 15% Abuja target by 2024/25. This provides extra revenues of 154.2 bln TzSh in 2015/16 rising to 3,215 bln in 2024/25. This is an average of 773 million USD a year for the next ten years and accounts for 5% of total public expenditure. This could cover 11% of the minimum ‘policy as usual’ financial gap over the ten years, and 8% of the wider gap.

**Health Insurance** - The nascent health insurance sector in Tanzania is small and fragmented. NHIF is one of the largest HI schemes in terms of membership in Tanzania. The Community Health Fund (CHF), which provides subsidised health services for the rural informal sector, is slightly greater. There is also the National Social Services Fund Social Health Insurance Benefits scheme (NSSF-SHIB) for those working in formal private sector and parastatals; and other Private Health Insurance (PHI). In total around 15% of the population are covered by health insurance. This is far from the Governments’ goal of covering 30% of the population by 2015.

As the Health Sector Strategic Plan III (2010 – 2015) states: “The MOHSW prefers improvement of health insurance schemes rather than increase of out-of-pocket expenditure by patients. It will also initiate activities towards increasing coverage of the social health insurance eventually reaching universal coverage”
In terms of resources to the health sector, insurance contributions accounted for only 5% of health care expenditures in 2008/09 and have risen to 11% in 2013/14. If the government was to continue its HI schemes the projections for growth look set to reach only 13% of total health sector resources by 2024/25. If there were major policy prioritisation to reform and improve the health insurance sector it is projected that HI could account for almost 50% of total health care expenditures in Tanzania by 2024/25.

The left hand chart below (millions Tanzanian shillings) shows the usual case with a breakdown of the various insurance schemes. The right hand chart shows the significantly greater potential if a more effective policy was put in place to raise health insurance coverage to 50% of the population.

If the increase in health insurance contributions is realised the extra revenues from health insurance could cover up to 42% of the minimum health needs financing gap in 2024/25 (from the current 5%). The same rise in health insurance would cover 30% of the wider THE financing gap by 2024/25.

There are currently some questions regarding whether the NHIC is financially sustainable, and notable the NHIF expects its financial reserves to be depleted in the near future. Before this point arrives there needs to be some action from the government to ensure the future of the NHIF. If not the coverage of civil servants and their beneficiaries will not be sustainable, let alone the goal of UHC.

**Innovative Financings Mechanisms** - Table A below summarises the resources that could be available from each of these alternative funding mechanisms each year on average for the next ten years. It is clear that these levies would be insufficient to fill the financing gap. The full amount would only cover 4% of the minimum gap or 2.9% of the wider financing gap. Apart from that there are also issues of political and technical feasibility that have to be resolved before these type of taxes can be put in place.
Table A - Potential Revenues from Alternative Funding Mechanisms for Health (Ten year average)

<table>
<thead>
<tr>
<th>Alternative Funding Sources M USD</th>
<th>As % Wider Financing Gap</th>
<th>As % Minimum Financing Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Funding Sources M USD</td>
<td>246</td>
<td>-4.0%</td>
</tr>
<tr>
<td>Alternative Funding Sources M TzSh</td>
<td>461,173</td>
<td>-4.0%</td>
</tr>
<tr>
<td>Earmarked Taxation</td>
<td>385,092</td>
<td>-3.3%</td>
</tr>
<tr>
<td>Remittances Levy</td>
<td>2,084</td>
<td>-0.02%</td>
</tr>
<tr>
<td>Airtime Levy</td>
<td>68,785</td>
<td>-0.6%</td>
</tr>
<tr>
<td>Alcohol Levy</td>
<td>256,381</td>
<td>-2.2%</td>
</tr>
<tr>
<td>Airline Levy</td>
<td>57,842</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Mainstreaming</td>
<td>76,080</td>
<td>-0.7%</td>
</tr>
<tr>
<td>Private sector mainstreaming</td>
<td>76,080</td>
<td>-0.7%</td>
</tr>
</tbody>
</table>

Efficiency Savings - The methodology for estimating efficiency savings is spelt out in the annex. The methodological limitations of the estimation technique are important, and these results are only directionally correct. The analysis suggests that Tanzania is about 30% less efficient compared with the most efficient countries. If Tanzania was to put emphasis on improving efficiency it is estimated this could improve to only 18% less efficient by 2024/25. The impact of this would be that the resources required for health in 2024/25 would be reduced if existing expenditure was spent more effectively (that is, improving efficiency without increasing spending). This would reduce national health resource needs – see Figure A. Nominally, the wider resources needs of 10.8 billion TzSh on average per year could fall to around 9.7 billion over the ten years. This would close the gap by 10%.

The significance of implementing such efficiency measures is not simply that they would result in saving the health programme of the United Republic of Tanzania 1.1 billion TzSh per year by 2024/25 but that such savings would be achieved without any increase in spending. They would be due solely to efficiency improvements of existing implementation. [See Scope for Efficiency Savings for an analysis of the proposed efficiency interventions]. Such measures are within the control of the government of Tanzania.
**Figure A - Impact of Efficiency Measures on Health Resource Needs**

![Graph showing impact of efficiency measures on health resource needs](chart)

**Closing the gap: The effects of new policy measures for additional resources for health**

Figure B and Figure C show the result on the basic and wider financing gap of the new policy measures that would generate additional funding for health: additional government contributions, accelerated health insurance coverage, innovative sources of funding and efficiency savings.

Figure B shows the basic package ‘minimum’ funding gap. It shows how raising the budget allocation to 15% and health insurance coverage to 50% of the population would close the gap by 20%. This would contribute 1.2 billion USD per year to the health sector on average over the next ten years. This equates to 2.1% of GDP, and reduces the 'policy as usual' minimum financing gap from 11% of GDP to 9%.

Figure B also shows how the innovative financing sources and efficiency gains can reduce the financing gap (see orange and yellow bar charts, respectively). With all mechanisms accounted for the financing gap remains at 3.6 billion USD in 2024/25; 4.4% of GDP. This is, however, a significant reduction from the 'policy as usual' scenario gap of 11% of GDP.
Figure C concerns the wider financing gap (population-wide demand for health services). The initial gap from the ‘policy as usual’ case is followed by three new bar charts, these include the following innovative actions, similar to the approach for the ‘minimum’ funding gap:

- **Innovative Action Financing Gap** – Includes the rise of government budget allocation from 6% to 15% and the increase in health insurance to 50% of the population by 2024/25.

- **Financing Gap with Innovative Funding** – Includes the previously mentioned changes plus monies from imposing new earmarked taxes and mainstreaming health issues.

- **Financing Gap with Innovative Funding and Efficiency Savings** – This adds the penultimate element to new possible financing options: if policies were put in place to make the Tanzanian health system become more efficient the gap would reduce further.

The resultant gap (in yellow bar chart) is the amount of borrowing that would be needed as a last resort to close the health financing gap to meet basic needs.
In the scenario shown, the financing gap with all innovative actions taken into consideration still accounts for 6% of GDP in 2024/25. This is reduced from the 15% projected if no action is taken.

**Financing gap with revenue from natural resources**

Projections suggest that the newly discovered natural resources could start positively impacting GDP and government revenues by 2016/17. This would be at a low level as investment projects kick off. The analysis suggests that if the situation in health was to remain as it is today (budget allocation of 6% of the discretionary current expenditures) but within the higher growth and subsequently raised budget it is projected that the health sector could receive an extra 7 million USD p/a in the near term rising to around 35 million USD p/a in the longer term. This equates to a rise of 1% a year in the available resources for health (THE), and would increase public expenditure on health by 2% a year. In terms of assisting in closing the financing gap these cautious projections for gas revenues are of not great significance. In sum they account for 1.6% of the ‘policy as usual’ wider financing gap. Therefore it is not recommended that the health sector rely on this potential income flow as a short term fix for the sustainable financing issue.

**How to achieve efficiency savings in Tanzania?**

In the previous section we used estimations of potential efficiency savings in Tanzania. This approach is directionally indicative at best. The real question facing policy makers is how to practically achieve efficiency savings. In Chapter 8 of this report we bring together elements of this answer by dredging the existing Tanzania health reports and analyses and by conducting
interviews with key stakeholders to identify practical policy suggestions. We then map these into the WHO World Health Report 2010 framework – which argues that between 20% and 40% of all health resources globally are wasted (WHO, 2010) – to distinguish efficiency challenges and associated recommended interventions into different thematic areas (WHR 2010).

The result emphasises the outcome of the Tunis Declaration (July 2012), which committed African states to the notion that wider and more equitable coverage of health services and greater performance of health systems would be achieved through the more effective and more efficient use of both existing and additional public and private resources.

This paper interrogates areas for efficiency reform across the entire spectrum of the Tanzanian health system, presenting a thorough analysis in Annexure E. For the purposes of this fiscal space evaluation, however, it locates Tanzania’s health efficiency challenges within four categories of inefficiency, suggesting ten ‘areas of intervention’ within which the MOHSW is encouraged to initiate/concentrate its efficiency reforms. Table B highlights 10 efficiency reform ‘quick wins’ below:

Table B - 10 Efficiency Reform ‘Quick Wins’

<table>
<thead>
<tr>
<th>Area for intervention</th>
<th>10 Efficiency Reform ‘Quick Wins’</th>
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<tbody>
<tr>
<td>Human Resources for Health</td>
<td>Staff Productivity and Efficiency:</td>
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<tr>
<td></td>
<td>• Improve Human Resource management and supervision:</td>
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<td></td>
<td>o Use research, spot visits and supportive supervision to ensure that staff are at their posts and engaged productively in clinical care.</td>
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<td></td>
<td>o Manage staff performance on the basis of workload &amp; patient volume.</td>
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<td></td>
<td>o Ensure that district and regional health teams provide appropriate supportive supervision to facilities and districts.</td>
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<td></td>
<td>o Strengthen HR management.</td>
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<td></td>
<td>Skills Shortages and Training:</td>
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<tr>
<td></td>
<td>• Capacity building needs to take place on-site. Off-site meetings and seminars should also be reduced.</td>
</tr>
<tr>
<td>Medicines</td>
<td>Payment of higher than necessary prices for medicines:</td>
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<tr>
<td></td>
<td>• Coordinate (and ideally pool) the procurement of medical commodities between government and development partners.</td>
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<td></td>
<td>Eliminate inefficiencies at the MSD:</td>
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<tr>
<td></td>
<td>• Improve record-keeping for drugs and medical supplies delivery.</td>
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<tr>
<td></td>
<td>• Track and monitor the MSD delivery rate.</td>
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<td></td>
<td>• Don’t stop drug delivery in June on account of zonal office stock-taking.</td>
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<td></td>
<td>• Ensure that health centres and dispensaries are fully utilising their allocations.</td>
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<tr>
<td>Leakage</td>
<td>Reduce waste and leakages:</td>
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<td></td>
<td>• Continue to eliminate ‘ghost workers’ from the payroll.</td>
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<td></td>
<td>o Implement measures to ensure that personnel records are timeously adjusted to reflect dismissals, absconders, retirements and deaths.</td>
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<td></td>
<td>• Investigate why the MOHSW is allocating and disbursing funds for primary health facilities that either do not exist or are not yet operational.</td>
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<td></td>
<td>• Eliminate ‘fiscal dumping’ – disbursements to hospitals and health facilities made in the last quarter of the financial year – to improve ability to fully spend allocations.</td>
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<tr>
<td>Enabling factors</td>
<td>Health Financing:</td>
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<tr>
<td></td>
<td>• Improve the absorption of funds: Ensure that the full health allocations are spent.</td>
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<td></td>
<td>• Improve disbursement</td>
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<tr>
<td></td>
<td>o Provide districts and facilities with more accurate budget forecasts.</td>
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<td></td>
<td>o Improve the speed with which finances are disbursed.</td>
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<td></td>
<td>o Improve accountability and eliminate complicated disbursement procedures.</td>
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<td></td>
<td>Service Delivery:</td>
</tr>
<tr>
<td></td>
<td>• Improve the functionality of the referral system.</td>
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Integrate components of vertically implemented programmes (particularly across HIV & AIDS, TB and malaria control).

Leadership and Management:
- Remove information ‘gate-keeping’: Improve the dissemination of and access to information to regional teams – from both community and central levels.

Health Information Systems:
- Institutionalise good practices like those implemented in Urumba (withholding per diems until report quality improves; use improved reports to organise district stocks of supplies and medicines to eliminate stock-outs; etc.).

As is argued in WHR 2010, eliminating just some of this waste would enable countries such as Tanzania to move more rapidly towards universal coverage

Conclusions

The overall conclusion of the analysis is that Tanzania’s health policy initiatives currently in place will not achieve universal coverage, even for a basic package of health services, in the foreseeable future (2024/25). There are a number of feasible initiatives that can be taken to obtain a better alignment between policy ambitions and the means to achieve these. These focus essentially on increasing health expenditure, in combination with more efficiently and effectively spending the health resources:

Health as a Budget & BNR Priority to Achieve UHC - Health does not receive the political and budgetary priority commensurate with the explicit policy ambitions of universal health coverage. To align the one with the other, health should be elevated and should be upgraded to the Big Results Now policy, following which it would receive a higher priority in resource allocation, with a view to gradually reaching the Abuja target.

Improved Planning and Budgeting for Effective Near-Term Financing and Service Delivery - As the Tanzanian health sector is heavily donor dependent, and donor contributions are highly volatile, systematic investment in health is undermined. Better planning and budgeting mechanisms are required so that capital and recurrent expenditure finances an effective health system.

Health Insurance is vital to ensuring Long Term Sustainable Health Financing - With the view to generating enough resources and in a way that limits exposure to financial risk, health insurance development should receive adequate attention. This aspect is recognised by the government, and this analysis underscores this. To date, results in terms of contribution to health financing and population coverage remain modest.

Alternative ‘Earmarked’ Funding Sources can Support the Health Sector - Although not a panacea, alternative sources of funding can provide a steady, sustainable and equitable way of generating resources for health. Several options are part of the funding mix and could be explored in more detail when elaborating a medium to long term health financing strategy.

Efficiency Savings can Reduce the Financing Gap - Efficiency savings hold significant potential for increasing fiscal space. These savings will not be realised without substantial effort. Such measures with their associated cost reductions are within the control of the Government of Tanzania. Therefore, in addition to increased allocation of resources to health, the ministry of health should commit to improving the efficiency of the health system. International comparison shows that significant efficiency savings can be made, and this is confirmed by a review of the many policy recommendations that have been made in the last couple of years in this area. The
ministry of health should engage on a programme to identify, quantify, prioritize and implement efficiency savings measures.

However, even if all of the above is put in place, the analysis suggests that Tanzania will not achieve universal coverage, nor will it be able to satisfy what is believed to be a population-wide demand for health services. In light of this two measures should be considered in the short run:

**Carry out a Tanzania-Specific Health Costing** - The resource needs estimate for universal coverage used in this work is derived from an internationally developed recommendation. There would be merit in engaging developing an expenditure plan that sets out what the ministry realistically can spend towards UHC in the coming 3, 5 and 10 years' time.

**Tanzania should Lobby for International Health Financing** - One of the major reasons that Tanzania is unlikely to achieve UHC any time soon is because it is a low income country. Even if growth rates are positive, spurred by natural resource discovery, the amount of resources for health that the economy can generate falls short of what is required to offer the population universally access to a basic package of services. The only way to fill any ‘residual’ financing gap is through donor funding.
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<td>AfDB</td>
<td>African Development Bank</td>
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<td>AG</td>
<td>Auditor General</td>
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<td>APHFTA</td>
<td>Association of Private Health Facilities in Tanzania</td>
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<td>BRN</td>
<td>Big Results Now</td>
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<td>CHF</td>
<td>Community Health Fund</td>
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<td>CHMT</td>
<td>Council Health Management Team</td>
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<td>DEA</td>
<td>Data Envelope Analysis</td>
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<td>DHS</td>
<td>Demographic and Health Survey</td>
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<td>DMO</td>
<td>District Medical Officers</td>
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<td>EAC</td>
<td>East African Community</td>
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<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
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<td>FY</td>
<td>Financial Year</td>
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<td>FYDP</td>
<td>Tanzania Five Year Development Plan (2012)</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>GiZ</td>
<td>Deutsche Gesellschaft für Internationale Zusammenarbeit (German International Development Agency)</td>
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<tr>
<td>GoT</td>
<td>Government of Tanzania</td>
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<td>HIM</td>
<td>Health Information Management</td>
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<td>HMIS</td>
<td>Health Management Information System</td>
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<td>HSSP</td>
<td>Health Sector Strategic Plan</td>
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<td>HTRS</td>
<td>“Hard-To-Reach-Stay”</td>
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<td>IAPAL</td>
<td>International Air Passenger Adaptation Levy</td>
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<td>IHI</td>
<td>Ifakara Health Institute</td>
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<td>ILS</td>
<td>Integrated Logistics System</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>ISC</td>
<td>Inter-Ministerial Steering Committee</td>
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<td>LGA</td>
<td>Local Government Authorities</td>
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<td>LTPP</td>
<td>Long-term Perspectives Plan (2012)</td>
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<td>MoF</td>
<td>Ministry of Finance</td>
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<td>MoHSW</td>
<td>Ministry of Health and Social Welfare</td>
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<td>MoL</td>
<td>Ministry of Labour</td>
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<td>MMAM</td>
<td>Mpango wa Maendelo ya Afya ya Msingi</td>
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<tr>
<td>MSD</td>
<td>Medical Stores Department</td>
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1 Introduction

Tanzania has pursued an active health financing strategy since the early 1990 with the introduction of user fees. This was followed by a multitude of reforms to suit evolving health policy objectives, and insights in the ways to achieve these. Today the focus is once again on health financing, as the country commits to universal health coverage (UHC). UHC is an ambitious health policy objective, which requires a series of interlinked health system reforms to be followed carried out, as well as a health financing strategy that not only delivers enough financial resources, but also ensures that revenue collection and spending is progressive, and resources for health are to a large extent pooled.

To tackle this complex policy challenge, the government put in place an Interministerial Steering Committee, and called for the development of nine background papers. This report is one of those papers.

The central question that this paper addresses is how much resources for health Tanzania could make available for health over the next 10 years. In order to get a sense whether this is enough to achieve UHC, we also compare resource availability with estimations of the cost of UHC (and, additionally, population-wide demand for health care).

At the centre of the approach followed in this paper is a fiscal programming framework that allows us to estimate essential economic, public finance and expenditure variables over the period 2014 – 2025. Within this framework we can coherently situate what are commonly seen at the most important sources of fiscal space for health:

- Additional government revenue, especially an estimation of budgetary expansion following recently discovered natural resources, and innovative sources of funding including hypothecated taxes;
- An assessment of the room for increased prioritisation of health in the allocation of general public expenditure;
- Contributions from external donors, including suggestions as to their future level of contributions;
- Efficiency savings in health, which decrease the resources required to achieve universal health coverage, and;
- Borrowing for health.

Each of these sources are quantified and integrated in a coherent fiscal framework, which has the added advantage that suggested policy interventions for additional fiscal space for health are only put forward if they are deemed prudent and safe from a macroeconomic point of view. To provide policy makers with a sense of the room in which they can devise health financing policy, we distinguish between a scenario of ‘policy as usual’, which shows outputs if no policy measures other than those currently in place are implemented; to contrast with a scenario of ‘new policy initiatives’ that aim to increase fiscal space for health.

Prior and subsequent to the description of the outputs of this model, we discuss general approaches to fiscal space, carry out an historic expenditure analysis, and review the body of evidence available on health system efficiency in Tanzania. The document is structured as follows:

Section two provides an overview of what is commonly understood by fiscal space, what the sources of fiscal space are, and how fiscal space can be increased. This section draws from
the international literature and provides a methodological framework for this work, and a common vocabulary to the reader.

Section three assesses fiscal space issues in Tanzania, starting from a macro centre-of-government perspective, down to issues of budgeting and expenditure in health. For each of the areas of analysis, it draws conclusions with regards to fiscal space for health.

Sections 4 to 7 constitute the core of the analysis. First we describe the setup of the fiscal programming framework, the approach to determining the resource requirements for universal health coverage (and population-wide demand for health care), and determine a ‘policy as usual’ financing gap up to 2025. In section five we assess whether traditional sources of funding – the government budget and health insurance – could generate more resources than projected in the baseline scenario. In section six we analyse potential contributions from innovative sources of funding and efficiency savings. In section seven we recalculate the health funding gaps with these additional sources of funding.

Section eight explores in more detail how efficiency savings could be materialised in Tanzania. We carried out a review of the major efficiency related studies in Tanzania, and map their empirical findings and recommendations into a framework with the major causes of inefficiency developed by the WHO. Section nine concludes.
2 Overview of Existing Fiscal Space Analyses

The economy of the United Republic of Tanzania has achieved considerable growth over the past 5 years, averaging 6.8% in the period since 2007/2008, in spite of the global economic recession. In 2013 the economy achieved a GDP growth rate of 7.1%. The World Bank projects that Tanzania will sustain such levels, achieving annual GDP growth of 7.4% (2014), 7.6% (2015) and 7.8% (2016) going forward (World Bank; 2014). Since 2007/2008, the government of Tanzania has also managed to increase domestic revenue collection, from 15.9% of GDP in 2007/08 to 17.6% in 2012/13. At the same time, government has continued to raise the fiscal deficit by substantially increasing expenditure beyond domestic revenue collection.

Economic growth, improved domestic revenue collection and increased government spending will have implications across the Tanzanian economy. These implications will be explored in greater detail in chapter 3. In the present chapter we will consider the concept of ‘fiscal space’ and how to achieve it, as well as the literature that argues why to increase fiscal space for health. The chapter will thus be supported by an analysis in chapter 3 of Tanzania’s health revenues and expenditure, by an estimate in chapter 4 of the fiscal space for health in Tanzania and by an exploration of innovative financing mechanism options in chapter 6.

The chapter takes as its lead the Long-term Perspectives Plan commitment to achieve Universal Health Coverage by 2025 (President’s Office; 2012). Despite Tanzania’s recognition of health as a human right and strong commitment to universal access, the government has not given itself the means to pursue these objectives. Budget allocations to health have not improved in recent years, and priority funding has been allocated across the Big Results Now (BRN) sectors of agriculture, education, energy, transportation, water and resources mobilisation.

The commitment to achieving Universal Health Coverage (UHC) takes place within a context in which low and middle income countries face the compounded challenge of epidemiological transition, an increasing availability of effective but expensive medical care, and changes in the demand and expectations of health services. This is made all the more difficult in a climate of competing interests as countries seek to scale-up their efforts to achieve the MDG goals (Powell-Jackson, et al. 2012) as well as by the slowing down of development partner support in the wake of the global economic crisis.

2.1 Defining Fiscal Space

What is ‘fiscal space’?

‘Fiscal space’ is a relatively new term that, in its broadest sense, refers to “the capacity of government to provide additional budgetary resources for a desired purpose without any prejudice to the sustainability of its financial position” (Heller, 2006). It refers to the effort to create room within the budget for additional spending while at the same time not jeopardising the fiscal stability of the economy.

The concept has come to the fore in the debate regarding what constitutes sound fiscal discipline. It is often an argument for increased prioritisation of spending on areas that have not traditionally been viewed as prudent investments when governments are attempting to improve their financial well-being. The argument is that ‘fiscal space’ should be created for such investments because spending in these areas creates productive assets that pay for
themselves over the long term. Financing infrastructure projects through additional borrowing is one such example. Another is increased outlays for health and education, where spending is considered an investment in the future that will eventually pay for itself through higher returns to human capital (Heller; 2005).

The term has become common as part of the criticism of the emphasis of a fiscal framework driven by purely fiduciary logic. Roy et al (2007) criticise fiscal frameworks that are based solely on fiduciary logic as being too focussed on short-term fiscal solvency and sustainability. They consider the single-minded emphasis on the role of fiscal policy and public finance as being essentially prudential as constituting “paradigmatic dogmatism” and argue that such an emphasis is primarily concerned with the short-term consequences (and mainly the potential adverse effects) of an increase in public expenditure and underestimates the long-term impact of spending on development objectives.

Thus, where governments are required to find fiscal space – through, for example, commitment to the MDGs – an analytical framework that assesses the sustainability and solvency of fiscal expansion is not able to measure the developmental implications of increasing fiscal space.

For Roy, et al (2007) ‘fiscal space’ is defined less in terms of the emphasis on the ‘gap’ or ‘room’ in the budget for ‘additional’ spending and more in terms of political economy factors. They define fiscal space as “the financing that is available to government as a result of concrete policy actions for enhancing resource mobilization, and the reforms necessary to secure the enabling governance, institutional and economic environment for these policy actions to be effective, for a specified set of development objectives” (Roy, et al; 2007).

In place of a fiscal framework driven by purely fiduciary logic Roy et al (2007) suggest a more development-centred fiscal framework, one where well-designed public investment programmes target long term human development outcomes. While recognising the importance of a hard ‘current budget deficit rule’ that imposes real limits on runaway government spending and a stringent savings indicator policy requirement they argue that socio-economic disparities and broad international development objectives require a substantial rethink of the purpose of fiscal policy. All the while, they emphasise that a long-term development-oriented fiscal framework is meant to complement rather than replace existing fiduciary assessments focused on short-term fiscal stability (measured through annual fiscal balance) and solvency (measured through the ratio of debt to GDP). A development-centred fiscal framework is thus not at all less fiscally disciplinary than a fiduciary one. Rather, it targets longer-term development transformation instead of short-term fiduciary outcomes (Heller; 2006).

Roy, et al (2007) provide Thailand as an example of a country that has used “well-targeted public investment and human development-related spending” as “the main drivers of fiscal expansion”, arguing how the Thai government was able to take a long-term view that facilitated both the implementation of “policies that secured fiscal sustainability” as well as “supporting a significant permanent increase in per capita public spending”.

2.1.1 What are the sources of ‘fiscal space’?

There are five sources through which a government can expand fiscal space, but it must do this without compromising either macroeconomic stability or fiscal sustainability. It must ensure that in creating fiscal space it has the short term and longer term capacity to finance its desired expenditure programmes while at the same time being able to service its debt. The five sources for expanding fiscal space are (Heller, 2005; Heller, 2006; Roy et al, 2007):
1) Official Development Assistance (ODA) (through aid and debt relief);
2) Domestic revenue mobilisation (through improved tax administration or tax policy reforms);
3) Deficit financing through domestic and external borrowing;
4) Reprioritisation and improvements (efficiency savings) in expenditure efficiency; and
5) Monetary expansion (printing money) to finance public programmes.

Thus, there are a variety of ways that governments can increase ‘fiscal space’, and none have to be pursued alone. The decision about how to do so is a policy choice dependent upon how consistent that source is with the country’s macroeconomic fundamentals. The choice is inherently country specific. It requires “detailed assessments of a government’s initial fiscal position, its revenue and expenditure structure, the characteristics of its outstanding debt obligations, the underlying structure of its economy, the prospects for enhanced external resource inflows and a perspective on the underlying external conditions facing an economy” (Heller; 2006).

2.2 Increasing fiscal space for Health

2.2.1 Why increase fiscal space for health?

McIntyre and Meheus provide a compelling argument for why governments should increase fiscal space for health (and other social services) in a recent (March 2014) paper (McIntyre & Meheus; 2014).

In it they argue, firstly, that Universal Health Coverage (UHC) is the primary global health policy agenda, requiring that governments provide universal access to health services, that health services be of adequate quality and that populations have financial protection from potentially catastrophic costs of using these services. Member states of the WHO, of which the United Republic of Tanzania is one, have committed to realising the goal of UHC – in Tanzania, by 2025. In World Health Assembly Resolution 58.33 (2005), WHO member states also committed to expanding Social Health Insurance, Universal Coverage and to providing protection from catastrophic costs of health financing.

Secondly, McIntyre & Meheus argue that of the four dimensions of sustainable development identified by the UN System Task Team on the Post-2015 UN Development Agenda, two are intricately related to ‘health’: namely, inclusive social development and inclusive economic development. “Ensuring that people’s rights to health and education, including through universal access to quality health and education services, is vital for inclusive ‘social development’ and requires investment to ‘close the gaps in human capabilities that help perpetuate inequalities and poverty across generations’. “Inclusive economic development similarly requires investment in people’s capabilities through public spending on social services, particularly health, education and nutrition...” (McIntyre & Meheus, 2014 but with reference to UNDP; 2013).

Thus both the health policy focus on Universal Health Coverage and the broader post-2015 sustainable development goals discussions call for increased government funding of health and other social services.
2.2.2 How – theoretically – can governments increase fiscal space for health?


Tandon & Cashin (2010) build on Heller’s fiscal framework to outline five ways through which to generate fiscal space for health (Tandon & Cashin; 2010). This section will briefly explore each of the five options in turn:

1) Conducive macroeconomic conditions, in particular GDP growth and tax revenue;

2) Prioritising health within the government budget;

3) Taxes earmarked for health and other health sector-specific resources;

4) External grants for health; and

5) Efficiency improvements in the health sector.

Notice that borrowing (from both domestic and foreign lenders) and the printing of money (monetary expansion) have been removed from this framework.

1) Conducive macroeconomic conditions,

This refers to opening fiscal space through additional national income generated by improved economic growth (GDP growth), through additional revenues raised by increasing taxes or through improving tax collection or through reduced levels of fiscal deficits and debt.

Sustained high levels of economic growth is a significant factor for, although health might for example remain unchanged at a certain share of GDP (e.g. 5%) year on year, GDP growth (of, for example, 7.5%) means that government spending on health will remain at the same proportion of the budget (i.e. 5%) but that the financial allocation towards health will increase by 7.5%.

Domestic revenue mobilisation refers to generating additional revenue by increasing taxes or improving tax collection. For countries with low ratios of government revenue to GDP, broadening the tax base and improving tax administration in order to raise the revenue share in GDP are likely to be important objectives. For low-income countries, a tax ratio of 15% of GDP should be seen as a minimum objective (Heller; 2005). According to Roy et al (2007), “Public revenues as a proportion of GDP averaged nearly 43% in developed countries but only 28% in middle-income countries and 23% in low-income countries in 2000.” As we will see in Chapter 3, domestic revenue as a proportion of GDP in Tanzania has been increasing since 2006/07 owing largely to improved tax collection and the rise in income tax. Indeed, the latest national budget statistics note that domestic revenue as proportion of GDP increased from 15.9% in 2008/09 to 17.0% in 2012/13 and is likely to reach 18.2% in 2013/14 (MoF; 2014).

2) Prioritising health within the government budget

A second source of fiscal space for health is for the health sector to receive greater prioritisation within the overall government budget by receiving a larger share of government spending. In general, cross-country comparisons show a wide variation in
government spending on health, even among countries with a similar income. (Powell-Jackson & McIntyre; 2012). Although other factors such as donor contribution and budget absorption rates impact public health spending, the share of public expenditure allocated to health is widely seen to be an expression of the priority given by governments to health.

The allocation of the budget is a highly politicised process and decision makers are faced with competing needs for which compelling cases are being put forward. Arguing for a reallocation of a larger share of the budget to health is therefore typically not an easily attained source of fiscal space in most countries (Tandon & Cashin; 2010).

Cross-country comparisons, particularly where the share of health in the government budget is lower than in comparison to countries in the region with similar income levels, provides a powerful advocacy tool for raising health’s share of overall government spending, as does a fiscal space analysis that demonstrates the need and potential impact of increasing the share of public resources devoted to the health sector (Tandon & Cashin; 2010).

3) Taxes earmarked for health and other health sector-specific resources

Earmarking taxes for health are another method through which to create fiscal space for health. Earmarking can involve dedicating an entire tax to fund a particular intervention (e.g. a dedicated payroll tax to fund social health insurance) or setting aside a fixed portion of a particular tax to fund the programme (e.g. a fixed proportion of general tax revenues allocated to the health budget). They might also entail specific user charges in public health facilities. Their purpose is the same, to increase the resource base for public spending on health.

Levying ‘sin taxes’ – taxes on goods that have adverse health effects, notably tobacco and alcohol – are another form of earmarking. They are considered justified due to imposing consumption charges on those who use them in lieu of the costs that these products generate impacting on the society beyond those who simply consume them.

Social health insurance (SHI) can provide another source of health sector-specific fiscal space. SHI collects mandatory financial contributions from designated segments of the population, typically through payroll taxes, and pools these contributions in independent funds to pay for services on behalf of the insured to finance public health care and to improving financial risk protection (Tandon & Cashin; 2010).

Earmarked taxes, however, create significant economic rigidities and may in fact ‘crowd out’ other expenditures (Heller; 2006). What is more, earmarking is often viewed as imposing an unnecessary constraint on fiscal policy-making, one that reduces flexibility and allocative efficiency (Tandon & Cashin; 2010). Thus, while it is not unusual that calls be made to introduce earmarked taxes as a way to insulate health spending from other competing publicly funded activities, these calls are generally supported by political rather than economic arguments (Tandon & Cashin; 2010).

4) External grants for health

Official Development Assistance (ODA) provides an additional source of fiscal space. In the effort to achieve the MDGs, many developing countries have come to rely on such support. The challenge with ODA, however, is that only a sustained and predictable flow of grants can create the potential for a scaling up of expenditure that can be maintained
by the recipient government beyond the expiration of the ODA. Most development partners are unwilling to commit to funding beyond a one- or two-year timeframe. This uncertainty, coupled with concern about exploiting readily available but short-ODA, rightly discourages recipient countries from accepting such funds to scale-up programmes, particularly where such programmes have high costs of downsizing (e.g. antiretroviral treatment) (Roy et al; 2007).

Moreover, the experience of many countries is that grants can be highly volatile, as a consequence not only of donor decisions and bureaucratic processes but also due to policy slippages by recipient governments. “Volatility and unpredictability of aid flows increase the risk of establishing services that cannot be sustained if aid flows are drastically reduced or discontinued, and temporary changes in relative prices may have long-term effects such as driving some private suppliers from the market” (Tandon & Cashin; 2010). The current decline in development partner support since the great recession (Whiteside; 2013) is already hampering the current ability of countries to finance the continued acceleration of programmes.

A key issue in the debate about ODA as a source of fiscal space for health is whether it is in fact additional or if it merely displaces or offsets domestic health sector resources. “A study of sources of health funding for 144 countries between 1995 and 2006 showed that a 1% increase in donor funding was associated with a 0.14% decrease in government spending on health among low-income countries, independent of changes in per capita GDP” (Tandon & Cashin; 2010 but referencing Farag et al; 2009).

Moreover, off-budget ODA support has some benefits but these are outweighed in the eyes of the recipient country by being difficult for Ministries of Health to ensure that funding flows to nationally prioritised health programmes.

Finally, there are potential macroeconomic consequences that may arise from a significant scaling up in absorption of external resource inflows that have risks for inflation and which may hamper a recipient country’s international competitiveness.

Thus, while attractive, the fiscal space opportunities offered by ODA might be less attractive than is apparent on the surface (Heller, 2005; Heller, 2006).

5) Efficiency improvements in the health sector.

Fiscal space created through efficiency improvements can take a variety of forms: increasing the efficiency with which services are delivered or transfers targeted (‘technical efficiency’), improving the allocation of resources so as to adjust the ‘mix’ of services and interventions in order to improve outcomes (‘allocative efficiency’), introducing policies that reduce corruption & improve governance, and achieving greater alignment and harmonisation of donor resources.

Within health spending the most commonly recommended areas for improving allocative efficiency are (Tandon & Cashin; 2010):

i. Improved geographic targeting using resource allocation formulas that reduce spending gaps across regions and the typical bias of spending toward urban areas;

ii. Changing the allocation of spending across care levels;
iii. Targeting specific interventions that yield high returns to spending;

iv. Aligning government health expenditures to identified health needs and strategic plans.

Other common sources of inefficiency include rigid public finance systems that have inadequate flexible funds and impede reallocation of funds to areas of highest need; imbalances in input use, particularly excessive expenditures on wages; corruption; low capacity to utilise existing funds; weak management capacity of decentralised units; and leakages from the system, including absenteeism among public sector workers.

The case for cost containment and for efficiency savings within the Tanzanian health system is an important one and will be explored in detail in ‘Scope for Efficiency Savings’ of this report.

In conclusion, the five sources for generating fiscal space for health should not be regarded as independent of each other. Interactions between all five are possible – for example, external grants for health may encourage a government to spend less of its own resources on health.

2.2.3 How – practically – are governments to increase fiscal space for health?

If governments are to generate fiscal space for health, how are they to go about doing so? The first thing to note is that it is only sources #4 (external grants for health) and #5 (efficiency improvements in the health sector) with within Tandon & Cashin’s fiscal framework model that are within the sole, receptively indirect and direct, sway of the Ministry of Health. That the three remaining sources for generating fiscal space – #1 (conducive macroeconomic conditions), #2 (prioritising health within the government budget) and #3 (taxes earmarked for health and other health sector-specific resources) – fall within the remit of the Ministry of Finance means that the Health Ministry must become adept at lobbying the Ministry of Finance with a strong case for increased spending on health. To achieve this will require an understanding of how the Ministry of Finance both considers fiscal space and of how it understands each of these three sources. It is not by coincidence that the current global health agenda targets Ministers of Finance.

With this in mind, it is not encouraging that Powell-Jackson & McIntyre (2012), among others, have observed that Ministries of Health often don’t present a very convincing case to Finance Ministries as to why the health sector needs more government resources. It is also not encouraging to learn that World Health Report 2010 argued that Health Ministries ‘need to learn the language of economists’ (WHO; 2010). Both of these areas will need to receive attention for health ministries to become adept at successfully lobbying for increasing resources for health. Also key in this regard, the literature suggests, is having the credibility that comes with a record of good governance, good past and present performance in public expenditure management and high absorption capacity during implementation (Powell-Jackson & McIntyre; 2012).

In this regard, however, the Tunis Declaration – a joint Declaration by African Ministers of Health and Ministers of Finance (July 2012) that refocused the attention from arguing for ‘more money for health’ to arguing for ‘value for money’ in health’ – is a positive step in the right direction. The Tunis Declaration helped to bring Ministers of Finance and Ministers of Health to the table to discuss and agree upon the need to achieve wider and more equitable coverage of health services, but it did so by concluding an agreement that improved
performance of health systems will be pursued through more effective and more efficient use of existing and additional public and private resources. Health Ministries must continue to work to understand the public financing of social investments from the perspective of the Finance Ministry while Finance Ministers also require improved capacity to understand health. The Tanzanian Finance Ministry are early recipients of the Tunis Declaration Value for Money initiative run by the African Development Bank (AfDB). In particular, the Tanzanian Minister of Finance attending the first one-week training session of the Ministerial Leadership in Health Programme for African Ministers of Finance conducted at Harvard University earlier in 2014, a programme run jointly by the AfDB and the Harvard School of Public Health (HSPH). (Follow this link for further information on the AfDB and the HSPH Value for Money initiative that emerged out of the Tunis Declaration).

2.3 Increasing fiscal space for Health – to what level?

One of the commonly cited constraints to achieving health outcomes is “a lack of adequate and sustained levels of resources”, particularly in low-income countries (Tandon & Cashin; 2012). While the temptation is to generate fiscal space for health by arguing for the proportion of government spending allocated to health to be increased it is first necessary to consider what might constitute a fair share of government resources to be dedicated to health services. This requires considering what level of public expenditure on health countries should be aiming for (McIntyre & Meheus, 2014).

The proportion of public expenditure allocated to health in low-income countries (data from 2007) ranges from 1.1% in Pakistan to more than 15% in Rwanda (Tandon & Cashin; 2012). This broad range provides little guidance.

Williams and Hay (2005) provide a simplistic but highly useful ‘back-of-the-envelope calculation’ for assessing fiscal space available for health. In most low-income countries, public expenditure rarely exceeds 30-35% of GDP. We have also seen that the allocation of government spending on health tops at around 15%. Together, spending 15% of 30%-35% of GDP equates to government spending of 4.5% to 5% of GDP.

A ‘back-of-the-envelope calculation’ is not an adequate basis upon which to determine the allocation of a significant proportion of government spending, but it provides a useful approximation. Were public health spending levels to reach the maximal amounts observed across most low-income countries then this simplistic calculation provides us with ‘upper bounds’ for the magnitudes of increases that are feasible, especially in the short-to-medium term (referenced in Tandon & Cashin; 2012). Such ‘upper bounds’ would be 4.5% to 5% of GDP.

A recent exhaustive review and analysis by McIntyre & Meheus (Fiscal Space for Domestic Funding of Health and other Social Services, 2014) seeks to establish more firmly grounded targets for determining what proportion of government spending countries should aim to allocate to health. According to their framework: “Countries should strive over time to achieve government health spending levels of at least 5% of GDP, supplemented by a minimum target of $86 per capita government and donor funding in low-income countries in order to ensure basic [Primary Health Care] PHC services in cases where meeting the 5% target alone would be insufficient”.

McIntyre & Meheus take as their basis for this 5% target the following results of their analysis:
• Significantly improving health status indicators (e.g., reducing the average IMR to 10 per 1,000 live births) requires government spending of more than 5% of GDP.

• Reducing financial catastrophe and impoverishment to negligible levels generally requires limiting out-of-pocket (OOP) payments to 15–20% of total health expenditure, which, in turn, requires government spending to exceed 5% of GDP.

• Promoting access to needed health care (using as proxies: 90% immunisation coverage, deliveries by skilled birth attendants and a global average of 44 core medical professionals per 10,000 population) requires government spending of at least 5% of GDP.

McIntyre and Meheus also quote World Health Report 2010 noting that “it is difficult for countries to get close to universal [health] coverage at less than 4-5% of GDP, although for many low- and middle-income countries, reaching [even] this goal is aspirational in the short term and something to plan for in the longer run” (WHO; 2010).

While setting a target of government spending at least 5% of GDP on health, McIntyre and Meheus are quick to note that the amount of $86 per capita will fund an almost (though not fully) comprehensive minimum level of Primary Health Care (PHC) services but only if the $86 is devoted fully to PHC services “(and not, for example, spent on high-cost tertiary services) and if these limited resources are used efficiently.”

Moreover, McIntyre and Meheus note that no low-income country and a significant number of lower-middle-income countries that devoted 5% of GDP to health could afford the minimum resource requirement of $86 per capita that it would take to fund basic PHC services for the entire population. The monetary value equivalent to 5% of GDP would be less than the required $86 per person in some countries. Therefore, McIntyre and Meheus make the point that were low-income countries to fund government spending on health at a level of $86 per capita from entirely domestic government sources, this would account for an average of nearly 15% of GDP. Such a level is “clearly unrealistic” (McIntyre & Meheus; 2014).

2 The target of $86 is a per capita amount of combined government and donor spending on health – in 2012 terms – that is required for countries to achieve universal primary health care (PHC) services, or UHC. The amount is intended to be “an aspirational goal for many low-income countries”. The target of $86 should not be considered in isolation. McIntyre and Meheus intend that countries move towards UHC by striving to achieve a government spending level of “at least 5% of GDP” that is “supplemented by a minimum target of $86 per capita government and donor funding in low-income countries”.

If countries are able to meet the target of domestic public spending on health of 5% of GDP and that this then exceeds $86 per capita of government spending on health, then countries will be able to gradually increase the range of health services provided to their populations, since the $86 per capita threshold is for providing ‘an almost (though not fully) comprehensive minimum level of PHC services’. On the other side of the spectrum, where countries meet the target of 5% GDP public sector spending on health but not the additional target of spending $86 per capita – which McIntyre and Meheus point out that ‘no low-income country and a significant number of lower-middle-income countries that devoted 5% of government spending to health could afford’ – this latter target acts as an ‘aspiration target’ for countries to strive towards over time in order to reach basic PHC services in cases where meeting the 5% target alone would be insufficient.
This, then, returns us to the conclusion that the five sources for generating fiscal space for health should not be regarded as independent of each other and should be employed in tandem because, where government spending on health remains below the $86 per capita threshold, considerable development partner support will be required enable countries to meet the $86 ‘government and donor funding’ per capita target. This, as McIntyre and Meheus note, is in line with recommendations for increased development aid for countries to achieve the minimum targets made by both the 2001 Commission on Macroeconomics and Health and the 2009 High-level Taskforce on Innovative International Financing for Health Systems.
3 Analysis of Tanzania’s Health Revenues and Expenditure

In this section we start with an assessment of the general budget and expenditure trends, and then we focus on an analysis of the health budget. Even though African Ministers of Health and Finance have refocused the attention away from ‘more money for health’ to ‘value for money in health’ (Tunis Declaration, 2012), the budget analysis assesses whether Tanzania has been able to move forward with the 2001 Abuja Commitment of African leaders; which requires that 15% of the national budget is allocated to health. It also gauges whether the country has made headway to meet its universal health coverage policy objectives in 2025, as stated in the Long-term Perspectives Plan (LTPP, 2012).

This section will look at the current status of health fiscal allocations and will attempt to identify areas that may need improvements for better health outcomes. Although health is not directly among the national priorities within the Big Results Now initiative, it is clear that health investments impact directly on the quality of human resources.

This analysis includes data from 2001/02 or 2007/08 to 2013/14. The data used depends on the available of consistent time series. The data is from official Ministry of Finance (MoF) and Ministry of Health and Social Welfare (MoHSW) sources. It must be noted that budget data here includes on-budget donor funds. In this chapter when discussing Health Expenditure it must be noted that this does not include out of pocket expenditures, private sector funding, or any off budget donor monies. This differs from the data used in the macro framework chapter which includes all health expenditures (and is referred to as Total Health Expenditure). As a result certain ratios will not be consistent between these chapters.

3.1 Overall fiscal trends

Table 1 presents key fiscal trends of Tanzania during the past seven years. Domestic revenue increased from 15.9 percent of GDP in 2007/08 to 17.6 percent in 2012/13. This rise in tax collection is consistent with a growing and more formalised economy; GDP growth averaged 6.8 percent during the period. However, the fiscal deficit - both before and after grants - worsened, showing that the government continued to raise its expenditure at a faster rate than domestic revenues.

<table>
<thead>
<tr>
<th>Table 1 - Fiscal trend (as a percentage of GDP)</th>
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<tbody>
<tr>
<td>Total revenue</td>
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<tr>
<td>Tax revenue</td>
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<tr>
<td>Nontax revenue</td>
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<tr>
<td>Total expenditure</td>
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<tr>
<td>Recurrent expenditure</td>
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<tr>
<td>Development expenditure</td>
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<tr>
<td>Domestic financing</td>
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<tr>
<td>Foreign financing</td>
</tr>
<tr>
<td>Fiscal balance excl. grants</td>
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<tr>
<td>Fiscal balance inc. grants</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance
Notes: 2007/08 - 2011/12 = Actual, 2012/13 = Provisional, 2013/14 = Budget
up to 2012/13 and as Figure 1 illustrates, there is a greater risk of debt becoming unsustainable when considering the rise in non-concessional borrowing. The fiscal deficit is usually bridged by borrowing from both domestic and foreign markets, however, non-concessional loans have recently increased due to the government’s choice to borrowing commercially for infrastructure from the foreign market, especially starting from 2010/11. Nonetheless, there has been a focus from government on the need to invest as seen by a rise in the levels of domestic development expenditure since 2011/12 as proportion of GDP (see Table 1).

Figure 11 - Foreign Financing (as a percentage of GDP)

![Figure 11 - Foreign Financing (as a percentage of GDP)](image)

Source: Ministry of Finance

However, foreign financing is more volatile than domestic revenue, as shown in Table 2. Grants were close to 7% of GDP in 2007/08 and have reduced to 4.5% over the past 4 years. However, year on year the level of grants has fallen as much as 35% or grown by 48%. Around half the aid support to Tanzania has been in the form of general budget support and basket funding, the remaining is mostly the projects support, these have also been more volatile that domestic revenues. The lack of predictability is problematic for a government to implement medium term strategies.

Table 2 - Revenue by Source (as a percentage of GDP)

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<tr>
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</thead>
<tbody>
<tr>
<td>Domestic revenue</td>
<td>15.9</td>
<td>16.2</td>
<td>15.9</td>
<td>16.4</td>
<td>17.5</td>
<td>17.6</td>
</tr>
<tr>
<td>Grants</td>
<td>6.9</td>
<td>5.1</td>
<td>4.6</td>
<td>4.7</td>
<td>6.9</td>
<td>4.5</td>
</tr>
<tr>
<td>Program, incl. baskets</td>
<td>3.6</td>
<td>3.0</td>
<td>3.1</td>
<td>3.0</td>
<td>2.8</td>
<td>2.5</td>
</tr>
<tr>
<td>Project</td>
<td>2.8</td>
<td>1.7</td>
<td>1.5</td>
<td>1.1</td>
<td>2.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Concessional borrowing</td>
<td>3.4</td>
<td>3.7</td>
<td>4.8</td>
<td>3.0</td>
<td>3.1</td>
<td>2.5</td>
</tr>
<tr>
<td>Non concessional borrowing</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.2</td>
<td>3.2</td>
<td>1.9</td>
</tr>
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</table>

Annual Change

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<tbody>
<tr>
<td>Domestic revenue</td>
<td>-</td>
<td>2%</td>
<td>-2%</td>
<td>4%</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>Grants</td>
<td>-</td>
<td>-27%</td>
<td>-8%</td>
<td>0%</td>
<td>48%</td>
<td>-35%</td>
</tr>
<tr>
<td>Program, incl. baskets</td>
<td>-</td>
<td>-17%</td>
<td>1%</td>
<td>0%</td>
<td>-9%</td>
<td>-11%</td>
</tr>
<tr>
<td>Project</td>
<td>-</td>
<td>-37%</td>
<td>-17%</td>
<td>-27%</td>
<td>176%</td>
<td>-49%</td>
</tr>
</tbody>
</table>
3.2 Overview of government revenue and expenditure

Nominal revenue and expenditure have been rising during the past decade (see Figure 2). According to the recent national budget statement, domestic revenue increased as proportion of GDP from 15.9% in 2008/09 to 17% in 2012/13 and it is likely to reach 18.2% for 2013/14 (URT, 2014). Domestic revenue has been supported largely by the rise in income tax collections. Taxes on imports, VAT, and non-tax revenues have not improved significantly over the time period.

Growth in expenditure has been due to an increased recurrent spending; as proportion of GDP this rose from 15.1% in 2008/09 to 22.5% in 2012/13. Development expenditure increased from 7.9 to 9.3% over the same time period.

Figure 2 - Government Revenues and Expenditures (Million Tanzanian Shillings)

Source: Ministry of Finance

Tanzania budget allocations are to be guided by the national medium and long term plans. These strategies are aimed at revamping the economy, include: the Vision 2025; Long-Term Perspectives Plan (LTPP); 5-Year Plan; the National Strategy for Growth and Reduction of Poverty (NSGRP) [in Kiswahili acronym is MKUKUTA]; and the Big Results Now (BRN) initiative. During the past five years, outstanding priorities in the national budgets have been drawn from these plans as shown in Table 3.

Health is explicitly mentioned in the annual national budgets as one of the priority areas, and is either explicitly or implicitly mentioned in all key plans as part and parcel for human resources development. This implies that the health sector deserves reasonable budget allocation for its development in line with the national priorities.

In practice sectoral distribution of resources in Tanzania show clear bias to MKUKUTA strategy and the BRN. These are Agriculture, Manufacturing, Tourism, Mining, Infrastructure, Energy, Water Supply and Human Resources. As Table 4 shows the MKUKUTA financing has remained the budget priority. Indeed for the past seven years MKUKUTA sectors have received 72% of the total expenditure (or an average of 67% if central government wages are excluded). In the last fiscal year the BRN key results areas received significant fiscal attention in terms of budget. Note that neither of these explicitly view health as a priority sector.
Table 3 - National Objectives and Priorities as per National Plans and Budgets
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<tbody>
<tr>
<td><strong>Objectives and priorities</strong></td>
<td><strong>Objectives and priorities</strong></td>
<td><strong>Priority clusters</strong></td>
<td><strong>Priority sectors</strong></td>
<td><strong>Priority sectors</strong></td>
<td><strong>Priority sectors</strong></td>
<td><strong>Priority sectors</strong></td>
<td><strong>Priority sectors</strong></td>
<td><strong>Priority sectors</strong></td>
</tr>
<tr>
<td>i. High quality livelihood</td>
<td>i. High quality livelihood</td>
<td>i. Cluster I Growth for reduction of income poverty</td>
<td>i. Agriculture, livestock and fisheries</td>
<td>i. Agriculture, livestock and fisheries</td>
<td>i. Agriculture, livestock and fisheries</td>
<td></td>
<td></td>
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<tr>
<td>iii. Well educated and learning society</td>
<td>iii. Cluster III Good governance and accountability</td>
<td>iii. Industry</td>
<td>iii. Infrastructure</td>
<td>iii. Land and habitat development</td>
<td>iii. Land and habitat development</td>
<td></td>
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<tr>
<td>i. Infrastructure</td>
<td>i. Education</td>
<td>i. Energy</td>
<td>i. Agriculture</td>
<td>i. Education</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>ii. Energy</td>
<td>ii. Health</td>
<td>ii. Agriculture</td>
<td>ii. Education</td>
<td></td>
<td></td>
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<tr>
<td>iii. Water supply</td>
<td>iii. Good governance</td>
<td>iii. Water</td>
<td>iii. Transport</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>Social sectors</strong></td>
<td></td>
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</tbody>
</table>
Table 4 - MKUKUTA and Non-MKUKUTA Expenditure (as a percentage of Total Expenditure)

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<tbody>
<tr>
<td>Including MDA Salaries</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total MKUKUTA</td>
<td>70.6</td>
<td>70.8</td>
<td>71.2</td>
<td>73.2</td>
<td>75.4</td>
<td>70.8</td>
</tr>
<tr>
<td>Non-MKUKUTA</td>
<td>29.4</td>
<td>29.2</td>
<td>28.8</td>
<td>26.8</td>
<td>24.6</td>
<td>29.2</td>
</tr>
<tr>
<td>Excluding MDA Salaries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total MKUKUTA</td>
<td>64.5</td>
<td>62.0</td>
<td>59.8</td>
<td>66.3</td>
<td>71.5</td>
<td>77.8</td>
</tr>
<tr>
<td>Non-MKUKUTA</td>
<td>35.5</td>
<td>38.0</td>
<td>40.2</td>
<td>33.7</td>
<td>28.5</td>
<td>22.2</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance  
Note: Includes LGAs transfers

Table 5 presents sectoral distribution of resources in the national budget. The leading sectors in terms of budget allocation are education which is currently receiving over 20% of the budget, followed by roads which receives 13% of the budget. Health has received 8 to 9% of the budget over the past few years.

Table 5 - Key Sector Spending (as a percentage of Total Budget)

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</thead>
<tbody>
<tr>
<td>Education</td>
<td>20.6</td>
<td>18.0</td>
<td>17.1</td>
<td>18.7</td>
<td>18.3</td>
<td>21.0</td>
</tr>
<tr>
<td>Health</td>
<td>9.0</td>
<td>13.6</td>
<td>8.7</td>
<td>9.1</td>
<td>8.1</td>
<td>9.4</td>
</tr>
<tr>
<td>Water</td>
<td>3.5</td>
<td>2.6</td>
<td>2.8</td>
<td>2.3</td>
<td>1.9</td>
<td>2.8</td>
</tr>
<tr>
<td>Agriculture</td>
<td>4.9</td>
<td>4.2</td>
<td>5.6</td>
<td>4.8</td>
<td>4.8</td>
<td>4.5</td>
</tr>
<tr>
<td>Roads</td>
<td>9.4</td>
<td>9.4</td>
<td>13.4</td>
<td>11.1</td>
<td>14.7</td>
<td>13.4</td>
</tr>
<tr>
<td>Energy</td>
<td>1.3</td>
<td>1.3</td>
<td>1.6</td>
<td>2.9</td>
<td>4.8</td>
<td>7.2</td>
</tr>
<tr>
<td>Total</td>
<td>48.8</td>
<td>49.2</td>
<td>49.1</td>
<td>48.9</td>
<td>52.6</td>
<td>58.4</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance

This level of funding fails to meet the standards set nationally or internationally – nationally the goal is that budget allocation to health should be 10% and internationally the Abuja Declaration, to which Tanzania is a signatory, commits states to allocating 15%. In contrast, the education sector has been more successful in achieving higher budget allocations, and it may serve the health sector to understand the underlying reasons.

### 4.1 Tanzania’s health budget and expenditure trends

Budget execution for health has been below planned budget allocations due to actual disbursements falling short of commitments. Figure 3 compares planned and actual expenditures over the past seven years revealing that on average health has missed out on monies worth 0.4% of GDP each year. The reduction in the health budget after 2008/09 is mainly due to a decrease in donor funding especially for the non-basket financing component. The decrease in health financing in Tanzania was among others, an aftermath of the recent global economic crisis, which reduced financing capacity across all development partners.

Figure 3 - Planned Budget to Health compared to Actual Allocation (as percentage of GDP)

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3 MoHSW (2009), National Health Sector Strategic Plan page 32.  
4 From meeting with MoHSW Assistance Director of Planning and Budgeting: The 2008/09 anomaly where actual budget is higher than planned is associated with the large number of new staff recruited. In this instance, central government / Ministry of Finance are responsible for salaries and pay these without requiring the health sector to reduce expenditures elsewhere.
Taking a closer look at the variation in the planned and actual disbursements of the health budget it is clear that the development budget suffers most; see Figure 4. This shows that the development budget – or ‘capital’ expenditures of the budget which deal with longer term investment needs for health – has experienced greater shortfalls of funds as a proportion of their total planned budget. This reflects the government’s policy of paying the recurrent expenditures
such as health staff salaries and any shortfalls in disbursements (from both government and donors) are to the detriment of longer term expenditures.

Figure 5 shows that government and donor development funding offset each other in the period 2008/9 to 2012/13. It is unclear whether this is fully intentional and what the direction of causality is. However, within a highly donor-dependent environment and where donor funding is volatile from one year to the next there are concerns that investment in health is qualitatively suffering. This suggests that if the government wishes to implement a health strategy that requires qualitative and quantitative changes to the health system it needs to ensure not only greater fiscal space for health but also a more transparent and predictable budget. This requires medium term dependable commitments from the government and donors alike.

**Figure 5 - Donor and Government Development Expenditures as a proportion of Total Development Health Expenditure**

![Graph showing donor and government development expenditures as a proportion of total development health expenditure.](image)

Source: MoHSW

Table 6 shows that in Tanzania the majority of health expenditure continues to be distributed by the Ministry of Finance through the budget. A third is from the local government authorities (LGAs), which receive donor funding (non-basket) and other resources, specifically the retentions of collections they get from health services provision. Table 7 compares the difference in actual budget to the planned budget across all levels of government. Unfortunately the available information doesn’t explain the reasons for the variation at the sub-national level. It is, however, clear that throughout the health system in recent years there has been greater shortfalls in disbursements compared to what each were expecting. This alludes to a system-wide problem in predictable funding and could be contributing to a national challenge in providing health services and effectively implementing health strategies.

**Table 6 - Health Expenditure by level of Government (Actual Disbursements as percentage of Health Expenditure)**
Finally Figure 6 looks at per capita health budget both in nominal and real terms. We use GDP deflator for the health sector and calculate per capita health budget in US dollars to attempt to: i) minimize the exchange rate exaggerations since the shilling has been depreciating; and ii) offset the effect of changes in prices to see if there is some real gain from the increases in the budget during 2006/07 – 2012/13. Although in nominal terms per capita health budget rose from USD 11 to USD 17, in the real terms it has remained relatively unchanged moving from USD 7 to 9 during the period. This shows a lack of real investment in Health in Tanzania.

**Figure 6 - Per Capita Health Budget (USD)**

The trends for health expenditures show that in the planning stages there has been an understanding of the greater financing needs for the sector. However, as resource constraints
come to the fore in disbursement of budget health has suffered. With education gaining 20% of the budget it is clear that it is possible for a social sector to gain a large share of the budget in Tanzania. Moreover, as education investment needs may decline (large capital expenditures for example), after this front loading of funding, there may be fiscal space within the general budget to reallocate some of this 20% towards health.

4.2 Sources of health financing

Table 8 shows all health expenditures inclusive of government spending, donor on and off budget funding, household out of pocket, and the private sector (note that this will include health insurance contributions).

Using the NHA methodology Total Health Expenditure (THE) has risen from 774 to 2,323 billion TzSh from 2002/03 to 2009/10, (preliminary data for 2011/12 suggest this has grown to more than 3,000 billion). The Government’s proportion of THE has remained around 25% whilst donor funding has risen from 27 to 40% over the time period. Household payments for health have fallen from the highs of 42% in 2002/03 but still account for a third of all THE in Tanzania.

Household expenditures are skewed towards ad-hoc out of pocket expenditures for health rather than a regular health insurance contribution. Indeed in NHA 2009/10 health insurance was found to account for only 2.7% of the THE (NHIF and Private Insurance). This paints a picture of an environment where there are less predictable funding flows for the sector, more volatile demand and therefore greater difficulties for the sector to plan appropriately for the future.

Table 8 - Total Health Financing by Source

<table>
<thead>
<tr>
<th>Million Tanzanian Shillings</th>
<th>2002/03</th>
<th>2005/06</th>
<th>2009/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>325,353</td>
<td>445,003</td>
<td>750,298</td>
</tr>
<tr>
<td>Donors</td>
<td>212,412</td>
<td>783,205</td>
<td>919,362</td>
</tr>
<tr>
<td>Government</td>
<td>196,853</td>
<td>498,403</td>
<td>603,922</td>
</tr>
<tr>
<td>Other Private</td>
<td>39,479</td>
<td>53,400</td>
<td>49,345</td>
</tr>
<tr>
<td>Total</td>
<td>774,097</td>
<td>1,780,011</td>
<td>2,322,927</td>
</tr>
</tbody>
</table>

As a percentage of Total Health Expenditures

<table>
<thead>
<tr>
<th></th>
<th>2002/03</th>
<th>2005/06</th>
<th>2009/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>42%</td>
<td>25%</td>
<td>32%</td>
</tr>
<tr>
<td>Donors</td>
<td>27%</td>
<td>44%</td>
<td>40%</td>
</tr>
<tr>
<td>Government</td>
<td>25%</td>
<td>28%</td>
<td>26%</td>
</tr>
<tr>
<td>Other Private</td>
<td>5%</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Note: Data for 2011/12 is in draft form and not yet validated, therefore cannot be presented here at time of writing.

4.3 Reprioritization scope for more resources

These trends of health budgeting and expenditure highlight a departure from national and international goals. Although the health sector ranks third in budget priority in Tanzania after education and infrastructure (roads) it still does not meet the targets of 10% of budget (national goal) or 15% of budget (Abuja). It is clear that if the government is dedicated to health then some reprioritization in terms of raising resource allocation is necessary.

5 See NHA publications for more information on this.
Figure 7 sheds another light on the level of prioritisation for health by the government. Although there has been a strong growth in the government health budget for most years, public health expenditure (excluding donors) have grown slower than the growth in tax revenue (accounting for about 90% of government revenue). This suggests that health is indeed not considered as a priority by government. This picture is partly mitigated by donor contributions, which may to some extent crowd out allocation of public expenditure to health (fungibility). Donor contributions are, however, volatile, and moreover there is a shift between aid instruments (budget aid, basket, project, etc.). This suggests that if Tanzania wants to plan its gradual achievement of universal health coverage, it will have to improve the planning of its expenditure for health, in terms of government priority, and across government and donor sources of funding.

**Figure 7 - Tax Revenue Growth Rate Compared to Health Budget Growth (Annual Change)**

Source: MoHSW

The government of Tanzania has shown interest to increase allocations to health and plans are underway to include health in the BRN sectors. This may prove a significant advance as in the past BRN sectors have been prioritised in terms of budget allocations. The prospect for increased resources for health goes hand in hand with the expectation that the ‘health lab’, which brings together key health experts, will formulate a series of profound health sector reform options towards UHC. Meanwhile, experts suggest that the following reform strands currently have most potential:

1. **Increase membership of the CHF** - More efforts can be made on the resources mobilization at the LGAs level for health financing through the Community Health Fund (CHF). Membership of CHF is variable across districts and success has been greatly attributed to local level leadership for the health initiative. A more focused and explicit prioritisation of CHF would be beneficial across all LGAs which would lead to greater membership.
2. **Creating a more flexible budget for local authorities** - At present districts receive earmarked transfers for health and education which are not fungible. For example in the current system education needs may be easily met within a budget, any remaining monies cannot be transferred to health. Stakeholders have suggested that local authorities have the capacity to be able to effectively manage their planning and budgets and that this would result in a more efficient allocation at the local level.

3. **Incorporating the Private Sector** – The contribution of private sector to health financing is low. Encouragement of the private sector via creating an enabling environment for private health facilities and a priority in PPP agenda of the government would increase the participation of the private sector. For example in the longer term PPPs could help establishment of pharmaceutical industries. This could in turn reduce currently high import cost of medicines and other equipment, although there are pitfalls to this strategy.

4. **‘Quick Win’ Efficiencies** - Shifting from piecemeal procurement to bulk procurement of medicines. There is possibility of cost saving from bulk procurement since it can be directly ordered from the manufacturers. There is thus scope for improved value of money if this approach is adopted for health supplies in the country. Further options for efficiency savings are described in chapter 9.
5 Estimating the Fiscal Space for Health in Tanzania

Underlying any assessment of resource availability is the macroeconomic context within which the health sector operates. The analysis presented in this report is supported by a macroeconomic framework ensuring consistency in the projections and capturing some of the interactions between health spending and the economy.

This section sets out the approach taken to the macroeconomic framework. We start with a description of how the framework is developed and apply it to Tanzania. The macroeconomic prospects are discussed and their implications for the various streams of health financing are presented in two scenarios. The first scenario provides projections if the health sector continues its current policies in a 'policy as usual' case and shows a resultant financing gap up to 2024/25. The second assumes the government and stakeholders take new policy initiatives with a view to mobilise additional resources to close the financing gap.

5.1 Methodology Overview

A full description of the framework used for the macroeconomic analysis is presented in Annex C. This section provides an outline of the approach. The section starts by describing the overall macroeconomic framework and then goes on to describe how health flows and expenditures interact with the framework.

The following section applies this framework to Tanzania and, in doing so, describes the macroeconomic context within which the health financing needs must be addressed. By developing the macroeconomic context in this manner, it is possible to quantify the size of the available resources under both a baseline scenario and one with alternative funding mechanisms (explored later in this paper). The macroeconomic performance of the country also places an inherent cap on any domestically generated resources for health and therefore is important for determining the plausibility of the total health funding availability identified in this report.

5.1.1 Macroeconomic Framework

This section describes the composition of the Tanzanian economy and its projected macroeconomic performance. Projecting economic variables over the long term is necessarily a matter of speculation. This is particularly the case with this exercise where macroeconomic figures are required 10 years into the future. What follows is a set of assumptions used in the macroeconomic framework. However, as there are a multitude of factors that can impact an economy over time, the medium to long projections should be taken with caution. This model in turn is used to produce the scenarios for health expenditure discussed below.

All findings are presented in the Tanzanian Fiscal Year July to June. Data and findings cover the period from 2008/09 to 2024/25. Note that some indicators may vary from those seen in the 'trends' section above. This is due to the need for the macroeconomic framework to have a consistent time series for the more disaggregated breakdown of health funding as a baseline.

Underlying macroeconomic data is taken from the International Monetary Funds’ (IMF) World Economic Outlook (WEO) database (April 2014) and the most recent country-specific IMF Article IV publications. The historic and near term estimations are agreed by country government so can
be viewed as official country data. The medium term projections (from around 2014 – 2019) meanwhile are produced by IMF staff.

After 2018/19 the methodology for projecting longer term (up to 2024/25) variables as follows:

- Nominal Growth of 10%;
- Inflation at 5%;
- Gives Real Growth of 5% over the medium to long term.

Other key variables such as Exchange Rates remain stable over the longer term. National Public Expenditures and Revenues continue to grow in line with nominal growth retaining their internal proportional relationships; e.g. Current Expenditure remains stable as a proportion of total expenditures, and Domestic Tax Revenues remains at the same ratio to Total Revenues.

This provides us with a ‘policy as usual’ scenario and allows us to compare resultant key macro indicators from imposing some restrictions. These are that the Fiscal Deficit should not exceed 5% of GDP; and Public Debt should be less than 45% of GDP (IMF; 2013)7.

We also assess the impact of revenue from newly discovered natural resources on government revenues and GDP. Projections show that there may be an impact on GDP from these industries from 2016/17. It is estimated that nominal GDP could be raised by an average of one percentage point a year up to 2024/25. Domestic revenues would increase following the rise in GDP as well as the direct tax incomes from the industry, this has been projected to raise domestic revenues by an average of 3% pa (vis-à-vis the policy as usual scenario).

Table 9 - Selected Macroeconomic Indicators and Projections

does a sub-set of key macroeconomic indicators for Tanzania resulting from the health financing gap model. The ‘Baseline’ data (up to 2013/14) paints a strong growth path but within an inflationary environment. The fiscal deficit has been over 5% of GDP and there are plans to reduce this to a more manageable size (see footnote 7).

Over the next ten years the ‘Policy as usual’ projections (i.e. assuming no policy initiatives for health) show continued strong economy and a lower inflation rate. The Governments’ Fiscal Deficit could remain within the Government’s own target of 5%. Public Debt is expected to rise but may remain within sustainable limits. The IMF’s latest Debt Sustainability Analysis states that Tanzania’s is at “low risk of external debt distress and low risks from domestic public debt, but continued prudent policies are needed to preserve debt sustainability” (IMF; 2014)8. Note that the ‘Innovative Action Projections’ will be discussed later in this paper.

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7 IMF; 2013: “fiscal policy is envisaged to be set so as to ensure that the debt ratio stabilizes at about 45 percent in 2014/15”, including a reduction of the “overall fiscal deficit to 5 percent of GDP. That target is consistent with medium-term deficit reduction stabilizing the debt-to-GDP ratio in the next two years, maintaining a low risk of debt distress, keeping external vulnerabilities in check, and limiting the risks of a resurgence of inflation”. Pg. 6 and Pg. 8.

8 See Article IV Consultation’, page 11.
Table 9 - Selected Macroeconomic Indicators and Projections

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal GDP Growth</td>
<td>10.0%</td>
<td>8.7%</td>
<td></td>
</tr>
<tr>
<td>Inflation (Annual Change)</td>
<td>11.1%</td>
<td>5.0%</td>
<td></td>
</tr>
<tr>
<td>Fiscal Balance</td>
<td>-5.7%</td>
<td>-1.4%</td>
<td></td>
</tr>
<tr>
<td>Tax Burden**</td>
<td>15.7%</td>
<td>19.0%</td>
<td>19.4%</td>
</tr>
<tr>
<td>Public Debt (% GDP)</td>
<td>39.7%</td>
<td>41.3%</td>
<td>52.3%</td>
</tr>
</tbody>
</table>

Source: OPM Macro Model / Authors own calculations as of June 2014.
Notes:
* = Averages
** = Tax Burden in Baseline is the Tax: GDP Ratio, in Innovative Action Scenario the taxation-related innovative funding mechanisms are added.

The following sections go on to describe how fiscal space for health is impacted by the scenario set out above.

5.1.2 Incorporating Health Resource needs and availability

The global pattern of total health spending (which includes both public and private expenditure) is closely related to national GDP. Data from the World Health Organisations based on National Health Accounts (NHA) for the years 2001-11 shows that the global average of total health expenditure (THE) is 7.2% of GDP. The corresponding average for the SADC countries (excluding Zimbabwe, where data were not available) was slightly lower, at 6.6%. Note that public health spending (general public expenditure on health) averages 5.7% of GDP, both globally and within SADC.

However, THE is not quite proportional to GDP. Figure 8 shows a scatter-plot of total health expenditure (THE) vs GDP (both per-capita) by country for the years 2001-2011. The SADC countries are indicated using red markers.

As can be seen, THE is strongly correlated to GDP (the r-squared value is 0.94, although the log-log plot conceals a large variance, particularly at high levels of GDP per capita). Globally, THE shows an elasticity of about 1.05 with respect to GDP, implying that THE will rise slightly faster than GDP on average. The SADC countries are close to the global trend, although they appear to show a lower elasticity – of about 1.02.

Figure 8 - Total health spending and GDP
One approach to estimating health resource needs would be to use the global pattern of THE as a proxy, on the assumption that the global pattern represents the underlying revealed demand for health care. This would average 7.2% of GDP globally, of which public spending averages 5.7%.

This level compares favourably with estimates from a recent paper by Di McIntyre’s (2014), implying that the minimum level of public spending required to provide universal health coverage is of the order of 5% of GDP, or a minimum of $86 per-capita (whichever is the larger). This implies that countries with a per-capita GDP lower than $1,720 will therefore need public spending on health of more than 5% of GDP.

Note that the implied need for public expenditure would still be below the global average of 7.2% of GDP. The remainder is assumed to be met by private expenditure, including out of pocket spending (OOP). One approach to estimating the total resource need would be to apply a multiplier (of 1.44) to the public spending need recommended by the Chatham House paper (McIntyre and Meus; 2014) in order to raise the total resource need from 5% to the global average of 7.2%.

For this work we follow a two-pronged approach. In a first approach we focus on the requirements for a basic package of services. In a second approach, we estimate the funding requirements that aligns with population-wide health-demand.

The first approach focuses on universal health coverage for a basic package of health services. We take a recent paper by Di McIntyre and Filip Meus (2014): *Fiscal space for domestic funding for health and other social services* as a starting point. The paper examines the funding requirement to offer a basic package of services with financial protection to the entire population.
The ‘financial projection’ requirement implies that the population should be able to access these services without risk of financial impoverishment. The authors suggest a double target: either public health funding of 5% of GDP but not less than USD 86 (2012 dollars) per capita. The latter condition is added in the knowledge that even if some low income countries would spend 5% of GDP on health, they would not reach USD 86 per capita. These cases make a compelling argument for additional contributions from international donor sources.

In a second approach, we focus on population-wide demand for health services, and assume that total health spending, globally, is a proxy for revealed demand for health. The funding requirements of the first approach, which focusses on a publicly funded basic package of services, are, logically, lower than those of this second approach. To modify the first approach to include private and out-of-pocket spending to bring it up to the global average of society-wide revealed demand for health, we apply a multiplier of 1.44 (see above) that brings the need for public spending of 5% to the global average of 7.2%, and also apply that to the other benchmark of USD 86, to create a second, larger one of USD 124 per capita.

Practically, country resource needs are set for each country individually, to reflect the maximum of two things:

<table>
<thead>
<tr>
<th>Lower Level Resource Needs</th>
<th>Wider Level Resource Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>$86 per-capita</td>
<td>$124 per-capita</td>
</tr>
<tr>
<td>Public spending 5% of GDP</td>
<td>Total Health Expenditure 7.2% of GDP</td>
</tr>
</tbody>
</table>

The model provides a time series on available funding for health from all sources. Background data is based on National Health Accounts (NHA) data 2009/10 as well as the NHA data available on the WHO Global Health Expenditures Database. Government budget data was sourced from the Ministry of Health and Social Work (MoHSW) budget data 2008/09 – 2012/13. The projections are then calculated using the following assumptions for the baseline or ‘policy as usual’ scenario:

1. **Government Health Spending**: Grows with nominal growth elasticity of 1.1 (see Annex D for methodological note). This assumes that Government funding to the health sector will rise at a slightly faster rate than nominal growth; i.e. as a country grows richer it invests proportionally more into its health services.

2. **Health Insurance** – Is the sum of the following types of insurance:
   a. **National Health Insurance Fund (NHIF)** – Backdata on level of contributions were found from NHIF publications (NHIF; 2007; 2009; 2011; 2013), as this is a government led scheme for civil servants. The projection methodology is the same as that used for government spending; growth elasticity of 1.1.
   b. **National Social Security Fund Social Health Insurance Board (NSSF-SHIB)** – This is a health insurance scheme designed for the private sector and parastatals. Therefore growth projections are in line with inflation to reflect the rising costs of services.
c. Community Health Fund (CHF) – This is a government led scheme for the informal rural sector. The projection methodology is the same as that used for government spending; growth elasticity of 1.1.

d. Other Private Health Insurance – Grows in line with inflation to reflect rising cost of health services. This sector makes up a small proportion of health care financing sources.

3. International Funding - Over the longer term, donor funding remains stable to represent a decline in real terms. This assumes that there will be a decline in external financings for health.

4. Household Expenditure: This category relates to Out of Pocket (OOP) Expenditures made by households on health care. Internationally OOP’s elasticity to GDP is 0.86 (see Annex D for a methodological note); i.e. OOP grows at a rate that is slower than nominal growth because as a country’s income rises the health burden falls less onto citizens for ad-hoc expenditures.

5. Private Sector – Grows in line with inflation to reflect the rise in health care costs. This sector makes up a small proportion of health care funding.

From these assumptions the model presumes a 'policy as usual' scenario. The two key points in this scenario are:

- that there are no great policy changes from central government in increasing health sector funding (including no significant rise in memberships of health insurance), and;

- donor money is not flowing as rapidly into health as it has done over the past decade.

5.1.3 The Funding Gap

From the macro, health, and resource needs data a financing gap is found; i.e. how much money is available in a country for health compared to how much money is needed to provide basic needs. There are two scenarios built around this:

Scenario 1: Policy as usual – Compares health needs against health available resources as set out under the assumptions in the previous section.

Scenario 1 presents the financial situation assuming needs continue as expected, there are no policy changes in spending, and donors do begin to reduce their income flows and so there will be a shortfall of financing for health. The Policy as usual case has two approaches:

a. The lower level of health needs of USD 86 per capita are set against the government’s spending on health and donor funds only to produce a financing gap. The public expenditure here includes general budget allocation and mandatory health insurance; i.e. NHIF and CHF.

b. The higher level of health needs of USD 124 per capita are compared to Total Health Expenditures to give a financing gap.
Scenario 2: Innovative Action – Examines various options for gaining extra resources for health. This includes, a larger budget allocation, a greater enrolment in health insurance membership, introduction of new alternative source of funding, savings from efficiency measures, and borrowing.

Scenario 2 presents a possible future financial situation where governments are taking a pro-active stance to meet the health needs of citizens to offset the decline from donor funding. Again there are two approaches within this scenario:

a. As per scenario 1.a. plus public expenditure rising to 15% of total public expenditure by 2024/25 and health insurance coverage rates reaching 50% of the population by 2024/25.

b. As per scenario 1.b plus scenario 2.a’s 15% public expenditure and the inclusion of new alternative sources of funding. Within this scenario borrowing is required to close the final gap.

Scenario 3: Natural Resource Revenues - A third scenario will also be present separately. This will provide a projection if scenario one holds but with greater government fiscal space due to natural resource revenues. This will show the potential for greater budget envelope from central government to health simply due to the fact they have more money available, not as a result of prioritising health.

5.1.4 Policy initiatives for additional funding to close the funding gaps

Four types of new policy initiatives are assessed to identify the potential magnitude and feasibility of implementing these as sustainable financing for health. The four types of new funding initiatives are explained below:

Increase in Budget Allocation – The total spending on health has seen a steady decline in the proportion from Government funds. Currently health expenditures from the central budget in Tanzania equate to around 6% of the discretionary current expenditures. Within the second scenario this is raised gradually to 15% by 2024/25 which is in line with the Abuja commitment the Tanzanian government agreed to. Placing the target more than 10 years down the line makes this target fully feasible.

The model also looks – in isolation – at the magnitude of potential budget funding to health due to the expected natural resource revenues. Within this scenario the allocation of discretionary current expenditure remains at 6%. Thus this shows a simple nominal rise that could be expected if the government were to do nothing to prioritise health but have a greater ‘pot’ following additional resources from natural resources, to take the existing allocation from.

Health Insurance – The Government of Tanzania (GoT) have plans to implement Universal Health Coverage (UHC) by 2025. The leading option is one where the NHIF and NSSF are merged to become the sole social insurer; this would also incorporate CHF. The main reasons behind this are to reduce administrative costs and to resolve the problems of variety in service coverage and lack of portability. Another intended result is a more effective and efficient health insurance service by creating a single purchaser (Bultman and Mushy; 2014). However, as the Government are only in the planning stages it is expected that institutional arrangements will take around five years to legislate and set up, and another five to have UHC implemented; a total of ten years (Interview with MoHSW senior advisor).
There is a chance therefore that the UHC may not be realised within the ten year time frame we are projecting. Indeed the past five years have seen total health insurance beneficiaries grow three fold (from 5% of the population in 2008/09 to 15% in 2012/13), yet to reach 100% by 2024/25 beneficiaries would need to rise more than tenfold in the next ten years; from 6 million to 66 million people (NHIF; all). The expected improvement in value for money and ability to have the entire population with health insurance coverage is unlikely to create more fiscal space before 2025 simply due to the logistics of planning and implementing such a task on a national scale. Therefore the innovative action scenario relating to health insurance projections assumes a 50% coverage rate by 2024/25. The required growth of insurance per annum is applied to the expenditure data in the base year for all insurance types.

A detailed analysis of the potential for individual HI schemes is not possible as no up to date actuarial reports exist for all schemes. Indeed even the actuarial reports for NHIF that were carried out in 2010 are no longer valid. This is because the growth rate in membership and beneficiary pay outs have grown substantially faster than expected in the past 4 years, making the actuarial estimates outdated. This data limitation constrains the models level of detail and methodology to project HI resources.

Alternative Funding – Other countries have prioritised health by creating a new and non-traditional source of income. Six of these are considered within the model as methods to fill the financing gap. These can be classified under two headings:

- Taxation - Tax on Remittances; Mobile Phone Levy; Alcohol Levy; or Airline Levy; and
- Mainstreaming – Private Sector Contributions.

Estimations of potential levels of income from the first six new domestic sources are calculated by using data found from other countries who have implemented these innovative financing sources. Their results have been summarised into an average return in terms of a percentage of GDP, and we assume that 0.4% of GDP can be raised through a combination of alternative financing sources. These are summed and added to the available traditional financing and a new financing gap is calculated.

Efficiency Gains and Savings - Countries have differing levels of spending efficiency. If they can become more efficient the country will need less money to provide the same levels of service, or with the same amount of money would be able to provide more services. The potential for each country to improve its efficiency rates has been calculated using a data envelope analysis (DEA) carried out by Wu Zeng (2014). The dataset covers 173 countries from 2004 to 2011 (so 1,384 data points). These efficiency savings are then accounted for in the Resource Needs; i.e. through a reduction in the amount of Resource Needs. A new financing gap is then calculated which includes efficiency savings. This resultant financing gap presupposed the implementation of a number of policies from the national Governments regarding implementing a number of efficiency measures for a more efficient health system. The global average within the econometric study was found to be 78.9%; i.e. on average countries could have saved 21.1% of their health spending if used as efficiently as their peers (Wu Zeng; 2014: 10). Specific findings for Tanzania show that efficiency of spending is around 70% compared to its peers. From 2008/09 to 2013/14 efficiency in health spending has risen from 64 to 70%, this is projected to reach 82% by 2024/25. The financing gap model has imposed this trend in
improving efficiency. This will require specific efficiency measures and a strong policy commitment to improving the efficiency health systems in Tanzania.

**Borrowing / Domestic Bonds for Health** - In this model we have retained Borrowing as a last resort, or a residual, if the Financing Gap is not closed by the sum of the rise in public expenditure on health, the innovative funding mechanisms and efficiency savings.

### 5.2 Scenario 1: Policy as usual health financing gap

This section will now examine the findings from the above methodology. First looking at the health expenditure projections within the policy as usual scenarios.

The National Health Accounts (NHA) exercise for Tanzania was last carried out in 2009/10. This showed that a quarter of all health expenditure was provided by the government, 40% by donors and a third from households OOP spending. Health insurance plays a minor role, accounting for less than 5% of all expenditures. The 2011/12 NHA’s preliminary findings (yet to be validated) suggest a rise in the level of donor dependency. Total Health Expenditure (THE) has declined as a percentage of GDP over the past five years from around 8 to 5.5%.

Figure 9 shows the nominal trends and also projections for the medium term under the assumptions for ‘policy as usual’. The lack of any policy prioritisation for health via government budget is clearly shown; it remains around 6% of discretionary current expenditures throughout this period. Donor funding remains stable over the medium term and the amount of out of pocket household expenditures rises (as per inflationary costs). Health insurance is rising slowly from 10% of THE in 2012/13 to 13% in 2024/25. In this scenario health expenditures per capita rise from the current 37 USD to 46 in 2024/25.

**Figure 9 - Total Health Expenditure Projections by Source of Funding (Million Tanzanian Shillings)**
The lower level financing gap sets these available resources against the resource needs of USD 86 per capita, results are shown in Figure 10. Bearing in mind that current health expenditure from the government and donors is 26 USD per capita (2012/13) the difference between the reality in Tanzania and the estimated needs to supply basic health services is large. The gap equates to around 10% of GDP at the moment and could rise to reach 11% by 2024/25. This is 37% of the budget and could grow to 46% by the end of the projected time period.

**Figure 10 - Policy as usual Minimum Financing Gap (Millions USD)**

Source: Authors’ Calculations
The Total Health Expenditure or Wider financing gap is shown in Figure 11. This financing gap sets the available resources against the resource needs of 124 USD per capita. Bearing in mind that current health expenditure per capita is just less than 40 USD in Tanzania (2012/13) the difference on the national scale is large. The gap equates to around 14% of GDP at the moment and could rise to reach 16% by 2024/25. This is around 50% of the budget and could grow to 65% by the end of the projected time period.

**Figure 11 - Policy as usual Wider / Total Financing Gap**
Source: Authors’ Calculations

The financing options available to Tanzanian to close this gap are discussed in the following chapters.
Fiscal Space and Innovative Financing for the Tanzania Health Sector

6 Traditional Government Options

As previously discussed, the government has only limited options to raise additional funding for health:

- Increase the allocation of public expenditure to the health sector in combination with expanding the health insurance coverage in the country. We discuss these in more detail together in this section (Section 6: Traditional Government Options).

- Innovative sources of funding. We discuss this in more detail in the next section – (Chapter 7: Innovative Financing Mechanisms and Efficiency savings).

- Efficiency savings and/or borrowing. We have discussed this in the previous section (Chapter 5: Estimating the Fiscal Space for Health in Tanzania) and will explore efficiency savings in further detail towards the end of the report (Chapter 9: Scope for Efficiency Savings).

Allocations from government revenue to health are conceptually similar to raising resources for health through compulsory health insurance. Both mechanisms levy resources from economic actors to finance health care services, through different modalities (the tax system and the budget; the health insurance fund). In this section we first discuss the experience of other countries in expanding budget allocation for health and then look at the likelihood of this happening in Tanzania. Second, we discuss the need and impact of expanding health insurance coverage and the likelihood of achieving UHC.

6.1 Budget Allocation

Globally, nominal budget expenditures for health increase as countries develops, and they do so faster than the GDP grows, so that typically the share of public expenditure for health increases the richer a country becomes. It is nevertheless not always easy to make the case for an increased share of government spending on health even when the economy grows, especially not in a resource constraint environment such as Tanzania.

International initiatives have tried to gain support and momentum for increasing budget allocation to health. For example the Abuja Declaration has been signed by the majority of the Heads of State of African Union countries who, in so doing, commit to allocate 15% of the national budget to health. The agreement dates from 2001 and, of the 47 signatories, only six have reached the 15% target so far (Liberia, Madagascar, Malawi, Rwanda, Togo and Zambia). Indeed, 13 years since it was signed the momentum appears to now have shifted away from the commitment to spend 15% of GDP on health and towards achieving wider and more equitable health service coverage through “enhancing value for money, sustainability and accountability in the health sector” (Tunis Declaration, 2012).

Within SADC three countries (Madagascar, Malawi and Zambia) have reached the Abuja target of 15% while four countries (Lesotho, Namibia, South Africa and Swaziland) look set to reach the 15% target in the near future. A further two (Botswana and Mauritius) appear likely to achieve the Abuja target by 2024/25 (OPM, 2014, forthcoming). That accounts for 9 of the 15 SADC Member States reaching the Abuja Target of spending 15% of GDP on health by 2024/25.
Furthermore, by 2024/25 the average share of public expenditure spent on health by SADC countries is projected to rise to 12%. If Tanzania does not prioritise health and continues on its current spending trajectory by 2024/25 health spending as a proportion of total budget will be half the SADC average at 6%.

The current national Health Sector Strategic Plan has noted the financing gap and it states that the government will be “increasing the share in the total health budget to 10% by 2015” (MoHSW; 2009 (Pg.32). With the current health budget just announced at 6% of the total budget for 2014/15 that policy objective will not be achieved.

Therefore the second modelled scenario starts from the hypothesis that the Government of Tanzania does prioritise the health sector and budget allocation is expanded gradually over the next ten years to meet the 15% Abuja target by 2024/25. This provides extra revenues of 154.2 bln TzSh in 2015/16 rising to 3,215 bln in 2024/25. This is an average of 773 million USD a year for the next ten years and accounts for 5% of total public expenditure. This could cover 11% of the minimum ‘policy as usual’ financial gap over the ten years, and 8% of the Wider / THE gap. What is the likelihood of this happening in Tanzania?

In discussing the reasoning behind budget allocations with the Ministry of Finance the key driver of decisions were found to be national goals outlined in the national development plans. Lately this concerns the ‘Big Results Now’ (BRN) priorities (as discussed in chapter 3); i.e. if a sector is a BRN priority sector it is likely to get substantial amounts in budget allocation. Health is currently not a BRN priority sector. However, there are plans for a ‘lab’ to be held in September on Health. This ‘lab’ as it is called, is where the government pull together all health experts in the country to discuss research and strategies for health in Tanzania. Depending on the outcomes from this (hopefully a strong action plan) the government will prioritise health in future budget allocations.

Another positive offshoot to this is that, if the lab strategy is agreed by donors, it will likely attract more donor funding for health. Whilst this is not in the sustainable financing spirit of this paper, if done in a well-planned manner these near term aid flows could help plug the gap whilst government can plan to cover longer term health financing needs. Part of the longer-term funding options, apart from increasing the allocation of public expenditure on health, is the natural resource boom as well as health insurance.

As mentioned above it is still early days for the gas industry in Tanzania. A lot of investment decisions have not yet been made and revenues may not been seen until 2016/17 at the earliest but with delays possible, 2020/21 may be more appropriate. The revenue values projected at the moment are very low within the ten year time frame we are examining. Therefore it is recommended these are not considered as a near term solution to the financing gap problem. The MoF are still considering what to do with the potentially large inflows, for example they may create a solidarity fund similar to some Nordic countries. The MoF when asked said they were not against earmarked taxes for health. Therefore this should be kept in mind when decisions are being made surrounding the spending choices for gas revenues.

### 6.2 Health Insurance

The introduction and development of health insurance is a health system wide reform that will ultimately transform all health financing functions and therefore have a profound impact on health financing and system performance. From a universal health coverage perspective, its main
contribution lies in its characteristic feature to convert out-of-pocket direct payments at the point of health service into predictable periodic premiums. This health financing modality protects health care users from catastrophic financial risk when using health services, which is an essential dimension of UHC. Health insurance also allows to collect progressive contributions (premiums in function of income), at least for formal sector workers, which in turn supports equity in financing, an equally desirable health financing objective. Health insurance is, however, not necessarily a mechanism that increases resource mobilisation per se. Whether or not health insurance increases total health expenditure depends on a large number of interlinked design factors. (Doetinchem; 2010). The level and relative share of contributions to SHI is an outcome of the social dialogue between employers, employees and the State, which may lead over time to increases in THE.

The nascent health insurance sector in Tanzania is small and fragmented. But with some extra efforts on the education of the benefits of paying for insurance, membership is rising. For example, membership of the government run HI scheme for civil servants – National Health Insurance Fund (NHIF) - has grown 60% from 0.3 million members in 2008/09 to 0.5 million in 2012/13. The number of beneficiaries from this have grown in line to reach almost 3 million people by 2012/13 (NHIF; 2009; 2011; 2013).

NHIF is one of the largest HI schemes in terms of membership in Tanzania, as seen in Table 10. The Community Health Fund (CHF), which provides subsidised health services for the rural informal sector, is slightly greater. There is also the National Social Services Fund Social Health Insurance Benefits scheme (NSSF-SHIB) for those working in formal private sector and parastatals; and other Private Health Insurance (PHI). In total around 15% of the population are covered by health insurance, (note: beneficiaries are in the area of a 4:1 ratio to contribution-paying members) (MoHSW; 2012).

<table>
<thead>
<tr>
<th></th>
<th>Millions</th>
<th>As % Total Population</th>
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<tbody>
<tr>
<td>NHIF</td>
<td>2,963,296</td>
<td>6.2%</td>
</tr>
<tr>
<td>CHF</td>
<td>3,261,726</td>
<td>6.8%</td>
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<tr>
<td>NSSF-SHIB</td>
<td>51,300</td>
<td>1.1%</td>
</tr>
<tr>
<td>PHI</td>
<td>450,000</td>
<td>0.9%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6,726,322</td>
<td>14.9%</td>
</tr>
</tbody>
</table>

Source: NHIF, and Bultman J. and Mushy A. (2013)

This is far from the Governments’ goal of covering 30% of the population by 2015, and the end goal of Universal Health Coverage (UHC) (Bultman and Mushy; 2013). As the Health Sector Strategic Plan III (2010 – 2015) states: “The MOHSW prefers improvement of health insurance schemes rather than increase of out-of-pocket expenditure by patients. It will also initiate activities towards increasing coverage of the social health insurance eventually reaching universal coverage” (MoHSW; 2009. Pg.32). Box 1 outlines some key problems relating to the limited expansion path of UHC in recent years. Another key challenge in achieving UHC is that the benefit packages and modalities differ significant between schemes, whereas UHC would require a much greater degree of harmonisation.

**Box 1 - Problems with the Health Insurance status quo**
With only two years to 2015, the current health insurance coverage of 16% is only half way to the objective of the Government of Tanzania to cover 30% of the population. This status is a result of various challenges as pointed out by insurers and other stakeholders. The main challenge observed is fragmentation of the HIM. This fragmentation begins from the top, where different ministries are responsible for different health insurance schemes including the MoHSW, MOF, MOL and PMO-RALG.

The schemes are fragmented, competing sometimes for the same clients without the possible benefits of competition materializing. Other schemes are themselves fragmented such as the CHFs which are restricted to the district level, have no portability and lack the ability to pool the risks more widely and thus cannot gain the pooling advantages expected in any insurance scheme.

Fragmentation within the HIM manifests itself in coordination difficulties of strategizing, resources and functions amongst the actors, duplication of activities and processes, not profiting from economies of scale, wastage of resources in the absence of an integrated approach and a strategy to achieve formulated policy goals.

*Source: Health Sector Options Paper 2: Insurance Market (2013) (Bultman and Mushy; 2013).*

In terms of resources to the health sector, insurance contributions accounted for only 5% of health care expenditures in 2008/09 and have risen to 11% in 2013/14. If the government was to continue its HI schemes without any policy initiatives the projections for growth look set to reach only 13% of total health sector resources by 2024/25\(^9\). If there were major policy prioritisation to reform and improve the health insurance sector it is projected that HI could account for almost 50% of total health care expenditures in Tanzania by 2024/25. These two scenarios are portrayed in Figure 12. The first chart shows the policy as usual case with a breakdown of the various insurance schemes. The second chart shows the significantly greater potential funds if a more effective policy was put in place to raise health insurance coverage to 50% of the population.

If the increase in health insurance contributions is realised the extra revenues from health insurance could cover up to 42% of the minimum health needs financing gap in 2024/25 (from the current 5%). The same rise in health insurance would cover 30% of the wider THE financing gap by 2024/25.

\(^9\) This growth is slower because the main growth in memberships for NHIF has been accomplished and so there are limits to the further rise in NHIF as the proportions of civil servants already signed up nears to 100%.
It has been noted that the NHIF have a relatively high level of reserves accumulating over the past ten years. Some health stakeholders argue the reserves should be spent on health care. However, information from discussions with the NHIFs’ Planning and Actuarial Services show that the high level of reserves culminating over recent years will soon decline. The background is that when NHIF was first set up there was a very low utilisation rate. Indeed in the first year 11 billion TzSh was collected from contributions but only 247 million was reimbursed. Over time the government realised they needed to educate members as to the services and benefits available to them. As a result benefits payments have risen to 83 billion in 2012/13. The ratio of benefits payments to contributions has risen from 2% in 2001/02 to 21% in 2008/09 and then rapidly in the past 4 years to reach 41% in 2012/13. This is still extremely low by any international standard.
The impact on reserves from this is shown in Figure 14. In nominal terms the reserves are still growing, reaching 131.3 billion in 2012/13. However, the funding ratio (this is the cumulative reserves divided by the benefits payments in any one year) has declined drastically from 44 years in 2001/02 to 7.5 in 2008/09, down to three years in 2012/13. Discussions with the Planning and Actuarial Services department at NHIF suggest this will continue to decline as members are now more familiar with health insurance and will increase their utilisation of the insurance services.
Reasons for this sharp decline other than the increased utilisation are due to the contributions not growing as fast as benefits payments. There are two main reasons for this:

1. Contributions have remained at 3% of employees’ salaries plus 3% from employer since 2001/02. This compares to inflation in double digits over this time raising the cost of providing health care services. So the price of health services has been growing faster than civil servants salaries.

2. The services covered in the benefits package have increased over time, e.g. longer term illnesses are now covered as well as cancer treatment. This increases the reimbursable benefits payments against whereas the income flow from contributions has remained relatively stable.

As these trends are expected to continue the NHIF expects its financial reserves to be depleted in the near future. Before this point arrives there needs to be some action from the government to ensure the future of the NHIF. If not the coverage of civil servants and their beneficiaries will not be sustainable, let alone the goal of UHC.

This situation is obviously extremely worrying. If the Fund would be allowed to run up a deficit, it will either have to be salvaged by a financial injection, most likely directly from government expenditure, it will be allowed to fail, in which case the country would lose one of its UHC building blocks. It goes without saying that an actuarial analysis should assess whether the current premium is in line with an uptake of services in equilibrium, meaning when members access care
according to need, allowing for the usual safety margins. The fact that the benefit package has been allowed to be expanded without increasing the premium suggests this is not the case. The low loss ratios (pay-outs over revenue) cannot justify such a decision. Such an assessment is a matter of urgency. Once the scheme’s design is balanced, it can play a role in increasing THE, by gradually and simultaneously increasing the benefits and the premiums.

One final area of potential savings / incomes for the health insurance sector is that concerning payment of taxes on investments. At the moment NHIF pays corporation tax on its investment incomes. These taxes have grown from 2 to 15 billion over the past 12 years. At the moment this equates to 16% of benefit payments. If the government were to give an exemption to NHIF this there would be more monies available for providing health services through health insurance.

To expand the health insurance sector to move further towards UHC Tanzania will need to involve the private sector. There are ideas to create Public Private Partnerships (PPPs) and such like to ease the development of the private sector in health. Indeed in speaking to the Tanzanian Private Sector Federation (TPSF) and the Association of Private Health Facilities in Tanzania (APHFTA) it was found that they were very interested and willing to engage with the government on these matters.
7 Innovative Financing Mechanisms and Efficiency savings

In this section we assess the potential of non-traditional or ‘innovative’ sources of financing. These are often viewed as shorter term solutions to funding needs whilst organisational arrangements are made for the longer term solutions discussed above. Based on work elsewhere we assess six types of innovative financing mechanisms assessed. These are considered under two headings:

- Taxation - Tax on Remittances; Mobile Phone Levy; Alcohol Levy; or Airline Levy; and
- Mainstreaming – Private Sector Contributions.

Each will be discussed in turn to identify the socio-economic theoretical impact and some country examples of implementation. This will feed into a discussion as to what could suit the realities faced in Tanzania and so provide a short assessment as to the applicability in Tanzania.

7.1 Remittances levy

Imposing a levy on international remittances has been identified as a potential revenue source for funding health by adding a small fee onto all money transfers from abroad. Remittances can be made through formal and informal channels.

**Formal channels** include domestic and international banks and service providers such as Western Union and Moneygram. Factors affecting their use include:

- High transaction costs which are believed to dampen the scope of money transfers;
- Banking requirements often excluding potential users from accessing banking services;
- Clearance times for money transfers are notoriously long; and
- Stringent exchange controls;

**Informal channels** include money carried by migrants themselves, remittances carried by friends and family, or sent through taxis and buses. These are believed to have a number of advantages and disadvantages:

- Costs are typically lower;
- Provide an opportunity to avoid government taxes;
- Do not require documentation and facilitate transfers from illegal immigrants;
- But they are less reliable and are extremely difficult to monitor.

The policy option to impose a levy would only impact on the formal sector transactions. This additional cost to transferring money through formal channels may lead to a move from formal to informal channels, with consequent externalities associated with this.
It is possible that, if the diaspora are aware that the extra charges are channelled to health programmes, they will be sympathetic and this could mitigate the shift towards informal remittances. However, the importance of fully researching this policy option cannot be underestimated, as remittances are a key flow of funds to developing countries:

‘Remittances are the second biggest source of external financing after foreign direct investments for developing countries. ... Remittances represent almost 2.5 times the volume of ODA. Due to lack of data, this amount is considered by the [World] Bank as grossly underestimated, since it only reflects transfers through official channels

(Lamontagne and Greener; 2008. Pg.9).

International evidence provides further evidence for treating any policy change to remittances with caution (Lamontagne and Greener; 2008). This has shown that remittances can:

- Act as a safety net in times of hardship;
- Be used to support families in the face of unexpected health care expenditures; and
- Protect poor families from slipping into extreme poverty.

It is clear that remittances provide a crucial source of income for the population. They can be spent on health services and in doing so will contribute to the financing of health.

In February 2011 UNCTAD held a conference to debate ways in which to maximise the development impact of remittances (UNCTAD; 2011). Though this area has not been well studied, there are some stylised facts on the positive and negative consequences of remittances. For example they note that remittances are known to have beneficial effects as follows:

1. Raise tax revenue - by raising consumption, and so in turn can increase fiscal space; and
2. Improve debt sustainability - thereby reducing the marginal cost of raising revenue; (reduced country risk).

However, some negative consequences include:

1. Dutch disease - remittances are found to be positively correlated with real exchange rate appreciation and this is stronger for low and lower-middle income countries (particularly those which are less open – in both trade and capital flow terms); and
2. Looser fiscal discipline – fiscal space opened up by remittances allow governments to take advantage by increasing consumption or borrowing.

Finally, it is important to note that we are not currently aware of another country that imposes a levy on remittances for health financing.

Remittances in Tanzania were recorded as 0.1 billion USD in 2012 (IMF; 2014). This equates to 0.4% of GDP. From other country experience the returns to imposing a tax on remittances equate to 0.002% of GDP. In Tanzania this would amount to around 2 billion TzSh per year and would only reduce the minimum financing gap by 0.02% and the wider THE financing gap by 0.01%. For the amount of effort required to implement this type of taxation system and given the fact that these...
remittance resource flows are essential for low income families it would not be recommended as a long term solution to the health financing gap.

### 7.2 Mobile phone levy

A levy sufficiently small not to distort demand could in principle be imposed on mobile phone calls. However, the mobile phone industry in Tanzania affects a large and diverse population. The mobile phone market is also young and it is therefore uncertain how suppliers will react and consumer demand will change in response to a tariff on calls.

The mobile phone market in Tanzania covers more than just phone calls. Bank transactions can be made by phone throughout the country even in remote rural areas. A new financial services industry is developing in East Africa on the back of mobile phone penetration such as agricultural insurance. The introduction of an additional cost to using these services may therefore have a detrimental impact on these services and more widely on the country’s economic development.

Imposing an airtime levy for health financing is a new idea. A recent report entitled “Taxation and the Growth of Mobile Services in Sub-Saharan Africa” produced by GSMA claims that such taxes are regressive in nature as they penalise the poorer sections of society (GSMA; 2012). It also claims that by lowering taxes on mobile phones, governments will in fact increase receipts as millions more people will be able to afford to use mobile phones.

Some countries such as Gabon and Burkina Faso countries contemplate introducing an additional mobile phone levy. However, this levy has been faced with criticism primarily due to the impact on the mobile phone industry and the disproportionate burden that it places on the poor who use mobile phone for economic decisions.

The revenue potential of this type of tax imposed in other countries averaged 0.066% of GDP. In Tanzania this would equate to 69 billion TzSh per year on average, reducing the minimum financing gap by 0.6% a year and the THE financing gap by only 0.4% each year.

In sum, the mobile industry is closely linked to other sectors (e.g. the financial sector) and is therefore also believed to have strong impact on economic growth. There are arguments that a levy would disproportionally impact on the poor. As a result of these complex factors, this option needs to be explored further before a decision is made.

The MoHSW will need to consider the mobile phone industry’s view on this proposal. It may be possible that the industry would take on some of the cost as part of their CSR agenda, rather than push all of the cost onto the customer. The MOHSW also could benefit from speaking with other countries that are considering to implement this policy.

### 7.3 Alcohol levy

This taxation measure is simply a rise in the taxation on alcohol sales which is earmarked for health. It penalises drinkers and is not paid by non-drinkers. Indeed one possible side effect includes that there may actually be some improvements in health as a result of the imposition of sin taxes. This assumes that if alcohol is more expensive, demand will decrease and so less damage is done to the health of the drinking population. Sustainability of this tax should be long term as there would be little pressure to reduce taxation of alcohol from a social standpoint.
Projections for the resources available from this tax could reach 256 billion TzSh a year for the next ten years. This equates to 0.2% of GDP and would cover 2.2% of the minimum financing gap, or 1.6% of the THE financing gap.

From discussions with the MoF ‘sin taxes’ i.e. levies on alcohol or tobacco etc, have a higher likelihood of being implemented in Tanzania for the purpose of being earmarked for health. However, their concern is that these would not be sufficient to cover health needs. As mentioned they would only cover around 2% of the financing gap and as will be discussed below the ability to implement them may be a challenge as it would require the negotiation of ‘Union’ taxation issues. Therefore there will be a trade-off between the amount which could be collected (which will need further investigation with more detailed country-specific data) versus the costs of the negotiating process with mainland Tanzania and Zanzibar.

### 7.4 Airline levy

One of the innovative funding mechanisms implemented by UNITAID in a number of countries in Europe and a few in Africa is a solidarity levy on airline tickets. An aviation solidarity levy has been used to help mitigate what are seen as negative impacts of globalisation and also provide funds to finance HIV/AIDS treatment, for example.

UNITAID member countries agree to donate the revenues of a solidarity tax added to plane tickets to existing national and international development institutions. A levy on airline tickets is both long-term and predictable, as air travel is growing and is expected to continue to grow in years to come. The main advantage of the airline solidarity levy is that it can be implemented in participating countries even if other countries do not wish to participate in the initiative. An overview of success of implementing Airline Levy’s is provided in Box 2.

**Box 2 – UNITAID’s Experience with Airline Levies**

UNITAID, the International Drug Purchase Facility, was established specifically to oversee the use of aviation solidarity levies. UNITAID’s mission is to provide people in the developing world with long-term access to quality drug treatment for diseases such as malaria, tuberculosis and HIV & AIDS at the lowest price possible (WHO, 2007). Since its creation in 2006 on the initiative of Brazil, France, Chile, Norway and the UK there are now 34 member countries. Nine of these countries contribute to UNITAID through the aviation solidarity levies. Airlines are responsible for collecting and declaring the levy and the funds are transferred to the Transport / Civil Aviation line Ministry in the same manner as airport taxes are collected.

France - which was the first country to implement an international solidarity airline levy in 2006 - charges 1 Euro on all European economy class flights (10 Euros in business class) and 4 Euros on international economy flights (40 Euros in business class) departing from its territory. It was meant to generate more stable and more predictable revenue in order to meet the needs of the developing countries in achieving the MDGs. At the time, the levy was projected to generate revenue of 200 million Euros per annum, to be spent in the response to pandemics, including access to anti-retroviral treatment for HIV/AIDS (IAPAL, 2008). In general, the air levy is applied to all passenger flights originating from countries that impose it. The levy rate is normally adjusted for the destination and type of ticket class (UNITAID, 2008).

In general all levies represent a small fraction of the cost of travel and research has shown that the negligible cost has not negatively influenced passenger traffic volumes.

Over 70% of UNITAID’s long-term financing, approximately 250 million USD annually, comes from a solidarity levy applied to each airline ticket bought in the participating countries. UNITAID generated more than $1.3 billion USD in the five years from 2008 to 2012 through the solidarity airline levy and has
Some proponents of the initiative argue that the levy will reduce demand for plane tickets and therefore might not generate the expected revenue. However, there is evidence that the price elasticity on demand for plane tickets is low and that the airline industry is not be affected by this additional tax. Tourism is a large contributor to GDP and foreign exchange in Tanzania. It is important to note that this levy is seen as a solid contender for alternative financing due to the relatively small charge on the cost of an airfare and it is not a tax on the poor.

In Tanzania the projections for revenues from an airline levy are in the region of 58 billion TzSh a year; 0.1% of GDP. This equates to a reduction in the minimum financing gap of 0.5% a year, and the THE gap by 0.4% per year. Whilst this is not a significant proportion of funding in terms of the gap that is projected, it is a sustainable income flow and does not constitute a regressive tax. Moreover, it could be easily administered and there are strong country experiences to build on. It is therefore seen as a viable option for Tanzania. The MoHSW would need to consult with the tourism industry to ensure that this move would be accepted.

### 7.5 Private Sector Mainstreaming

Private businesses and companies are seen as an integral part of the health financing solution in Tanzania. For example there are ideas to create more opportunities for Public Private Partnerships (PPPs) in Health. The private sector have a unique role to play because their structures, communications systems and training capacities that are already in place can be used for all types of health care including prevention, care and support programmes. Furthermore, businesses and companies are seen as an additional financing source in an environment of limited resource availability. For example:

- Private company contributions in the area of HIV are common in Sub-Saharan African countries through health insurance for one; and

- Social Impact Bonds or Development Impact Bonds (DIBSs) are a financing mechanism whereby capital is raised by private sector companies buying bonds which are repaid once a specific development objective is achieved. In Mozambique the private sector are working with Government and donors to design a fund to support malaria control programmes in this manner\(^\text{10}\).

Private sector contributions can be motivated by a sense of corporate citizenship or by the direct effect that low levels of health care has or could have on their business including:

- Increased costs such as health insurance, sick leave and funeral benefits, as well as recruitment and training of new staff;

- Reduced productivity caused by increased absenteeism (due to illness or caring for the sick), high staff turnover, loss of intellectual capital and loss of morale; and

- Fall in the demand for goods and services as household disposable income falls due to higher health care costs or loss of income.

\(^{10}\) The Global Health Group (2013)
In general a government has two main mechanisms to increase the participation of the private sector:

1. Provide an enabling environment (and/or possibly tax incentives) to implementers of health insurance packages in the workplace; and

2. Offer tax incentives for philanthropic foundations.

The success of these depends on the strength of the tax administration and that the appropriate fiscal instruments are in place. In terms of philanthropy there is currently little information available on the contributions made by the formal philanthropic sector in Africa. However, it is thought that tax breaks could be offered to create a more enabling environment for this sector to grow (Lamontagne and Greener; 2008).

The projections for this area of innovative funding suggest a potential 76 billion TzSh per year could be realised. This equates to 0.1% of GDP and could cover 0.5% of the minimum financing gap over the next ten years, or 0.4% of the THE financing gap.

In Tanzania the Private Sector Federation (TPSF) is open to working with the government in the health sector (interview with TPSF). The TPSF is keen on PPPs in health however they see the Governments priority for PPS as being within the infrastructure sector. They also suggest that the private sector is actually more efficient in supplying health care than the public sector but that the problem lies with a lack of an enabling environment to work in. As the government are working towards more private sector involvement and the private sector are also keen it seems like a sensible option to investigate this potential source of funding more rigorously in Tanzania.

### 7.6 Will earmarked taxes be implemented in Tanzania?

Table 11 summarises the resources that could be available from each of these alternative funding mechanisms each year on average for the next ten years. It is clear that these levies would be insufficient to fill the financing gap. The full amount would only cover only 4% of the minimum gap or 2.9% of the Wider / THE financing gap. But assuming that the Government of Tanzania are willing to implement these as a step towards longer term sustainability this section will look at the likelihood of implementing new earmarked taxes in Tanzania. It will cover specific areas of concern that have been mentioned such as the rejection of these types of initiatives for funding the HIV/AIDS Trust Fund, and the claim that Tanzania already has high taxation levels.

<table>
<thead>
<tr>
<th>Table 11 - Potential Revenues from Alternative Funding Mechanisms for Health (Ten year average)</th>
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<tr>
<td><strong>M USD</strong></td>
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<tr>
<td>Alternative Funding Sources M USD</td>
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<tr>
<td>Alternative Funding Sources M TzSh</td>
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<tr>
<td><strong>Earmarked Taxation</strong></td>
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<td>Airttime Levy</td>
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<td>Alcohol Levy</td>
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<td>Airline Levy</td>
</tr>
<tr>
<td><strong>Mainstreaming</strong></td>
</tr>
</tbody>
</table>
As was mentioned in above the implementation of all the possible innovative funding mechanisms would create a rise in the tax burden of 0.4% of GDP. A common complaint in Tanzania is that the private sector is over taxed already, particularly relative to their counterparts in the EAC. Figure 15 and Table 12 provide some information on taxation levels in the EAC which show that Tanzania is not the highest taxed country in the region. Furthermore, conversations with the TPSF indicate that it is not necessarily the taxation amount but the perception that public expenditure is ineffective which poses a problem to tax-payers – i.e. that they are not getting value for money for their taxes. Therefore initiatives to raise taxes for health, or increasing health insurance premiums etc., or more likely to be accepted if they go hand in hand with initiatives to make public spending in health more efficient.

The HIV/AIDS sector requested similar alternative sources of funding in Tanzania to finance their Trust Fund. These were rejected for various reasons. One of which was that to implement changes in taxation and earmarking revenues was a decision that had to be made as a ‘Union’ as these were Federal Tanzanian issues. In practice this means that mainland Tanzania would need to gain the support and agreement from Zanzibar and both would implement these earmarked taxes simultaneously. When this was discussed with the MoF there was a sense that if the right tax was found for health efforts would be made to negotiate with Zanzibar and have it implemented. Therefore it seems that there is not a blanket closed door to this type of financing.

**Figure 15 - EAC Country Domestic Tax Revenues as a percentage of GDP**

<table>
<thead>
<tr>
<th>Year</th>
<th>Burundi</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006/07</td>
<td>5m KSh</td>
<td>$57,471</td>
<td>30%</td>
<td>10 - 30%</td>
<td>$117 - 447</td>
</tr>
<tr>
<td>2007/08</td>
<td>5m KSh</td>
<td>$57,471</td>
<td>30%</td>
<td>10 - 30%</td>
<td>$117 - 447</td>
</tr>
<tr>
<td>2008/09</td>
<td>5m KSh</td>
<td>$57,471</td>
<td>30%</td>
<td>10 - 30%</td>
<td>$117 - 447</td>
</tr>
<tr>
<td>2009/10</td>
<td>5m KSh</td>
<td>$57,471</td>
<td>30%</td>
<td>10 - 30%</td>
<td>$117 - 447</td>
</tr>
<tr>
<td>2010/11</td>
<td>5m KSh</td>
<td>$57,471</td>
<td>30%</td>
<td>10 - 30%</td>
<td>$117 - 447</td>
</tr>
<tr>
<td>2011/12</td>
<td>5m KSh</td>
<td>$57,471</td>
<td>30%</td>
<td>10 - 30%</td>
<td>$117 - 447</td>
</tr>
<tr>
<td>2012/13</td>
<td>5m KSh</td>
<td>$57,471</td>
<td>30%</td>
<td>10 - 30%</td>
<td>$117 - 447</td>
</tr>
</tbody>
</table>

Source: EAC Facts and Figures 2012 and 2013, and IMF WEO April 2014

**Table 12 - EAC Taxation Rates and Thresholds**

<table>
<thead>
<tr>
<th>Country</th>
<th>VAT Rate</th>
<th>Threshold Local</th>
<th>USD Corporation Tax Rate</th>
<th>Income Tax Rate Local Currency</th>
<th>USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>16%</td>
<td>5m KSh</td>
<td>$57,471</td>
<td>30%</td>
<td>10,164 - 38,892</td>
</tr>
</tbody>
</table>
### 7.7 How much could potentially be saved in the Tanzanian health sector?

The methodology used to estimate the magnitude of potential savings from imposing efficiency measures is based on international comparative performance (as discussed in Chapter 5: Estimating the Fiscal Space for Health in Tanzania). The results of the data envelope analysis carried out by Wu Zeng (2014, OPM internal note) show that Tanzania is about 30% less efficient compared with those countries producing at the production frontier – see Figure 16. If Tanzania was to put emphasis on improving efficiency it is estimated this could improve to 82% by 2024/25—or 18% less efficient than those countries producing at the production frontier. The impact of this would be that the resources required for health in 2024/25 would be reduced if existing expenditure was spent more effectively (that is, improving efficiency without increasing spending). This would reduce national health resource needs, as shown in Figure 16. Nominally, the wider resources needs of 10.8 billion TzSh on average per year could fall to around 9.7 billion over the ten years. This would close the gap by 10%.

---

<table>
<thead>
<tr>
<th>Country</th>
<th>Rate</th>
<th>Amount</th>
<th>Tax Rate</th>
<th>Expenditure Range</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rwanda</td>
<td>18%</td>
<td>20m Rwf</td>
<td>30%</td>
<td>30,001 - &gt;100,000</td>
<td>$44 - 147</td>
</tr>
<tr>
<td>Tanzania</td>
<td>18%</td>
<td>40m TSh</td>
<td>30%</td>
<td>190,000 - &gt;720,000</td>
<td>$113 - 429</td>
</tr>
<tr>
<td>Uganda</td>
<td>18%</td>
<td>50m Ush</td>
<td>30%</td>
<td>100,000 - &gt;410,000</td>
<td>$388 - 159</td>
</tr>
</tbody>
</table>

Source: Doing Business: Know your Taxes - East Africa Tax Guide 2013/14

Notes: Shows basic rates for residents, not details of allowances and exceptions. No data provided for Burundi.
The significance of implementing such efficiency measures is not simply that they would result in saving the health programme of the United Republic of Tanzania 1.1 billion TzSh per year by 2024/25 but that such savings would be achieved without any increase in spending. They would be due solely to efficiency improvements of existing implementation. Efficiency savings therefore hold significant potential for increasing fiscal space. These savings, however, will not be realised without substantial effort – but this again merely reiterates that such measures and their associated cost reductions are within the control of the Government of Tanzania. Turning projected efficiency savings into real efficiency savings greatly depends on the ability of the health sector to implement efficiency saving initiatives. While these initiatives will be explored in greater detail in Scope for Efficiency Savings and in Annexure E, it is expected that, in practice, some efficiency interventions will be subject to greater time lags than will others. For this reason the set of efficiency interventions proposed (see Scope for Efficiency Savings) are followed by Table 24: a table highlighting 10 efficiency reform ‘quick wins’. If the full set of efficiency gain interventions are implemented the sector could gain significantly. And this on the assumption that the Government of the United Republic of Tanzania will implement efficiency reform interventions that will enable it to become only 12% more efficient over the ten years until 2024/25.
8 Closing the gap and implications for increasing fiscal space for health

This chapter will provide an overview of the sum of possible policy options for Tanzania and their potential impact on the health financing gap. It will also discuss the implications for the wider Tanzanian economy. Finally there will be an assessment of the potential for a proportion of the natural resource revenues to be earmarked for health.

8.1 Scenario 2: Health financing gap after new policy initiatives

Within the macroeconomic framework various options were considered to close the financing gap, here will we present the overview of results for both the minimum and wider financing gap.

Firstly from the minimum financing gap where we are looking at health financing from official government sources (budget and mandatory health insurance) and international funds. Figure 17 shows how raising budget allocation to 15% and health insurance coverage to 50% of the population would close the gap by 20%. This would contribute 1.2 billion USD per year to the health sector on average over the next ten years. This equates to 2.1% of GDP, and reduces the 'policy as usual' minimum financing gap from 11% of GDP to 9%.

Figure 17 also shows how the innovative financing sources and efficiency gains can reduce the financing gap at the 5% GDP resource needs level, (see orange and yellow bar charts, respectively). With all mechanisms accounted for the financing gap remains at 3.6 billion USD in 2024/25; 4.4% of GDP. This is however, a significant reduction from the 'policy as usual' scenario gap of 11% of GDP."

Figure 17 - Impact of Traditional Government Option on the Minimum Financial Gap (M USD)

Source: Author’s own calculations
Figure 18 shows the cumulative effect of implementing all innovative funding mechanisms on the wider financing gap. The initial gap from the policy as usual case is followed by three new bar charts, these include the following innovative actions:

- **Innovative Action Financing Gap** – Includes the rise of government budget allocation from 6 to 15% and the increase in health insurance to 50% of the population by 2024/25.

- **Financing Gap with Innovative Funding** – Includes the previously mentioned changes plus monies from imposing new earmarked taxes and mainstreaming health issues.

- **Financing Gap with Innovative Funding and Efficiency Savings** – This adds the penultimate element to new possible financing options: if policies were put in place to make the Tanzanian health system became more efficient the gap would reduce further.

- The resultant gap (in yellow bar chart) is the amount of borrowing that would be needed as a last resort to close the health financing gap to meet basic needs.

In the near term the impact is small (see difference between original ‘policy as usual’ gap in red and the sequential ‘gaps’) but as the health insurance membership becomes greater the amount of financing available rises quickly. Indeed if the operational bottleneck elements to implementing a UHC system could be overcome and 100% health insurance coverage could be achieved by 2024/25 the financing gap would be almost zero.

However, in the scenario shown the financing gap with all innovative actions taken into consideration still accounts for 6% of GDP in 2024/25. This is reduced from the 15% projected if no action is taken.

**Figure 18 - Impact of Traditional and Innovative Actions on the Wider / THE Financing Gap (M USD)**
8.2 Scenario 3: Financing gap with revenue from natural resources

If the government chooses not to prioritise health within the budget or take action to create a more sustainable financing environment for the sector there is an alternative. Economic activity is already being created surrounding the new natural resources found in Tanzania. Projections suggest that an impact on GDP and government revenues could be possible by 2016/17. This would be at a low level as investment projects begin.

Calculations show that if the situation in health was to remain as it is today (budget allocation of 6% of the discretionary current expenditures) but within the higher growth and raised budget environment it is projected that the health sector could receive an extra 7 million USD more pa in the near term rising to around 35 million USD pa in the longer term. This equates to a rise of 1% a year in the available resources for health (THE), and would raise public expenditure on health by 2% a year.

In terms of assisting in closing the financing gap these cautious projections for gas revenues are of not great significance. In sum they account for 1.6% of the ‘policy as usual’ financing gap. Therefore it is not recommended that the health sector rely on this potential income flow as a short term fix for the sustainable financing issue.

8.3 Macroeconomic Implications of Increasing Fiscal Space by Innovative Financing

Some key macroeconomic variables change as a result of innovative financing mechanisms for health. These are discussed below.

**Tax Burden** – The model assumes that the increased budget allocation to health is created through redistribution of current resources rather than increased national tax levels then. There is expected to be an increased tax burden of only 0.4 percentage points due to the new alternative funding sources. A common complaint in Tanzania is that the private sector is over taxed already, particularly relative to their counterparts in the EAC. As will be shown in this chapter (Chapter 7) this seems not to be the case.

**Effect on Discretionary Expenditures** – Scenario two assumes the government will increase budget allocation to health through a rise in the proportion of expenditures provided to the sector. This is a rise from 6% to 15%. This will then reduce the availability of expenditures for other sectors from 94% to 85%. This is not an insignificant amount and could be expected to have implications for other sectors of the economy. As we cannot assume which sector would incur a reduction in funding it is not possible to project the macroeconomic impact. However it is important to note that additional funding for health is expected to have a positive economic impact through the creation of a more productive workforce, as well as the new business opportunities within the health insurance sector, and health services in general as demand rises.

**Fiscal Balance** – The fiscal balance is projected to improve over time as per IMF and Government of Tanzania targets. As commented above the model is somewhat passive in its assumptions and so the financing found for health will be as a result of redistribution rather than creating additional
fiscal space. As a result the projected path for the fiscal balance is not disrupted. At present there is a commitment to reducing the fiscal deficit from the Government as it is more than 6% of GDP (2013/14) which exceeds the 5% limit. In particular there are concerns relating to the rise in arrears. These have been rising in recent years and to ensure they do not slip into debt the fiscal balance needs to be kept in check to be able to pay off these arrears.

**Debt to GDP Ratio** – There is also a strong commitment to ensure that the level of debt is sustainable in Tanzania. The declining fiscal balance will be necessary to create a manageable environment and retain the debt to GDP ratio within the 45% limits. As scenario two shows, to close the health financing gap in its entirety would require borrowing. This would raise the ratio from an average of 41 to 52% over the next ten years. This is out with the target ceiling agreed with Government of Tanzania and IMF. It is therefore a policy option that would not be suited to Tanzania.

To conclude, it must be noted that currently the government is working within a tight fiscal environment which looks likely to tighten further in the near term (Interviews with Ministry of Finance PS, IMF Residential Representative and World Bank Senior Economist). The aforementioned focus on reducing the fiscal balance and debt levels are coupled with a reform of the tax system. At present there are concerns of over-complication of the tax system due to a multitude of exemptions and small levies. The VAT Reform is currently being debated in Parliament and is likely to be implemented in January 2015. There is also research being carried out to investigate the income tax loopholes, how to close them and the best way to raise revenues. Given this environment the argument to widen fiscal space for health will be challenging.

### 8.3.1 Implications for Health of Increasing Fiscal Space

The projected trends for nominal and real Total Health Expenditure (THE) per capita are shown in Table 13. If the current policies are continued, the projections in the ‘policy as usual’ scenario suggest a small rise in the real and nominal per capita spending for health from 37 to 46 USD per person. But with some prioritisation, as per ‘innovative action’ scenario, this could rise from 37 USD per person to 199 USD (nominal).

The ‘innovative action’ scenario clearly shown a large impact in the rise of the USD per capita spend by the government; from 10 USD to reach 43 USD in 2024/25. However, the greatest increase in spending comes from the policy commitment to health insurance. All government budget allocations plus health insurance spending alone will raise the spending per capita from 13 to 93 USD.

**Table 13 - Health Expenditures in Tanzania (USD per capita)**

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Wider Policy as usual Projections ($124)</th>
<th>Wider Innovative Action Projections ($124)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013/14</td>
<td>2024/25</td>
<td>2024/25</td>
</tr>
<tr>
<td><strong>Nominal THE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>46</td>
<td>119</td>
</tr>
<tr>
<td><strong>Real THE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>43</td>
<td>113</td>
</tr>
<tr>
<td><strong>Nominal Public expenditure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>18</td>
<td>43</td>
</tr>
<tr>
<td><strong>Real Public expenditure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>17</td>
<td>41</td>
</tr>
<tr>
<td><strong>Nominal Gov’t incl. Health Insurance</strong></td>
<td>13</td>
<td>23</td>
<td>93</td>
</tr>
<tr>
<td><strong>Real Gov’t incl. Health Insurance</strong></td>
<td>14</td>
<td>24</td>
<td>97</td>
</tr>
</tbody>
</table>
Yet, these levels of spending are significantly lower than in peer countries such as SADC as is shown in Table 14. The average spend has been 38 USD in Tanzania over the past five years, and as seen above, with all innovative funding the model only projects a per capita spend on health of 119 by 2024/25 this is less than the average spend across SADC currently; 211 USD per person. Looking at this data as a proportion of GPD of public expenditure does not put Tanzania in a better light vis-à-vis her peers.

However, Tanzania is a low income country and comparing her performance to SADC low income countries shows higher levels of spending. But these are still far from the ‘basic needs’ for health as described by international best practice.

**Table 14 - Comparative Average Health Expenditures: Tanzania and SADC (Nominal USD per capita)**

<table>
<thead>
<tr>
<th></th>
<th>Tanzania</th>
<th>SADC 14</th>
<th>SADC Low Income</th>
<th>Basic Needs**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Health Expenditure</td>
<td>$38</td>
<td>$211</td>
<td>$28</td>
<td>$124</td>
</tr>
<tr>
<td>Public and Donor Expenditure</td>
<td>$11</td>
<td>-</td>
<td>-</td>
<td>$86</td>
</tr>
<tr>
<td>Public Health Expenditure as % GDP</td>
<td>1.6%</td>
<td>2.6%</td>
<td>1.3%</td>
<td>5%</td>
</tr>
<tr>
<td>Public Health Expenditure as % Budget</td>
<td>6.0%</td>
<td>7.6%</td>
<td>4.9%</td>
<td>15%***</td>
</tr>
</tbody>
</table>

Source: OPM draft paper on fiscal space for SADC (WHO / NHA)
Notes:
* = Five year average 2008/09 to 2012/13
** = Basic Needs are the Minimum Health Services based on government and donor revenues only (see McIntyre and Meheus, 2014)
*** = Abuja Declaration Target (2001)
'Public and Donor' = budget allocation, mandatory health insurance and donor funding for health
'Public' = budget allocation only.
9 Scope for Efficiency Savings

Chapter 2 (specifically 2.2: Increasing fiscal space for Health) of this report explored the ways in which governments can increase fiscal space for health. Heller (2005 & 2006) and Roy et al (2007) identified ways in which to increase fiscal space while Tandon & Cashin (2010) built upon these to outline ways through which to increase the fiscal space for health. “Reprioritisation and improvements in expenditure efficiency” – or efficiency savings – featured in all of these analyses. This section will explore the scope for efficiency savings in the Tanzanian health sector.

9.1 Efficiency savings in the health sector

The World Health Report 2010 recognises that UHC cannot be achieved through raising resources only but that existing resources will have to be used more efficiently. The same report notes that between 20% and 40% of all health resources globally are wasted (WHO, 2010). While the Ministry of Finance in Tanzania does not explicitly link the comparatively low allocation of public expenditure to health to a perceived lack of efficiency of the health sector this is not the case in many other countries (McIntyre and Meheus, 2014).

The Tunis Declaration – a joint Declaration by African Ministers of Health and Ministers of Finance (July 2012) – has reiterated the emphasis on achieving wider and more equitable coverage of health services and greater performance of health systems pursued through the more effective and more efficient use of both existing and additional public and private resources.

The gains that are to be made by improving efficiency are those that would result from closing the gap between coverage levels and health outcomes that are currently achieved and those that could potentially be achieved with the same resources were they to be used more efficiently. Thus, what is important for efficiency is not simply the cutting of costs but increasing the impact of spending and improving the efficiency with which funds are spent. Ultimately this increases fiscal space for health.

In this way, while inefficiency is traditionally thought of as involving excessive spending it may, counterintuitively, result from insufficient spending. For example, low salaries for public sector health workers can result in these workers supplementing their income with second jobs during the hours of their primary employment, impacting on the quality of care delivered by the public health system.

A further component to efficiency are those gains to be derived from improving the global health architecture. Donors can reduce the fragmented way that their funds are delivered and that countries are asked to report on their use. Donors could also reduce duplication.

Efforts to improve efficiency are directed at one of two areas:

1. Improving the allocation of resources so that the health service implements a mix of services that maximises health outcomes (allocative efficiency), or

2. Improvements that optimise implementation so that interventions are implemented most efficiently (technical efficiency).
'Allocative efficiency' is concerned with the mix of services or interventions, both within diseases (such as prevention versus treatment within, say, HIV) as well as across them (such as spending less on HIV and more on, say, malaria), in order to maximise health outcomes. Thus there is an interest in health outcomes and in how such outcomes are distributed across the population, with a view to adjusting the mix of services and interventions provided in order to achieve better outcomes.

‘Technical efficiency’ relates to improving the sub-optimal or even unnecessary use of resource inputs for a defined outcome in order to extract maximum benefit from those inputs. It is concerned with improving the way in which health care inputs are used: with using less resources for a particular intervention without reducing outcomes. For services and interventions this involves implementing that particular intervention or service as best as can be done – implementing them in the best way possible.

Alternatively, technical efficiency involves using ‘fixed resources’ (such as staff, facilities, etc.) more fully or more efficiently. Efforts to improve technical efficiency can reduce costs while maintaining health outcomes by combining different services so that resources (e.g. infrastructure costs, overheads, HR, or highly specialised equipment or staff) are shared across different services, by switching from brand-name to generic drugs, by improving staff productivity so that each health worker sees more patients in the same amount of time, or by improving patient flow in facilities so that more patients progress through the system in the same amount of time.

9.2 How could this be done?

The 2010 World Health Report argues that all countries can implement interventions across a variety of areas that will improve the efficiency of their health systems. These interventions can involve:

- Efficiency gains extracted through more effective governance.
- Reducing fragmentation in the flow and pooling of funds for health.
- Taking a more strategic approach when providing or buying health services.
- Optimising the incentives inherent in the health financing system.
- Efforts targeting particular areas of the health system (such as medicines).

The purpose of this chapter (and its accompanying Annexure E within which the analysis of this topic is undertaken in greater detail) is to review international and domestic literature and draw upon key informant interviews conducted during field visits in June 2014 in order to identify the leading causes of inefficiency in the country’s health system.

Towards the objective of this report – examining fiscal space within the Tanzania health sector - this chapter will assess the potential for efficiency savings of different health policy reforms and will propose recommendations for how such savings can be realised so that the country’s health sector is using its available resources to the fullest extent.
9.3 Key areas of inefficiency in the Tanzania health sector and the potential for efficiency gains of different health policy reforms

This section draws from information gathered through key informant interviews conducted by Oxford Policy Management and Dr Jehovaness Aikaeli Urasa (Head of the Department of Economics, University of Dar es Salaam) as well as an assessment of international and national literature. (See Annexure F for the literature sources as well as the key informants who were interviewed).

The result of the literature review and interview process was an extensive analysis of each of eighteen different areas for recommended interventions across six categories of inefficiency, and a total of 97 overarching policy recommendations. Such a comprehensive set of recommendations is not feasibly implementable and so this chapter extracts from these recommendations ten areas of intervention within which the MOHSW is encouraged to initiate/concentrate its efficiency reforms. These ten areas of intervention fall within four categories of inefficiency (See Table 15). In the section that follows each of these inefficiencies is explored in greater detail.

Table 15 - Ten areas for recommended efficiency interventions

<table>
<thead>
<tr>
<th>Category of inefficiency</th>
<th>Area for recommended intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Human resources for health</td>
<td>1 Staff Shortages and Mal-distribution.</td>
</tr>
<tr>
<td></td>
<td>2 Staff Productivity and Efficiency (including demotivation).</td>
</tr>
<tr>
<td></td>
<td>3 Skills Shortages and Training.</td>
</tr>
<tr>
<td>2 Medicines and health products</td>
<td>4 Payment of higher than necessary prices for medicines.</td>
</tr>
<tr>
<td>3 Health system leakages</td>
<td>5 Waste, corruption and fraud.</td>
</tr>
<tr>
<td>4 Enabling factors for improving health sector inefficiencies</td>
<td>6 Health Financing.</td>
</tr>
<tr>
<td></td>
<td>7 Service Delivery.</td>
</tr>
<tr>
<td></td>
<td>8 Leadership and Management.</td>
</tr>
<tr>
<td></td>
<td>9 Health System Planning.</td>
</tr>
<tr>
<td></td>
<td>10 Health Information Systems.</td>
</tr>
</tbody>
</table>

For the benefit of those wishing to evaluate the full 97 overarching policy recommendations and the detailed analysis underpinning how the ten recommended intervention areas were arrived at, the complete analysis has been included in Annex E of this report.

1. Human resources for health

Health workers are the core of health system and it is important to generate and maintain sufficient numbers of suitably qualified and motivated health workers in order for any health system to operate effectively. The importance of human resources for health is further evidenced by the fact that they are among the largest cost items for health systems, with salaries and other payments typically consuming about half of the entire health budget (Chisholm and Evans, 2010).

Recommendations within the category ‘Human Resources for Health’ fall within three intervention areas: Staff Shortages and Mal-distribution; Staff Productivity and Efficiency; and Skills Shortages.
and Training. The recommendations are summarised in Table 16. Table 17 thereafter then discusses the challenges and associated recommendations in greater detail.

Table 16 - Summary of Key Recommendations – Human Resources for Health

<table>
<thead>
<tr>
<th>Area for intervention</th>
<th>Key Recommendations – Human Resources for Health</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staff Shortages and maldistribution</strong></td>
<td>Tackle low salaries and improve inadequate housing for health workers.</td>
</tr>
<tr>
<td></td>
<td>Streamline and prioritise human resource allocation and deployment:</td>
</tr>
<tr>
<td></td>
<td>• Allocate budgets in accordance with where health workers are needed rather than in accordance with where they currently are.</td>
</tr>
<tr>
<td></td>
<td>• Preferentially allocate staff in accordance with need and consider re-allocating staff away from LGAs served above average.</td>
</tr>
<tr>
<td></td>
<td>In “Hard-To-Reach-Stay” [HTRS] areas, support LGA designed and implemented strategies for staff attraction, retention and motivation.</td>
</tr>
<tr>
<td></td>
<td>In LGAs, promote initiatives in support of improved human resource management and of greater transparency of resource allocation and utilisation.</td>
</tr>
<tr>
<td></td>
<td>Concentrate the deployment of health workers upon less well-served areas to maximise impact.</td>
</tr>
<tr>
<td><strong>Staff Productivity and Efficiency</strong></td>
<td>Fill vacant positions within health facilities.</td>
</tr>
<tr>
<td></td>
<td>Improve staff productivity &amp; efficiency so that existing workers are fully utilised:</td>
</tr>
<tr>
<td></td>
<td>• Systematically monitor and measure staff productivity and efficiency. Use data to eliminate current variation in workload and productivity by spreading resources, staff and equipment among facilities accordingly.</td>
</tr>
<tr>
<td></td>
<td>• Use the results of time-and-motion studies to ensure that where health workers are available they are fully utilised.</td>
</tr>
<tr>
<td></td>
<td>• Set staffing level norms and standards on the basis of health facility utilisation levels.</td>
</tr>
<tr>
<td></td>
<td>• Ensure that district and regional health teams provide appropriate supportive supervision to facilities and districts</td>
</tr>
<tr>
<td></td>
<td>Motivate health workers and support staff.</td>
</tr>
<tr>
<td></td>
<td>Strengthen and support HR management.</td>
</tr>
<tr>
<td></td>
<td>Monitor the use of staff:</td>
</tr>
<tr>
<td></td>
<td>• Manage staff performance on the basis of workload &amp; patient volume.</td>
</tr>
<tr>
<td></td>
<td>• Define service delivery targets on the basis of outputs and outcomes.</td>
</tr>
<tr>
<td></td>
<td>• Should service delivery targets continue to be defined through inputs, ensure that they are correlated with facility utilisation levels.</td>
</tr>
<tr>
<td></td>
<td>Use research, spot visits and supportive supervision to ensure that staff are at their posts and engaged productively in clinical care.</td>
</tr>
<tr>
<td><strong>Skills Shortages and Training</strong></td>
<td>Strengthen the financial and managerial capacities of districts.</td>
</tr>
<tr>
<td></td>
<td>Capacity building needs to take place on-site and off-site meetings and seminars should also be reduced.</td>
</tr>
<tr>
<td></td>
<td>Conduct an audit of the qualifications of CHMT members and institute appropriate redress.</td>
</tr>
<tr>
<td></td>
<td>Greatly increase enrolment in pre-service training institutions of students from rural regions/districts.</td>
</tr>
<tr>
<td></td>
<td>Increase the capacity to train staff, particularly for lower levels.</td>
</tr>
</tbody>
</table>

Table 17 - Challenges and recommendations within the category ‘Human Resources for Health’

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staff Shortages and Maldistribution</strong></td>
<td>Tackle low salaries and inadequate housing for public health workers to improve the environment within which the MOHSW is to generate, attract and retain the 476,000</td>
</tr>
<tr>
<td>The Five Year Development Plan notes that the current number of health professionals (110,000) will need to be quadrupled to 476,000 by 2025. *Low salaries for public</td>
<td></td>
</tr>
</tbody>
</table>
### Health Workers and Inadequate Housing

Health workers and inadequate housing make it difficult to maintain sufficient numbers of suitably qualified and motivated health workers or to attract new health workers into the profession. [FYDP; 2012]

### Unequal Allocation of Staff Across LGAs

Unequal allocation of fiscal resources across Local Government Authorities (LGA) are driven primarily by unequal allocations of salary expenditure. Personnel budgets are allocated according to where health workers are rather than according to where health workers are needed. Noticeably, the needs-based formula for distributing block grant funds for health does not apply to personnel. [USAID; 2011].

#### Streamline and Prioritise Human Resource Allocation and Deployment for Addressing Inter-LGA Inequity

- Allocate personnel budgets according to where health workers are needed rather than according to where they currently are.
  - Ministry of Finance encouraged to consider applying the needs-based formula for distributing block grant funds to personnel. [PEAKS Consortium; 2014].
  - Preferentially allocate staff in accordance with need (i.e. to the most underserved areas) and consider reallocating staff away from LGAs that are significantly served above average (even where they too are understaffed).
  - PEAKS Consortium study found that “Employees are… amenable to relocation if they have access to basic facilities and allowances amongst other incentives”. [PEAKS] and [PO-PSM implementation strategy; 2012].

#### While LGAs have the theoretical discretion to recruit staff independently, acute staff shortages has led sector Ministries (since the mid-2000s) to allocate education, health and agriculture staff directly to LGAs. Since 2008 new recruits have been targeted to the most understaffed LGAs. Despite this, central allocation has seen health workers recruited to LGAs that are staffed above average (such as Kibaha) rather than in accordance with direct need because such LGAs are still understaffed compared to national norms. [PEAKS Consortium; 2014].

- “Hard-To-Reach-Stay” [HTRS] LGAs, in particular, are heavily affected by unequal staff allocation. Despite some progress in HTRS, patterns of inequity persist, with some LGAs still being overstaffed relative to others.
- The trend of declining “Other Charges” [OC – or staff allowance] allocations in LGAs limits and reduces more effective use of existing staff resources.

#### There are not enough health personnel (medical doctors, laboratory technicians, pharmacists, nurses and paramedical graduates). [World Bank (WB); 2011]

- Pharmacist shortages are more severe than for other cadres. All districts have wide disparities in dispensary staffing levels. [PEAKS Consortium; 2014].
- The very limited number of pharmacists at the district level are overwhelmed by their (theoretical) workload, which includes supervising every health centre and every medicine seller each quarter. [USAID; 2011].

#### There is evidence of decreasing returns to scale. Spending per capita is 3.5x greater in the top 30 districts than in the bottom 30, yet outpatient visits and the share of births in facilities are only 50% greater. Resources (including staff) have far more impact in the bottom 30 districts than in the top 30. [PER, pg.70-76; 2011] and [PEAKS; (annex 4)].

#### Staff Productivity and Efficiency

- Spends has decreasing returns to scale – dedicate resources to where they will have a greater impact.
  - Concentrate the deployment of health workers upon the bottom 30 districts rather than the top 30 in order to maximise impact. [PEAKS; 2014 (annex 4)].
While the country faces an acute shortage of health workers, where health workers are available they are not fully utilised – evidenced by the variation in their workload and productivity:

- The data on effective workload and on differences in health staff productivity and efficiency (by facility and by LGA) clearly indicate that some staff work substantially more than others, while some staff are heavily underutilised – even in comparison to other countries. [PEAKS; 2014]
  - See Annexure E for six examples of differences in effective workload and productivity.
- While LGA management is generally aware of the wide variation in workload and productivity, no effort is made to measure it systematically. [PEAKS; 2014]
- Service delivery targets set during the LGA planning process are defined through inputs (i.e. equal numbers of staff per facility type (hospital, health centre, dispensary, etc.) irrespective of level of utilisation of these facilities. Not only does this result in very uneven workloads between facilities but it distorts the performance of equally staffed but less busy facilities. [PEAKS; 2014].

Fill vacancies.

- A 2012 survey found that “only 14% (122/854) of the recommended number of nurses and 20% (90/441) of the clinical staff had been employed at surveyed facilities. Furthermore, 44% of clinical staff were not available on the day of the survey.” – 38% were attending seminars, 8% were on long-training, 25% were on official travel and 20% were on leave. [Manzi, et al; 2012].

Understaffing in underserved areas is exacerbated by significantly under-motivated health workers, contributing to low quality of health service delivery in these areas. [USAID; 2011].

Human resource (HR) management is a priority but remains weak. Districts are unable to ensure that facilities are sufficiently staffed and sufficiently motivated. [USAID; 2011].

Supportive supervision is not taking place: “almost two-thirds of facilities [surveyed] received less than 3 visits from district health teams during the 6 months preceding the survey”. [Manzi 2012 and USAID; 2011].

Skills Shortages and Training:

Significant shortages of financial and managerial expertise at the district level exacerbates the ability of...
districts to monitor and manage facilities.

The approach to capacity building using off-site meetings and seminars and the financial incentives (per diems) derived from participating in off-site training, seminars, workshops and other meetings cause high absenteeism. [USAID; 2011].

Capacity building needs to take place on site through coaching and on-the-job training rather than off-site. Off-site meetings and seminars should also be reduced.

Conduct an audit of the qualifications of CHMT members and institute appropriate redress.

There is low enrolment in pre-service training institutions of students coming from rural regions/districts, negatively impacting retention in these areas. [USAID; 2011].

Strengthen staff retention in rural regions/districts by greatly increasing enrolment in pre-service training institutions of students from these regions/districts.

Increase the capacity to add professionals to public health facilities especially at the lower (primary) level to have cases treated at low costs and promptly as they arise (i.e. to reduce demands for expensive tertiary services) [Key informant interview].

2. Medicines

The costs of diagnostic tests and prescription drugs typically constitute the second largest budget items in a health system. According to the WHO World Medicines Situation 2011 report, “Medicines represent one of the single largest components of health expenditure, accounting for more than 15.2% of total health spending in the world in 2000.” Moreover, “…according to estimates in low- and middle-income countries the proportion of total government expenditure on medicines was on average 28.4% and 29.1%, respectively in 2000.” (Lu Y et al.; 2010). World Health report 2010 placed the estimate at “20–30% of global health spending, [but] slightly more in low- and middle-income countries”. As such, the category of ‘diagnostic tests and prescription drugs’ offer opportunities for inefficient spending.

Referred to as ‘medicines’ for the sake of simplicity inefficiencies within the prescription of drugs and the use of diagnostic tests fall within two intervention areas: Payment of higher than necessary prices for medicines and Eliminating inefficiencies at the MSD. The recommendations are summarised in Table 18. Table 19 thereafter then discusses the challenges and associated recommendations in greater detail.

Table 18 - Summary of Key Recommendations – Medicines

<table>
<thead>
<tr>
<th>Area for intervention</th>
<th>Key Recommendations – Medicines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment of higher than necessary prices for medicines</td>
<td>Provide sufficient, regular and predictable funding to the MSD. Expand centralised procurement for key drugs and commodities. Coordinate (and ideally pool) the procurement of medical commodities between government and development partners.</td>
</tr>
<tr>
<td>Eliminating inefficiencies at the MSD</td>
<td>Track and monitor the MSD delivery rate. Reduce delays in the procurement process. Focus cost-saving efforts on existing supply chain inefficiencies. Improve record-keeping for drugs and medical supplies delivery. Operational improvements to increase the efficiency of MSD. Don’t stop drug delivery in June due to zonal office stock-taking. Ensure that health centres and dispensaries are fully utilising allocations. Improve the efficiency of use of diagnostic equipment.</td>
</tr>
</tbody>
</table>

Table 19 - Challenges and recommendations within the category ‘Medicines’

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Payment of higher than necessary prices for medicines

<table>
<thead>
<tr>
<th>Description</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disbursement of the drug budget to the (MSD) is unpredictable to some extent, providing severe uncertainty among service providers on when and how much the central authorities are going to disburse for drugs. Irregular and insufficient funding to the MSD impacts on their ability to procure sufficient volumes on a timely basis. [Auditor General report, 2011].</td>
<td>Address the insufficient and irregular funding provided to the MSD in order that MSD are able to procure sufficient volumes on a timely basis [USAID; 2011].</td>
</tr>
<tr>
<td>HIV, Malaria, TB have centralised procurement. This should be expanded to (at least) the critical medications such as antibiotics, paracetamol, etc. [Key informant interview].</td>
<td>Expand centralised procurement for key drugs and commodities [Key informant interview].</td>
</tr>
<tr>
<td>Development partners procure medical commodities (including equipment and reagents) on behalf of the MOHSW, but procurement is uncoordinated and highly inefficient [Key informant interview].</td>
<td>Government and development partners to coordinate (and ideally to pool) the procurement of medical commodities (including equipment and reagents) [Key informant interview].</td>
</tr>
<tr>
<td>The availability and accessibility of commodities remains a critical issue [mid-term review of Health Sector Strategic Plan (HSSP) III].</td>
<td></td>
</tr>
</tbody>
</table>

### Eliminating inefficiencies at the MSD

<table>
<thead>
<tr>
<th>Description</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>While using MSD for procurement and distribution provides economies of scale from which the health system reaps efficiencies, regular stock-outs cause hospitals and districts to be forced to buy emergency supplies at short notice from private providers and at great cost. This is hugely expensive (and time consuming), undermining any efficiencies previously gained through centralising procurement [mid-term review of HSSP III; and Interviews with AfDB and USAID].</td>
<td>Track and monitor the delivery rate of MSD from national to central stores to zonal offices and on to health facilities [National Audit Office; 2011].</td>
</tr>
<tr>
<td>Consistent stock-outs of medicines and supplies in health facilities remains a “big challenge”. The delivery rate of drugs and medical supplies to MSD zonal offices and health facilities by MSD central stores and MSD zonal offices is low. Average MSD central stores delivery rate to MSD zonal offices is 30-40%; MSD zonal offices to health facilities is 49% [USAID; 2011].</td>
<td>Reduce delays in the procurement process: Improve MSD procurement processes between stages of the procurement cycle [National Audit Office; 2011].</td>
</tr>
<tr>
<td>There are delays in procurement processes at MSD from one stage of the procurement cycle to another [Key informant interview].</td>
<td>While exploring manufacturing, procurement and distribution options concentrate attention on extracting significant cost-saving from existing supply chain inefficiencies.</td>
</tr>
<tr>
<td>There was no evidence to show that the drugs and medical supplies said to be delivered by MSD reached the intended users as record keeping at both DMO and PHC facilities is poor. Moreover, MSD zonal offices are delivering drugs and medical supplies not ordered by the facilities.</td>
<td>Substantially improve record-keeping for drugs and medical supplies delivered (and not delivered) by MSD, particularly at DMO and PHC level. Evaluate delivery against order.</td>
</tr>
<tr>
<td>MSD closes its zonal offices for the whole month in June for stock taking purposes thus bringing the whole process of drug delivery to a standstill [National Audit Office; 2011].</td>
<td>Implement operational improvements to increase the efficiency of MSD and end costly stock-outs: automate ordering processes; optimise distribution routes; improve supervision at district level; etc. [Key informant interview; also National Audit Office; 2011].</td>
</tr>
<tr>
<td>There are huge unutilised funds lying idle at MSD (TzSh 24.3 billion). Health centres and dispensaries are not fully utilising the amounts allocated to them by the MOHSW while MOHSW does not monitor the utilisation of funds allocated to health facilities for drugs and medical equipment [National Audit Office, 2011].</td>
<td>MSD zonal office stock-taking should not result in their closure during the month of June, thereby bringing the whole drug delivery process to a standstill [National Audit Office; 2011].</td>
</tr>
<tr>
<td>Diagnostic equipment (e.g. cartridges) is used at well below capacity (even well below recommended minimum of 50% of capacity) and leads to costly wastage [Key informant interview].</td>
<td>Consistently monitor that health centres and dispensaries are fully utilising the amounts allocated to them for drugs and medical equipment [National Audit Office; 2011].</td>
</tr>
</tbody>
</table>
3. Leakages due to corruption and waste

Further inefficiencies that diminish the flow of inputs into the health system are fraud and corruption. The following areas are key sources of corruption in health: embezzlement and theft from health budgets or user-fee revenues; corruption in procurement; corruption in payment systems; corruption in the pharmaceutical supply chain; and corruption at the point of health service delivery, especially charging fees for services that are meant to be free. [Transparency International: 2006].

Leakages commonly result from: unclear resource allocation guidance; lack of transparency; poor accountability and governance mechanisms; and low salaries.

There is a great deal that countries can do to significantly reduce fraudulent practice and corruption in the health sector. The key to success is improved health system governance, key principles of which include accountability, transparency and the rule of law”.

Measuring the extent of corruption is by definition challenging. Nevertheless, PWC conducted estimated the rate of leakage in Tanzania at 40%. [PriceWaterhouseCoopers, 1999].

Recommendations within the category ‘Leakages due to corruption and waste’ are summarised in Table 16Table 20. Table 21 thereafter then discusses the challenges and associated recommendations in greater detail.

Table 20 - Summary of Key Recommendations – ‘Leakages due to corruption and waste’

<table>
<thead>
<tr>
<th>Area for intervention</th>
<th>Key Recommendations – ‘Leakages due to corruption and waste’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste, corruption and fraud</td>
<td>Continue to eliminate ‘ghost workers’ from the payroll. Implement measures to ensure that personnel records are timeously adjusted to reflect dismissals, absconders, retirements and deaths. Investigate why the MOHSW is allocating and disbursing funds for primary health facilities that either do not exist or are not yet operational. Implement measures to ensure that this is not repeated. Eliminate ‘fiscal dumping’ – disbursements to hospitals and health facilities made towards the last quarter of the financial year.</td>
</tr>
</tbody>
</table>

Table 21 - Challenges and recommendations within the category ‘Leakages due to corruption and waste’

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health system leakages (Waste, corruption and fraud)</td>
<td>Continue the effort to eliminate ‘ghost workers’ from the payroll, and implement measures to ensure that personnel records are timeously adjusted to reflect dismissals, absconders, retirements and deaths [PEFA Assessment, 2013].</td>
</tr>
<tr>
<td>A 2011/2012 Internal Auditor General audit report on the payroll of the Health, Education and Agriculture sectors indicated delays in adjusting personnel records to reflect dismissals, absconders, retirements and deaths. While payroll cleansing exercises over the last 2 years (facilitated by the HCMIS upgrade) have resulted in a sharp reduction – probably up to 90% – eliminating and preventing ‘ghost workers’ represents an area for significant payroll control. [Public Expenditure and Financial Accountability (PEFA) Assessment, 2013].</td>
<td>Investigate why the MOHSW is allocating and disbursing</td>
</tr>
<tr>
<td>A 2011 Auditor General report into the MSD found that the</td>
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</tbody>
</table>
MOHSW is allocating and disbursing funds for primary 31 health facilities that either do not exist or are not yet operational (in the amount of TzSh 285,049,854 as at 30 June 2011) [National Audit Office; 2011].

Most disbursements to hospitals are made towards the last quarter of the financial year. A 2011 auditor general report found that disbursements during the last month of the financial year (June) ranged from 17% to 46% of the facility’s annual disbursement [National Audit Office; 2011]. Eliminate ‘fiscal dumping’ – disbursements to hospitals and health facilities made towards the last quarter of the financial year [National Audit Office; 2011].

4. Enabling factors for improving health sector inefficiencies

Recommendations within the category ‘Enabling factors for improving health sector inefficiencies’ fall within 5 intervention areas: Health Financing; Service Delivery; Leadership and Management; Health System Planning; and Health Information Systems. The challenges and associated recommendations are detailed and discussed in Table 22.

Table 22 - Challenges and recommendations within the category ‘Enabling factors for improving health sector inefficiencies’

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Financing</strong></td>
<td></td>
</tr>
<tr>
<td>Per capita Total Health Expenditure (THE) increased from US$21 in 2002/03 to US$41 in 2009/10.</td>
<td>Increase per capita Total Health Expenditure (THE) beyond the level of US$ 86 per capita.</td>
</tr>
<tr>
<td>- This remains below the threshold of USD 86 used as benchmark for UHC for a basic package of care.</td>
<td></td>
</tr>
<tr>
<td>Total public expenditure on health as a share of general public expenditure is low by any standard and there is no clear strategy to increase the public budget.</td>
<td></td>
</tr>
<tr>
<td>- Approximately 64% of THE was spent on the three priority areas: HIV/AIDS, reproductive health, and malaria.</td>
<td></td>
</tr>
<tr>
<td>- Households compensate for low public health expenditure through Out-of-Pocket (OOP) expenditure, which increased from 25% of THE in 2005/06 to 32% in 2009/10, making households vulnerable in times of financial hardship.</td>
<td>- Assess the extent to which to adjust the fact that 64% of THE is spent on HIV/AIDS, reproductive health, and malaria alone.</td>
</tr>
<tr>
<td>- Monitor the increase in household OOP expenditure on health and accelerate the implementation of pre-payment initiatives to reduce payment at the point of service.</td>
<td></td>
</tr>
<tr>
<td>- Increase health improvements that go beyond the narrow scope of disease specific programmes.</td>
<td></td>
</tr>
<tr>
<td>For FY 2012/2013, the budget absorption rate was only 89.4%.</td>
<td>Improve absorption: Ensure that the full health allocation is spent</td>
</tr>
<tr>
<td>The health system is highly dependent on donors:</td>
<td>Work to eliminate parallel donor – government systems [USAID; 2011].</td>
</tr>
<tr>
<td>- Poses a major challenge to sustainability and reliability.</td>
<td></td>
</tr>
<tr>
<td>- Donor reliance has created parallel donor – government systems.</td>
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</tr>
<tr>
<td>Geographic inequity in resource allocation among districts: for example, in 2011/12 the best resourced LGA (Pangani) had 7.4 times more resources per capita than the worst resourced LGA (Barandi). [Rapid Budget Analysis, 2012]</td>
<td>Improve the per capita allocation of resources for health across districts and LGAs.</td>
</tr>
<tr>
<td>The gap between what is budgeted vs. what is disbursed is large and sometimes reaches only 50% throughout the year.</td>
<td>Improve disbursement:</td>
</tr>
<tr>
<td>- The transfer of funds from central to districts are very inefficient [Key informant interview].</td>
<td>- Provide districts and facilities with more accurate budget forecasts [National Audit Office; 2011].</td>
</tr>
<tr>
<td>- There are often delays in facilities getting requested funds disbursed (including user fees) due to complicated procedures for funding disbursement, and it is not clear who is accountable.</td>
<td>- Improve the speed with which finances are disbursed [National Audit Office; 2011].</td>
</tr>
<tr>
<td></td>
<td>- Improve the disbursement of funds (including user fees) by being clear on who is accountable. Moreover, eliminate complicated disbursement procedures [National Audit Office; 2011].</td>
</tr>
</tbody>
</table>
### Service Delivery

**While it is acknowledged that there are HR, commodity, and equipment constraints, most health facilities are not using the resources they do have in an efficient way [USAID; 2011].**

- Improve the use of all resources (HR, commodities, and general equipment) so that all health facilities are using the resources they have in an efficient manner [USAID; 2011].

**Although there are written standard operating procedures at the national level, lower-level health facilities are not aware of them, nor can they meet the standards due to shortages of HR, equipment, and commodities [USAID; 2011].**

- Address shortages of HR, equipment and commodities in order to enable lower-level health facilities to meet national level standard operating procedures [USAID; 2011].

**The referral system does not function appropriately because extensive paperwork discourages referrals, transport costs are a burden, and higher-level facilities do not always have greater expertise [USAID; 2011].**

- Evaluate the referral system to improve its functionality – extensive paperwork discourages referrals, transport costs are a burden, and higher-level facilities do not always have greater expertise [USAID; 2011].

**Clinical supervision is not effective due to the lack of qualified CHMT members who have time to conduct supervisory visits. The facilities are often left unmonitored, and do not have the motivation to improve quality of care [USAID; 2011].**

- Increase the quantity of qualified CHMT members in order to improve the clinical monitoring of facilities and the number of supervisory visits that are conducted. Furthermore, improve CHMT staff motivation so that they are motivated to improve the quality of care [USAID; 2011].

**Mpango wa Maendelo ya Afya ya Msingi (MMAM) funding to build new facilities in Tanzania is a great opportunity to improve service delivery. However, many of the facilities that have been constructed recently are not staffed appropriately, and some have no staff at all [USAID; 2011].**

- While MMAM funding provides a great opportunity to build new facilities, service delivery will only improve by ensuring that all facilities are appropriately staffed (or staffed at all) [USAID; 2011].

**Vertical programmes such as HIV/AIDS, TB and malaria control have negative impacts (competition for staff and lack of integration) on service delivery that are lead to inefficiency [USAID; 2011].**

- Improve collaboration with private sector providers and increase private sector involvement [USAID; 2011].

**The MOHSW recognises the importance of the private sector providers, but it is only beginning to develop mechanisms for better collaboration with the private sector [USAID; 2011].**

- Evaluate the need to which to integrate components of vertical programmes such as HIV/AIDS, TB and malaria control [USAID; 2011].

### Leadership and Management

**There is little coordination among and little effort to achieve consensus between all relevant parties so that common challenges, solutions, and actions can be identified and**

- Improve coordination among all relevant stakeholders so that common challenges, solutions and actions can be identified, consensus reached and decisions implemented
<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve accountability (both willingness and capability) so that organisations and individuals are held responsible for their roles, responsibilities and actions</td>
<td>[USAID; 2011].</td>
</tr>
<tr>
<td>Overcome the challenges brought by a lack of implementation-level mechanisms to ensure that challenges and actions across multiple Ministries and parties are acted upon and addressed</td>
<td>[USAID; 2011].</td>
</tr>
<tr>
<td>Reduce the reliance on appointing senior level staff in an ‘acting’ capacity</td>
<td>[USAID; 2011].</td>
</tr>
<tr>
<td>Improve the dissemination of guidelines, policies and laws and improve the understanding of these and their implications at local levels</td>
<td>[USAID; 2011].</td>
</tr>
<tr>
<td>Remove information 'gate-keeping': Improve the dissemination of and access to information to regional teams – from both community and central levels</td>
<td>[USAID; 2011].</td>
</tr>
<tr>
<td>Improve the existence and functioning of governing bodies and committees (e.g. Council Health Service Boards) and ensure that they understand their roles and responsibilities</td>
<td>[USAID; 2011].</td>
</tr>
<tr>
<td>Improve mechanisms for providing feedback from the implementation level</td>
<td>[USAID; 2011].</td>
</tr>
<tr>
<td>Implement measures to ensure that information captured at all levels is both analysed and used to assist in management of the health system</td>
<td>[USAID; 2011].</td>
</tr>
<tr>
<td>Improve efforts to cost national strategies and plans. Furthermore, costings must: Be fiscally realistic. Account for all activities (including off-budget development partner activities). Indicate prioritisation and the logical sequencing of activities. Take capacity constraints into account. Implement strategic purchasing. (Improve efficiency by taking a more strategic approach to purchasing). This requires that “health care needs of the population are actively assessed and that the most appropriate services to meet those needs to the greatest extent possible are purchased”.</td>
<td>McIntyre et al. 2014].</td>
</tr>
<tr>
<td>Carry out a DHS at local level. Or, link all existing HMIS to achieve health outcomes data.</td>
<td>HSSP4 Mid-Term Review and Interviews with USAID &amp; World Bank].</td>
</tr>
<tr>
<td>Institutionalisce good practices like those implemented in Urumba (withholding per diems until report quality improves; use improved reports to organise district stocks of supplies and medicines to eliminate stock-outs; etc.)</td>
<td>[USAID; 2011].</td>
</tr>
</tbody>
</table>
9.3.1 Summary of efficiency-related policy suggestions: 10 areas to focus on and 10 ‘Quick Wins’:

This section of the report has attempted to identify areas for efficiency reform across the entire spectrum of the Tanzanian health system. Table 33 extracts from the recommendations ten areas of intervention within which the MOHSW is encouraged to initiate/concentrate efficiency reforms.

Table 23 - Ten areas for recommended efficiency interventions

<table>
<thead>
<tr>
<th>Category of inefficiency</th>
<th>Area for recommended intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resources for health</td>
<td>Staff Shortages and Maldistribution.</td>
</tr>
<tr>
<td></td>
<td>Staff Productivity and Efficiency (including demotivation).</td>
</tr>
<tr>
<td></td>
<td>Skills Shortages and Training.</td>
</tr>
<tr>
<td>Medicines and health products</td>
<td>Payment of higher than necessary prices for medicines.</td>
</tr>
<tr>
<td>Health system leakages</td>
<td>Waste, corruption and fraud.</td>
</tr>
<tr>
<td>Enabling factors for improving health sector inefficiencies</td>
<td>Health Financing.</td>
</tr>
<tr>
<td></td>
<td>Service Delivery.</td>
</tr>
<tr>
<td></td>
<td>Leadership and Management.</td>
</tr>
<tr>
<td></td>
<td>Health System Planning.</td>
</tr>
<tr>
<td></td>
<td>Health Information Systems.</td>
</tr>
</tbody>
</table>

Table 24 highlights 10 efficiency reform ‘quick wins’.

Table 24 - 10 Efficiency Reform ‘Quick Wins’

<table>
<thead>
<tr>
<th>Area for intervention</th>
<th>Key Recommendations – 10 Quick Wins</th>
</tr>
</thead>
</table>

[Key informant interview].

[Introduce a national policy on data flow and information use, and use this to eliminate parallel sub-systems [MOHSW, undated]].

[MOHSW, undated].

[MOHSW, undated].

[MOHSW, undated].

[MOHSW, undated].

[MOHSW, undated].

[MOHSW, undated].

[MOHSW, undated].

[MOHSW, undated].

[MOHSW, undated].

[USAID; 2011].

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<table>
<thead>
<tr>
<th>Human Resources for Health</th>
<th>Staff Productivity and Efficiency:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Improve Human Resource management and supervision:</td>
</tr>
<tr>
<td></td>
<td>o Use research, spot visits and supportive supervision to ensure that staff are at their posts and engaged productively in clinical care.</td>
</tr>
<tr>
<td></td>
<td>o Manage staff performance on the basis of workload &amp; patient volume.</td>
</tr>
<tr>
<td></td>
<td>o Ensure that district and regional health teams provide appropriate supportive supervision to facilities and districts.</td>
</tr>
<tr>
<td></td>
<td>o Strengthen HR management.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Skills Shortages and Training:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Capacity building needs to take place on-site. Off-site meetings and seminars should also be reduced.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medicines</th>
<th>Payment of higher than necessary prices for medicines:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Coordinate (and ideally pool) the procurement of medical commodities between government and development partners.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eliminate inefficiencies at the MSD:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Improve record-keeping for drugs and medical supplies delivery.</td>
</tr>
<tr>
<td>• Track and monitor the MSD delivery rate.</td>
</tr>
<tr>
<td>• Don’t stop drug delivery in June on account of zonal office stock-taking.</td>
</tr>
<tr>
<td>• Ensure that health centres and dispensaries are fully utilising their allocations.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leakage</th>
<th>Reduce waste and leakages:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Continue to eliminate ‘ghost workers’ from the payroll.</td>
</tr>
<tr>
<td></td>
<td>o Implement measures to ensure that personnel records are timeously adjusted to reflect dismissals, absconders, retirements and deaths.</td>
</tr>
<tr>
<td></td>
<td>• Investigate why the MOHSW is allocating and disbursing funds for primary health facilities that either do not exist or are not yet operational.</td>
</tr>
<tr>
<td></td>
<td>• Eliminate ‘fiscal dumping’ – disbursements to hospitals and health facilities made in the last quarter of the financial year – to improve ability to fully spend allocations.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enabling factors</th>
<th>Health Financing:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Improve the absorption of funds: Ensure that the full health allocations are spent.</td>
</tr>
<tr>
<td></td>
<td>• Improve disbursement</td>
</tr>
<tr>
<td></td>
<td>o Provide districts and facilities with more accurate budget forecasts.</td>
</tr>
<tr>
<td></td>
<td>o Improve the speed with which finances are disbursed.</td>
</tr>
<tr>
<td></td>
<td>o Improve accountability and eliminate complicated disbursement procedures.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Delivery:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Improve the functionality of the referral system.</td>
</tr>
<tr>
<td>• Integrate components of vertically implemented programmes (particularly across HIV &amp; AIDS, TB and malaria control).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leadership and Management:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Remove information ‘gate-keeping’: Improve the dissemination of and access to information to regional teams – from both community and central levels.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Information Systems:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Institutionalise good practices like those implemented in Urumba (withholding per diems until report quality improves; use improved reports to organise district stocks of supplies and medicines to eliminate stock-outs; etc.).</td>
</tr>
</tbody>
</table>
10 Conclusions and Policy Implications

This analysis shows that Tanzania doesn't give itself the means to achieve its stated policy objectives; i.e. health policy initiatives currently in place will not achieve universal coverage, even for a basic package of health services.

Indeed this analysis shows that if Tanzania continues with its current health policy it will be out of line with peers: by 2024/25 with a health budget allocation of around 6% of total government expenditure Tanzania will be spending half that of the SADC average which is projected to reach 12%.

There are several initiatives the government of Tanzania can take to be in a better position to achieve UHC. These policy choices will become the beginnings a of longer term sustainable health financing strategy and include the following:

Health as a Budget & BNR Priority to Achieve UHC - Health does not receive the political and budgetary priority commensurate with the explicit policy ambitions notably of universal health coverage. To align the one with the other, health should be elevated and could be upgraded to the Big Results Now policy, following which it would receive a higher priority in resource allocation, with a view to gradually reaching the Abuja target.

Improved Planning and Budgeting for Effective Near-Term Financing and Service Delivery - As the Tanzanian health sector is heavily donor dependent, and donor contributions are highly volatile, systematic investment in health is undermined. Better planning and budgeting mechanisms are required so that capital and recurrent expenditure finances an effective health system.

Health Insurance is Vital to ensuring Long Term Sustainable Health Financing - With the view to generating enough resources and in a way that limits exposure to financial risk, health insurance development should receive adequate attention. This aspect is recognised by the government, and this analysis underscores this. To date, results in terms of contribution to health financing and population coverage remain modest.

Alternative ‘Earmarked’ Funding Sources can Support the Health Sector - Although not a panacea, alternative sources of funding can provide a steady, sustainable and equitable way of generating resources for health. Several options are part of the funding mix and could be explored in more detail when elaborating a medium to long term health financing strategy.

Efficiency Savings can Reduce the Financing Gap - Efficiency savings hold significant potential for increasing fiscal space. These savings will not be realised without substantial effort. Such measures with their associated cost reductions are within the control of the Government of Tanzania. Therefore, in addition to increased allocation of resources to health, the ministry of health should commit to improving the efficiency of the health system. International comparison shows that significant efficiency savings can be made, and this is confirmed by a review of the many policy recommendations that have been made in the last couple of years in this area. The ministry of health should engage on a programme to identify, quantify, prioritize and implement efficiency savings measures.

However, even if all of the above is put in place, the analysis suggests that Tanzania will not achieve universal coverage, nor will it be able to satisfy what is believed to be a population-wide demand for health services. In light of this two immediate / short-term measures can be considered:
**Carry out a Tanzania-Specific Health Costing** - The resource needs estimate for universal coverage used in this work is derived from an internationally developed recommendation. There would be merit in engaging developing an expenditure plan that sets out what the ministry realistically can spend towards UHC in the coming 3, 5 and 10 years’ time.

**Tanzania should Lobby for International Health Financing** - One of the major reasons that Tanzania is unlikely to achieve UHC any time soon is because it is a low income country. Even if growth rates are positive, spurred by natural resource discovery, the amount of resources for health that the economy can generate falls short of what is required to offer the population universally access to a basic package of services. The only way to fill any ‘residual’ financing gap is through donor funding.
11 References / Bibliography

11.1 Literature


Bultman J. and Mushy A.: Options for Health Insurance Market Structuring for the Tanzanian Health Financing Strategy (Final Report), GiZ; 30 June 2013. Available at:

http://www.who.int/healthsystems/topics/financing/healthreport/28UCefficiency.pdf

http://www.who.int/healthsystems/topics/financing/healthreport/51Hypothecation.pdf

http://www.who.int/healthsystems/topics/financing/healthreport/41FiscalSpace.pdf

East African Community Secretariat: East African Community Facts and Figures 2012; Arusha Tanzania; 2012. Available at:

East African Community Secretariat: East African Community Facts and Figures 2013; Arusha Tanzania; 2013. Available at:


Parliamentary Committee, 2013. Report of Special Committee Appointed by the Speaker to Undertake a Study on the Ways Government Revenue Could be Increased for 2013/14 Fiscal Year


Resource-Poor Countries”, World Health Report, Background Paper, 41


Tanzania Ministry of Finance: Study on Integration and Harmonisation of Non Tax Revenue Collection Systems for Ministries, Departments and Agencies (MDAs); July 2013.

Tanzania Ministry of Health and Social Welfare: “Health Financing in Tanzania, where we have come from ... and where are we going ...”; Presentation delivered by the Tanzania Ministry of Health and Social Welfare at the Blue Pearl Hotel – Dar es Salaam; September 2010.


Tanzania Ministry of Health and Social Welfare: *Proposal to Strengthen the Health Information System* [HIS]; [undated]. Available at: [http://ihi.eprints.org/569/1/ihi.digital.pdf](http://ihi.eprints.org/569/1/ihi.digital.pdf)

Tanzania National Audit Office: Report of the Controller and Auditor General on Special Audit on Drugs Availability at Medical Stores Department (MSD) for the period from 30 June 2009 to 30 June 2011; December 2011.

Tanzania Parliamentary Committee: *Report of Special Committee Appointed by the Speaker to Undertake a Study on the Ways Government Revenue Could be Increased for 2013/14 Fiscal Year*. 2013


URT 2010. "Health Financing in Tanzania, where we have come from ... and where are we going ...", *Ministry of Health and Social Welfare Presentation, Blue Pearl Hotel – Dar es Salaam, Sep. 2010*

URT, 2012. The Tanzania Long Term Perspective Plan (LTPP), 2011/12-2025/26: The Roadmap to a Middle Income Country

URT, 2013. Study on Integration and Harmonisation of Non Tax Revenue Collection Systems for Ministries, Departments and Agencies (MDAs), July 2013


World Health Organisation: World Health Assembly resolution 58.33; Available at: http://apps.who.int/iris/bitstream/10665/20383/1/WHA58_33-en.pdf?ua=1

## Annex A  Interviews Conducted and Organisations Consulted

### Table 25 - Interviews Conducted and Organisations Consulted

<table>
<thead>
<tr>
<th>Institution</th>
<th>Position</th>
<th>Contact Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Finance</td>
<td>Deputy Permanent Secretary</td>
<td>Prof. Adolf Mkenda</td>
</tr>
<tr>
<td></td>
<td>External Finance Department</td>
<td>Andambike Mololo</td>
</tr>
<tr>
<td></td>
<td>Policy Analysis Officers</td>
<td>Fatima Mangumba and Morris</td>
</tr>
<tr>
<td></td>
<td>Financial Management Officers</td>
<td>Bwinda Naso and Zwadi Bigi</td>
</tr>
<tr>
<td>Prime Minister’s Office – Regional Administration and Local Government</td>
<td>Deputy Permanent Secretary</td>
<td>Dr. Deo Mutasiwa</td>
</tr>
<tr>
<td>Ministry of Health and Social Welfare</td>
<td>Director, Policy</td>
<td>Miriam Ally</td>
</tr>
<tr>
<td></td>
<td>Senior Advisor, Health Policy, Planning &amp; Management</td>
<td>Sally Lake</td>
</tr>
<tr>
<td></td>
<td>Assistant Director (Planning and Budgeting)</td>
<td>Bernard Konga</td>
</tr>
<tr>
<td>TACAIDS</td>
<td>Director of Finance, Administration &amp; Resource Mobilization</td>
<td>Beng‘l Mazana Issa</td>
</tr>
<tr>
<td>National Health Insurance Fund (Includes CHIF)</td>
<td>Director of Operations</td>
<td>Eugen</td>
</tr>
<tr>
<td></td>
<td>CHF Manager</td>
<td>Rehani</td>
</tr>
<tr>
<td></td>
<td>Director Planning and Actuarial Services</td>
<td>Michael Mhando</td>
</tr>
<tr>
<td>SSRA</td>
<td>Director General</td>
<td>Irene Isaka</td>
</tr>
<tr>
<td>Tanzanian Private Sector Foundation (TPSF)</td>
<td>Director Research, Actuarial &amp; Policy Development</td>
<td>Ansgar Mushi</td>
</tr>
<tr>
<td></td>
<td>Executive Director</td>
<td>Godfrey Simbeye</td>
</tr>
<tr>
<td></td>
<td>Director of Policy and Analysis and Advocacy</td>
<td>Edward Furaha</td>
</tr>
<tr>
<td></td>
<td>Membership Service Officer</td>
<td>Lilian Ndossi</td>
</tr>
<tr>
<td>Association of Private Health Facilities in Tanzania (APHFTA)</td>
<td>Chief Executive Officer</td>
<td>Dr. Samwel Ogillo</td>
</tr>
<tr>
<td>IMF</td>
<td>Resident Representative</td>
<td>Thomas Baunsgaard</td>
</tr>
<tr>
<td>World Bank</td>
<td>Senior Economist</td>
<td>Emmanuel Mungunasi</td>
</tr>
<tr>
<td>AfDB</td>
<td>Senior Social Development Specialist</td>
<td>Hamisi Sel Simba</td>
</tr>
<tr>
<td></td>
<td>Country Program Officer</td>
<td>Lekoet</td>
</tr>
<tr>
<td>GIZ</td>
<td></td>
<td>Christian Pfleiderer</td>
</tr>
<tr>
<td>Health Budget Support Group / USAID</td>
<td>Temporary Chair of the Health Basket Fund, &amp; Senior Policy and Health Systems Strengthening Advisor for USAID</td>
<td>Susna De</td>
</tr>
<tr>
<td>USAID</td>
<td>Senior Supply Chain Advisor</td>
<td>Kelly Hamblin</td>
</tr>
<tr>
<td>Ifakara Health Research Centre</td>
<td>Lead, Health Financing Group</td>
<td>Jemini Mtei</td>
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<tbody>
<tr>
<td><strong>Total domestic revenue (including LGAs own source)</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual</td>
<td>3,634,580.6</td>
<td>4,240,074.3</td>
<td>4,661,540.3</td>
<td>5,736,266.1</td>
<td>7,221,408.6</td>
<td>8,442,610.8</td>
<td>11,537,522.6</td>
<td>10.5%</td>
</tr>
<tr>
<td><strong>A. Tax Revenue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Import duty</td>
<td>349,275.6</td>
<td>359,255.3</td>
<td>367,070.1</td>
<td>444,650.2</td>
<td>497,686.6</td>
<td>534,136.9</td>
<td>852,319.0</td>
<td>7%</td>
</tr>
<tr>
<td>2. Excise Duty</td>
<td>660,888.2</td>
<td>762,092.7</td>
<td>837,622.3</td>
<td>1,052,152.2</td>
<td>1,028,883.8</td>
<td>1,258,242.1</td>
<td>1,906,857.0</td>
<td>1.6%</td>
</tr>
<tr>
<td>3. Value added tax</td>
<td>1,042,489.7</td>
<td>1,231,135.4</td>
<td>1,389,624.3</td>
<td>1,530,641.3</td>
<td>1,974,820.2</td>
<td>2,146,336.7</td>
<td>2,590,291.0</td>
<td>2.4%</td>
</tr>
<tr>
<td>4. Income tax</td>
<td>963,804.3</td>
<td>1,226,645.6</td>
<td>1,334,019.7</td>
<td>1,680,385.2</td>
<td>2,246,783.7</td>
<td>3,034,359.9</td>
<td>3,656,505.6</td>
<td>3.6%</td>
</tr>
<tr>
<td>5. Other taxes</td>
<td>382,792.0</td>
<td>462,543.8</td>
<td>499,497.2</td>
<td>601,448.4</td>
<td>732,903.2</td>
<td>706,910.4</td>
<td>1,387,587.3</td>
<td>1.0%</td>
</tr>
<tr>
<td><strong>B. Non-tax revenue</strong></td>
<td>275,330.8</td>
<td>196,401.3</td>
<td>233,706.6</td>
<td>442,988.8</td>
<td>740,930.9</td>
<td>712,624.9</td>
<td>1,142,082.7</td>
<td>8%</td>
</tr>
<tr>
<td>1. Parastatal dividends</td>
<td>58,253.5</td>
<td>25,865.9</td>
<td>18,630.7</td>
<td>26,154.6</td>
<td>207,352.0</td>
<td>47,602.4</td>
<td>122,047.1</td>
<td></td>
</tr>
<tr>
<td>2. Ministries and regions</td>
<td>172,797.3</td>
<td>155,334.5</td>
<td>177,841.2</td>
<td>231,839.4</td>
<td>311,317.7</td>
<td>414,925.0</td>
<td>614,654.1</td>
<td>4%</td>
</tr>
<tr>
<td>3. Other nontax revenue</td>
<td>44,280.0</td>
<td>15,200.9</td>
<td>37,234.7</td>
<td>26,714.9</td>
<td>29,262.6</td>
<td>20,835.9</td>
<td>383,451.8</td>
<td>3%</td>
</tr>
</tbody>
</table>

**Source:** Ministry of Finance
Annex C  Overview of the macroeconomic framework

C.1  Introduction

The macroeconomic approach adopts a numeric framework, known as a financial programming framework, which is designed to assist in the development of a consistent approach to the different aspects of economic policy. The key feature of the financial programming framework is that it is based on a comprehensive view of the national economy, comprising four inter-dependent sectors. The four sectors are:

- The Real Sector, which relates to productive activities of the economy.
- The Fiscal Sector, which captures government transactions.
- The External Sector, which includes all transactions between the country in question and other countries.
- The Monetary Sector, which includes the transactions of the banking system and of the central bank.

Whilst not a sector in its own right, attention is also given to the debt of the central government, as the stocks and flows of the government’s debt are reflected in the fiscal, external and monetary sectors.

At the outset, it should be clearly understood that the macroeconomic framework is not an economic model. It does not constitute a set of equations which attempt to model the behaviour and interaction between different sets of economic agents. In economic terminology, it is not based on a set of econometrically estimated behavioral and/or structural relationships which drive economic outcomes.

The macroeconomic framework is a tool for ensuring the consistency between different sets of assumptions about the future course of the economy. In other words, by starting with a set of assumptions about the economy (e.g. GDP growth), the framework assesses the impact of different policy options on the four sectors of the economy in a consistent manner.

C.2  Key components

The starting point for the macroeconomic framework is the tables published on the country’s macroeconomic performance by the IMF. These tables are produced in a standard format for all countries as part of the IMF’s Article IV surveillance activities. The standard IMF documents include five tables that are replicated in the macroeconomic framework used for this analysis. These are:

- Table 1: Selected Economic Indicators, containing summary data from the real, fiscal, monetary and external sectors.
Table 4: Monetary Accounts, showing the paths of broad money, net foreign assets and net domestic assets.

Table 5: Balance of Payments, including indicators on gross international reserves.

These tables are transposed into Excel and expanded further as necessary, to produce data for the four sectors of the economy described above. This is done through the following six work sheets:

- **Overview**: The Overview sheet includes projections for headline macroeconomic variables such as real GDP growth, GDP deflator and the exchange rate.
- **Real**: The Real sheet provides the projections of the real sector, including values for GDP and its components (including consumption and investment).
- **Fiscal**: The Fiscal sheet provides information on the annual budget for the Government, including projections for domestic revenue, expenditure, grants and deficit financing.
- **Money**: The Money sheet provides projections for the monetary sector. It includes the path of key monetary aggregates, such as credit to the private sector.
- **External**: The External sheet provides forecasts for the Balance of Payments, including projections for imports, exports, and gross international reserves.
- **Debt**: Whilst the Debt sheet does not reflect a sector as such, it performs a simple function by taking the debt disbursements, combining these with the existing debt stock and forecast repayments, to project the debt variables into the future.

The different sheets are all linked to each other to ensure consistency, as discussed further below. Additional worksheets are used to group together the key macroeconomic assumptions, to include the data on health resources and to present charts of macroeconomic indicators.

**C.3 Theoretical approach**

The framework uses four macroeconomic accounting identities to ensure consistency between the different sectors of the economy. A macroeconomic accounting identity is a relationship between a set of economic variables that must hold true by definition. For example, GDP must be equal to the sum of its components (investment, consumption, imports and exports). Each sector has its own accounting identity.

The framework ensures consistency between the sectors in two ways. Firstly, the macroeconomic framework ensures that all of the accounting identities are met. It does this through the use of a "residual" item, which is set via a formula to ensure that the identity is always true. For example, if we have already determined GDP, investment, imports and exports, then there can only be one value for consumption that is consistent with the accounting identity for the real sector (i.e. Consumption = GDP – Investment – Exports + Imports). In this case, consumption is known as the "residual".

Secondly, the macroeconomic framework ensures that wherever a variable features in more than one sector, the projections for that variable are the same in both sectors. For example, Imports
features in both the real sector (as a component of GDP) and the external sector (as a component of the Current Account). Thus, the macroeconomic framework will ensure that whatever values are used for Imports in the external sector are also used in the real sector.

C.3.1 Macroeconomic Accounting Identities

This section will examine the accounting identities used in each sector and the residual that is used to balance them.

The Real Sector

<table>
<thead>
<tr>
<th>Basic Identity:</th>
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<tbody>
<tr>
<td>( GDP = \text{Consumption (Private + Public)} + \text{Investment (Private + Public)} + \text{Exports} - \text{Imports} )</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Residual:</th>
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</thead>
<tbody>
<tr>
<td>Private Consumption</td>
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</tbody>
</table>

The primary assumption in this sector is that of growth in real GDP. This is used to extrapolate the current figure for GDP into the coming years. An assumption is also made about the future path of the GDP deflator in order to convert between real GDP and nominal GDP.

Having determined the value of GDP in future years, it is necessary to determine its composition. Public consumption (i.e. government current expenditure) and public investment (i.e. government development expenditure) are determined by the Fiscal sheet (see below). By making assumptions about the share of investment in GDP, it is possible to produce forecast figures for investment. Finally, Imports and Exports are linked from the External sheet (see below).

Therefore, having determined the total value for GDP and all but one of its components, the residual component must be set to ensure consistency with the basic accounting identity. In this case, private consumption is used as the residual and is equal to GDP plus imports, less exports, private investment and total government spending.

The Fiscal Sector

<table>
<thead>
<tr>
<th>Basic Identity:</th>
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<tbody>
<tr>
<td>( \text{Total Revenue} - \text{Total Expenditure} = \text{Net Borrowing} )</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Residual:</th>
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<tbody>
<tr>
<td>Net Disbursements of Domestic Debt</td>
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</tbody>
</table>

This sector is focused on the government budget. Firstly, tax revenue is determined (based on an assumption about its share of GDP) as well other sources of revenue, such as grants and non-tax revenue. External grants are converted to local currency using the exchange rate.
Assumptions are made about the government’s expenditure (excluding debt service). The interest payments on debt are calculated in the Debt sheet, such that a higher deficit in one year is reflected in higher interest payments in the subsequent year. These factors determine the government’s overall deficit and hence the government’s borrowing requirement. Future disbursements and principal repayments on external debt are determined by assumption and converted to local currency using the exchange rate.

All that remains is to determine the net disbursements on domestic debt. This is the residual in this sector and it set at a level to balance government borrowing with the overall deficit.

**The Monetary Sector**

<table>
<thead>
<tr>
<th>Basic Identity:</th>
</tr>
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<tbody>
<tr>
<td>Net Foreign Assets + Net Domestic Assets = Broad Money</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Residual:</th>
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</thead>
<tbody>
<tr>
<td>Net Claims on Other Sectors (a component of Net Domestic Assets)</td>
</tr>
</tbody>
</table>

Net foreign assets are determined by the net flow of foreign currency into the country, which is given by the change in official reserves in the balance of payments (i.e. from the External sheet).

Net domestic assets includes net claims on government and net claims on other sectors (i.e. the private sector). Net claims on government is determined by the outstanding stock of government debt, which is taken directly from the Debt sheet. Net claims on other sectors is the residual in this sector and therefore calculated at the end.

Broad money can derived from the economic relationship between nominal GDP, broad money and the velocity of money (PY=vM). Broad money is therefore calculated by dividing nominal GDP by an assumed figure for the velocity of money.

Having determined everything else using the above assumptions, net claims on other sectors is the residual and is set to ensure compliance with the accounting identify for this sector. It is equal to broad money less net foreign assets and less net claims on government.

**The External Sector**

<table>
<thead>
<tr>
<th>Basic Identity:</th>
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<tbody>
<tr>
<td>Current Account + Capital Account + Financial Account + Errors &amp; Omissions = Change in Official Reserve Assets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Residual:</th>
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<tbody>
<tr>
<td>Change in Official Reserve Assets</td>
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</table>
The external sector is essentially a representation of the balance of payments, which captures the flow of foreign currency into and out of the country in question. The current account is determined by assumptions about the import and export of goods and services, income and remittances. Also included in the current account are government interest payments on external debt (taken from the Debt sheet) and external budget support grants (taken from the Fiscal sheet).

The capital account includes external project grants (taken from the Fiscal sheet). The financial account requires assumptions about foreign direct investment and portfolio investment. The only other significant components of the financial account are the disbursements and repayments of external loans to government, which are taken from assumptions in the Fiscal sheet.

Errors and omissions are assumed to be zero in the future. The only item left is the change in official reserve assets, which is used as the residual to ensure consistency in this sheet. The change in official reserves is therefore given by the sum of the current account, the capital account and the financial account.

C.3.2 Key Linkages between the Sectors

As discussed above, the second source of consistency comes from the use of only one set of forecasts wherever a variable appears in two different sectors. Table 1 summarises the linkages between different sheets. It is important to note that the link is created from the sheet listed on the left hand side to the sheet list along the top of the table (i.e. imports from the External sheet are transferred to the Real sheet.) To avoid confusion, only the most important linkages are shown, these correspond with the linkages discussed in the text above.
Annex D  Out-of-pocket and public spending elasticities to GDP

The methodological background to the public health spending and out-of-pocket multipliers to GDP are elasticities, obtained as follows. Tanzania is part of SADC, and therefore a SADC analysis is superimposed on the graphs.

Out of pocket spending on health is somewhat more variable than total health expenditure (THE), but the National Health Accounts (NHA) estimates also show a global correlation with GDP, as shown in Figure 19 below.

Figure 19 - Out-of-pocket expenditure and GDP

As can be seen, the global elasticity for OOP is about 0.86 – implying that OOP rises more slowly than GDP, and that OOP is a larger proportion of household income in poorer countries. Note however that the elasticity of OOP appears to be somewhat lower in SADC countries (shown in red), with a value of about 0.66. This implies that OOP is significantly lower as a proportion of household income in those countries with higher GDP per capita.

General government spending on health (GGEH) includes on-budget spending derived from domestic revenue and revenue derived from external sources (primarily donors). The global average of GGEH is about 5.7% of GDP, and the level in the SADC countries is almost the same.

GGEH is also strongly correlated with GDP, as shown in Figure 20 below. The elasticity with respect to GDP is 1.1 globally, and about 1.2 in the SADC countries which do not show a
significant difference from the global trend. This implies that GGEH generally rises about 10%-20% faster than GDP.

**Figure 20 - General government spending on health and GDP**
Annex E  Further analysis of the Scope for Efficiency Savings

How could this be done (continued)?

World Health Report 2010 identifies 10 leading causes of or sources of inefficiency:

1. **Medicines**: Underuse of generics and higher than necessary prices for medicines.
2. **Medicines**: Use of sub-standard and counterfeit medicines.
3. **Medicines**: Inappropriate and ineffective use.
4. **Health-care products and services**: Overuse or supply of equipment, investigations and procedures.
5. **Health workers**: Inappropriate or costly staff mix, unmotivated workers.
6. **Health-care services**: Inappropriate hospital admissions and length of stay
7. **Health-care services**: Inappropriate hospital size (low use of infrastructure).
8. **Health-care services**: Medical errors and suboptimal quality of care.
9. **Health system leakages**: Waste, corruption and fraud.
10. **Health interventions**: Inefficient mix/ inappropriate level of strategies.

### Key areas of inefficiency in the Tanzania health sector and the potential for efficiency gains of different health policy reforms

In the text below key causes of inefficiency and proposed recommendations as collected from the key interviews and literature review are laid out in bullet point paragraphs for each of the health sector areas where efficiency losses are greatest (according to the WHO). These recommendations are grouped into six broad categories (drawn from *World Health Report 2010*), as set out in Table 26. The analysis is preceded within each category by a table summarising the challenges and recommendations within that category of inefficiency.

<table>
<thead>
<tr>
<th>Table 26 - The six categories of inefficiency and areas of recommended interventions</th>
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<tbody>
<tr>
<td><strong>Category of inefficiency</strong></td>
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<td>-------------------------------</td>
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<tr>
<td><strong>1. Human resources for health</strong></td>
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<td><strong>2. Medicines and health Products</strong></td>
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<td><strong>3. Hospitals</strong></td>
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<tr>
<td><strong>4. Health system leakages</strong></td>
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</tbody>
</table>
5. Intervention mix

<table>
<thead>
<tr>
<th>6. Enabling factors for improving health sector inefficiencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inefficient mix / inappropriate level of strategies.</td>
</tr>
<tr>
<td>Health Financing</td>
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<tr>
<td>Service Delivery</td>
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<tr>
<td>Leadership and Management</td>
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<tr>
<td>Health System Planning</td>
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<tr>
<td>Health Information Systems</td>
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</tbody>
</table>

5. Human resources for health

Health workers are the core of any health system and it is important to generate and maintain sufficient numbers of suitably qualified and motivated health workers in order for any health system to operate effectively. The importance of human resources for health is further evidenced by the fact that they are among the largest cost items for health systems, with salaries and other payments typically consuming about half of the entire health budget (Chisholm and Evans, 2010). As such, the opportunities for human resource spending inefficiencies are widespread.

Table 27 - Key Recommendations – Human Resources for Health

<table>
<thead>
<tr>
<th>Area for intervention</th>
<th>Key Recommendations – Human Resources for Health</th>
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<tbody>
<tr>
<td><strong>Staff Shortages and mal-distribution</strong></td>
<td>Tackle low salaries and improve inadequate housing for health workers.</td>
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<td></td>
<td>Streamline and prioritise human resource allocation and deployment:</td>
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<tr>
<td></td>
<td>- Allocate budgets in accordance with where health workers are needed rather than in accordance with where they currently are.</td>
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<td></td>
<td>- Preferentially allocate staff in accordance with need and consider re-allocating staff away from LGAs served above average.</td>
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<td></td>
<td>In “Hard-To-Reach-Stay” [HTRS] areas, support LGA designed and implemented strategies for staff attraction, retention and motivation.</td>
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<td></td>
<td>In LGAs, promote initiatives in support of improved human resource management and of greater transparency of resource allocation and utilisation.</td>
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<td></td>
<td>Concentrate the deployment of health workers upon less well-served areas to maximise impact.</td>
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<tr>
<td><strong>Staff Productivity and Efficiency</strong></td>
<td>Fill vacant positions within health facilities.</td>
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<tr>
<td></td>
<td>Improve staff productivity &amp; efficiency so that existing workers are fully utilised:</td>
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<tr>
<td></td>
<td>- Systematically monitor and measure staff productivity and efficiency. Use data to eliminate current variation in workload and productivity by spreading resources, staff and equipment among facilities accordingly.</td>
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<tr>
<td></td>
<td>- Use the results of time-and-motion studies to ensure that where health workers are available they are fully utilised.</td>
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<td></td>
<td>- Set staffing level norms and standards on the basis of health facility utilisation levels.</td>
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<td></td>
<td>- Ensure that district and regional health teams provide appropriate supportive supervision to facilities and districts</td>
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<td></td>
<td>Motivate health workers and support staff.</td>
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<td></td>
<td>Strengthen and support HR management.</td>
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<td></td>
<td>Monitor the use of staff:</td>
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<td></td>
<td>- Manage staff performance on the basis of workload &amp; patient volume.</td>
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<tr>
<td></td>
<td>- Define service delivery targets on the basis of outputs and outcomes.</td>
</tr>
<tr>
<td></td>
<td>- Should service delivery targets continue to be defined through inputs, ensure that they are correlated with facility utilisation levels.</td>
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</tbody>
</table>
Use research, spot visits and supportive supervision to ensure that staff are at their posts and engaged productively in clinical care.

**Skills Shortages and Training**

- Strengthen the financial and managerial capacities of districts.
- Capacity building needs to take place on-site and off-site meetings and seminars should also be reduced.
- Conduct an audit of the qualifications of CHMT members and institute appropriate redress.
- Greatly increase enrolment in pre-service training institutions of students from rural regions/districts.
- Increase the capacity to train staff, particularly for lower levels.

**Staff Shortages and Mal-distribution:**

- **Low salaries** for public health workers and **inadequate housing** make it difficult to maintain sufficient numbers of suitably qualified and motivated health workers or to attract new health workers into the profession [Tanzania Five Year Development Plan (FYDP); 2012]:
  
  - The Five Year Development Plan notes that the current number of health professionals (110,000) will need to be quadrupled to 476,000 by 2025.

- **Unequal allocation of staff across LGAs.** Varied allocation of fiscal resources across Local Government Authorities (LGA) are driven primarily by unequal allocations of salary expenditure. Personnel budgets are allocated according to where health workers are rather than according to where health workers are needed. Noticeably, the needs-based formula for distributing block grant funds for health does not apply to personnel. [USAID; 2011].

- While LGAs have the theoretical discretion to recruit staff independently, acute staff shortages has led sector Ministries (since the mid-2000s) to allocate education, health and agriculture staff directly to LGAs. Since 2008 new recruits have been targeted to the most understaffed LGAs. Despite this, central allocation has seen health workers recruited to LGAs that are staffed above average (such as Kibaha) rather than in accordance with direct need because such LGAs are still understaffed compared to national norms. [PEAKS Consortium; 2014].
  
  - “Hard-To-Reach-Stay” [HTRS] LGAs, in particular, are heavily affected by unequal staff allocation. Despite some progress in HTRS, patterns of inequity persist, with some LGAs still being overstaffed relative to others.
  
  - The trend of declining “Other Charges” [OC – or staff allowance] allocations in LGAs limits and reduces more effective use of existing staff resources.

- There are not enough health personnel (medical doctors, laboratory technicians, pharmacists, nurses and paramedical graduates). [World Bank (WB); 2011]
  
  - Pharmacist shortages are more severe than for other cadres. All districts have wide disparities in dispensary staffing levels. [PEAKS Consortium; 2014].
  
  - The very limited number of pharmacists at the district level are overwhelmed by their (theoretical) workload, which includes supervising every health centre and every medicine seller each quarter. [USAID; 2011].
There is evidence of decreasing returns to scale. Spending per capita is 3.5x greater in the top 30 districts than in the bottom 30, yet outpatient visits and the share of births in facilities are only 50% greater. Resources (including staff) have far more impact in the bottom 30 districts than in the top 30. [PER, pg.70-76; 2011] and [PEAKS; (annex 4)].

**RECOMMENDATIONS – Staff Shortages and Mal-distribution:**

- Address low salaries and inadequate housing for public health workers to improve the environment within which the MOHSW is to generate, attract and retain the 476,000 suitably qualified and motivated health workers needed by 2025. [FYDP; 2012].
- Streamline and prioritise human resource allocation and deployment for addressing inter-LGA inequity.
  - Allocate personnel budgets according to where health workers are needed rather than according to where they currently are. Ministry of Finance encouraged to consider applying the needs-based formula for distributing block grant funds to personnel. [PEAKS Consortium; 2014].
  - Preferentially allocate staff in accordance with need (i.e. to the most underserved areas) and consider reallocating staff away from LGAs that are significantly served above average (even where they too are understaffed). PEAKS Consortium study found that “Employees are…amenable to relocation if they have access to basic facilities and allowances amongst other incentives”. [PEAKS] and [PO-PSM implementation strategy; 2012].
- Support LGA designed and implemented strategies for staff attraction, retention and motivation in HTRS areas, including technical assistance and fiscal support.
  - “Localise recruitment and training”. [World Bank (WB); 2011]
  - While the Public Service Pay and Incentive Policy (PO-PSM 2010) aims (in the long term) to “decentralise [the] management of [the] payroll…” it is currently considered premature for LGAs to have full autonomy to hire and fire staff and to manage their own staff establishment budget within the overall (formula-based) fiscal ceiling. [WB; 2011] and [PO-PSM implementation strategy; 2012].
- In LGAs, promote initiatives in support of improved human resource management and of greater transparency of resource allocation and utilisation. [WB; 2011]
- Spending has decreasing returns to scale – dedicate resources to where they will have a greater impact. Concentrate the deployment of health workers upon the bottom 30 districts rather than the top 30 in order to maximise impact. [PEAKS; 2014 (annex 4)].

**Staff Productivity and Efficiency:**

- While the country faces an acute shortage of health workers, where health workers are available they are not fully utilised – evidenced by the variation in their workload and productivity:
The data on effective workload and on differences in health staff productivity and efficiency (by facility and by LGA) clearly indicate that some staff work substantially more than others, while some staff are heavily underutilised – even in comparison to other countries. [PEAKS; 2014]

- A 2006 time-and-motion study [158 health workers from 2 districts] found that only 60% of working time was spent on productive activities, with only two-thirds of productive working time spent on direct patient care. [PEAKS].

- A 2012 survey found that while RCH clinic nurses are present for 7 hours a day, they only worked productively for 57% of the time (4 hours) [Manzi, et al; 2012].

- 20% of facilities handle almost 50% of outpatient visits while the least productive 20% handle only 7% of outpatient visits. [Auditor General; 2008/09].

- An SDI survey found that in 18 dispensaries just 13% of health workers perform over half of the outpatient consultations. The bottom 40% of the staff managed just 5% of the outpatient visits — which is to say that they were virtually unused. [PEAKS Consortium; 2014].

- The busiest dispensary in Uvinza DC sees 43,800 outpatients per annum while the least busy sees just 1,250. The most pronounced disparities in outpatient visits occur in Uvinza DC, Bukoba MC and Korogwe DC. [PEAKS Consortium; 2014].

- At the busiest facility in Uvinza, each staff member sees 21,900 outpatients per annum, compared with one staff member seeing just 717 per annum at the least busy facility. At the busiest facility in Iramba DC, each staff member sees 11,144 outpatients per annum, compared with one staff member seeing just 100 per annum at the least busy facility. The disparities in staffing levels to outpatients is not specific to disadvantaged LGA’s – Uvinza and Iramba were the only exceptions. [PEAKS Consortium; 2014].

- While LGA management is generally aware of the wide variation in workload and productivity, no effort is made to measure it systematically. [PEAKS; 2014]

- Service delivery targets set during the LGA planning process are defined through inputs (i.e. equal numbers of staff per facility type (hospital, health centre, dispensary, etc.) irrespective of level of utilisation of these facilities. Not only does this result in very uneven workloads between facilities but it distorts the performance of equally staffed but less busy facilities. [PEAKS; 2014].

- **Fill vacancies.** A 2012 survey found that “only 14% (122/854) of the recommended number of nurses and 20% (90/441) of the clinical staff had been employed at surveyed facilities. Furthermore, 44% of clinical staff were not available on the day of the survey.” – 38% were attending seminars, 8% were on long-training, 25% were on official travel and 20% were on leave. [Manzi, et al; 2012].

- Understaffing in underserved areas is exacerbated by significantly under-motivated health workers, contributing to low quality of health service delivery in these areas. [USAID; 2011].

- Human resource (HR) management is a priority but remains weak. Districts are unable to ensure that facilities are sufficiently staffed and sufficiently motivated. [USAID; 2011].
Supportive supervision is not taking place: “almost two-thirds of facilities [surveyed] received less than 3 visits from district health teams during the 6 months preceding the survey”. [Manzi 2012 and USAID; 2011].

RECOMMENDATIONS - Staff Productivity and Efficiency:

- Fill vacant positions within health facilities.
- Motivate health workers and support staff, particularly in underserved areas.
- Strengthen and support HR management (at all levels) in order that they ensure that facilities are sufficiently staffed and that staff are utilised efficiently and productively.
- Address the wide discrepancy in health facility use that causes many facilities to be underused but to receive significant resources.
- Dedicate attention to improving staff productivity and efficiency so that existing health workers are fully utilised [USAID; 2011].
  - Ensure that LGA management systematically monitor and measure staff productivity and efficiency and that this data is used to eliminate the current wide variation in workload and productivity by spreading resources, staff and equipment among facilities appropriately. [PEAKS; 2014].
  - Use the results of time-and-motion studies to ensure that where health workers are available they are fully utilised – that their working time is spent on productive activities and on direct patient care. [PEAKS; 2014].
  - Set staffing level norms and standards on the basis of health facility utilisation levels rather than on the basis of health facility type (hospital, health centre, or dispensary).
  - Ensure that district and regional health teams provide appropriate supportive supervision to facilities and districts. [Manzi, et al.; 2012].
- Regional and district management to use research, spot visits and supportive supervision to ensure that staff are at their posts and engaged productively in clinical care. [Manzi, et al; 2012].
- Monitor the use of human resources (staff) (both within and across facilities) on the basis of workload and outpatient volume and manage staff performance on the basis of outputs and health outcomes:
  - Define service delivery targets on the basis of outputs and outcomes rather than on the basis of inputs (e.g. levels of staffing by facility). [PEAKS; 2014].
  - Should service delivery targets continue to be defined through inputs, ensure that they are correlated with facility utilisation levels. [PEAKS; 2014].

Skills Shortages and Training:
This section draws strongly on USAID: Tanzania: Health System Assessment 2010 (2011).
• Significant shortages of financial and managerial expertise at the district level exacerbates the ability of districts to monitor and manage facilities.

• The approach to capacity building using off-site meetings and seminars and the financial incentives (per diems) derived from participating in off-site training, seminars, workshops and other meetings cause high absenteeism. [USAID; 2011].

• There is low enrolment in pre-service training institutions of students coming from rural regions/districts, negatively impacting retention in these areas. [USAID; 2011].

RECOMMENDATIONS – Skills Shortages and Training:

• Strengthen the financial and managerial capacities of districts [USAID; 2011].

• Capacity building needs to take place on site through coaching and on-the-job training rather than off-site. Off-site meetings and seminars should also be reduced.

• Strengthen staff retention in rural regions/districts by greatly increasing enrolment in pre-service training institutions of students from these regions/districts.

• Increase the capacity to add professionals to public health facilities especially at the lower (primary) level to have cases treated at low costs and promptly as they arise (i.e. to reduce demands for expensive tertiary services) [Interview with AfDB].

6. Medicines

The costs of diagnostic tests and prescription drugs typically constitute the second largest budget items in a health system and, as such, offer opportunities for inefficient spending.

Referred to as ‘medicines’ for the sake of simplicity inefficiencies within the prescription of drugs and the use of diagnostic tests are divided into four main cost-driving categories (See Table 28 below). We explore each of these in turn.

Table 28 - Key Recommendations – Medicines

<table>
<thead>
<tr>
<th>Area for intervention</th>
<th>Key Recommendations – Medicines</th>
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<tbody>
<tr>
<td>Underuse of generic medicines</td>
<td>Explore alternative procurement options, including pooled procurement.</td>
</tr>
<tr>
<td>Payment of higher than necessary prices for medicines</td>
<td>Provide sufficient, regular and predictable funding to the MSD.</td>
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<td>Expand centralised procurement for key drugs and commodities.</td>
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<td></td>
<td>Coordinate (and ideally pool) the procurement of medical commodities between government and development partners.</td>
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<tr>
<td>Eliminating inefficiencies at the MSD</td>
<td>Track and monitor the MSD delivery rate.</td>
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<td></td>
<td>Reduce delays in procurement process.</td>
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<td></td>
<td>Focus cost-saving efforts on existing supply chain inefficiencies.</td>
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<tr>
<td></td>
<td>Improve record-keeping for drugs and medical supplies delivery.</td>
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<tr>
<td></td>
<td>Operational improvements to increase the efficiency of MSD.</td>
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<td></td>
<td>Don’t stop drug delivery due to June zonal office stock-taking.</td>
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<td></td>
<td>Ensure that health centres and dispensaries are fully utilising allocations.</td>
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<tr>
<td></td>
<td>Improve the efficiency of use of diagnostic equipment.</td>
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</table>
| **Management & supply chain** | Support facilities to improve the ILS functionality of ILS.  
Implement lessons learnt from of drugs supply and management within vertical programmes across the health sector.  
Encourage the horizontal integration of vertical supply-chains.  
Implement an appropriate system that assesses drug consumption and assists facilities and staff to quantitatively determine health facility drug needs.  
Increase the availability of medicines through the involvement of the private sector.  
Hold DMO accountable for monitoring medical supply delivery. |
| **The use of sub-standard or counterfeit medicines** | Evaluate the extent to which substandard and counterfeit medicines are used in Tanzania.  
Strengthen procurement mechanisms, drug regulation and regulatory structures. |
| **Inappropriate and ineffective use** | Improve the provision of curative and preventive medicines and enhance preventive care in order to save on treatment costs.  
Use medicines appropriately.  
Eliminate unnecessary spending on medicines.  
Improve quality control for medicines. |
| **Over or under-use or supply of equipment, investigations and procedures** | Improve the health tools and equipment available across all levels of the health system.  
Consistently evaluate the allocation of resources across various levels: geographic, per capita, per budget item, etc.  
Continue to aggressively scale-up budget allocations for drugs and medical supplies.  
Monitor budget allocations for medical supplies (overall as well as per programme area and adjust appropriately. |

**Underuse of generics:**

- Generic (as opposed to ‘branded’) medicines have equivalent efficacy and are substantially cheaper to procure, yet they are vastly underutilised. In a background paper for the 2010 World Health Report, Cameron (2010) provides an analysis of the current use of branded as opposed to generic medicines and finds that tens of millions of (US) dollars could be saved by switching to generic versions of 17 commonly used drugs in public hospitals alone in each of a range of developing countries (Chisholm & Evans, 2010).

- While medicines make up a very large proportion of health total expenditure in Tanzania, most of the medicines are imported, giving the country little ability to control price [Key informant interview]. Both SADC and the East African Community are discussing regional pharmaceutical manufacturing plans and Tanzania has committed to increasing local production. This paper does not make recommendations on the feasibility of or potential efficiency gains to be derived from local pharmaceutical manufacturing.

**RECOMMENDATIONS – Under-use of generics:**

- Although this paper does not make recommendations on potential efficiency gains to be derived from local pharmaceutical manufacturing it is clear that Tanzania should explore alternative procurement options. Moreover, while alternative procurement options are under consideration Tanzania should seek to improve fiscal space by rooting out the numerous inefficiencies that exist within the supply chain [Interviews with USAID].

- **Explore alternative procurement options.** While Tanzania has experimented with pooled procurement before the country should seek global expertise to explore and exploit the variety of alternative pooled procurement options available to it. [Interviews with AfDB & USAID]
This will require synergistic efforts to strengthen the Tanzanian Food & Drug Authority (TFDA) in order to improve the efficiency of the drug registration process as well as of the Medical Stores Department (MSD), to improve supply and delivery [Key informant interview].

**Payment of higher than necessary prices for medicines:**

- Disbursement of the drug budget to the (MSD) is unpredictable to some extent, providing severe uncertainty among service providers on when and how much the central authorities are going to disburse for drugs. Irregular and insufficient funding to the MSD impacts on their ability to procure sufficient volumes on a timely basis. [Auditor General report, 2011].

- HIV, Malaria, TB have centralised procurement. This should be expanded to (at least) the critical medications such as antibiotics, paracetamol, etc. [Interview with USAID].

- Development partners procure medical commodities (including equipment and reagents) on behalf of the MOHSW, but procurement is uncoordinated and highly inefficient [Interview with USAID].

**RECOMMENDATIONS – Overly high medicines prices:**

- Address the insufficient and irregular funding provided to the MSD in order that MSD are able to procure sufficient volumes on a timely basis [USAID; 2011].

- Expand centralised procurement for key drugs and commodities [Interview with USAID].

- Government and development partners to coordinate (and ideally to pool) the procurement of medical commodities (including equipment and reagents) [Interview with USAID].

**Higher than necessary prices for medicines – General:**

- The availability and accessibility of commodities remains a critical issue [mid-term review of Health Sector Strategic Plan (HSSP) III].

- **Eliminating inefficiencies at the MSD:**
  
  - While using MSD for procurement and distribution provides economies of scale from which the health system reaps efficiencies, regular stock-outs cause hospitals and districts to be forced to buy emergency supplies at short notice from private providers and at great cost. This is hugely expensive (and time consuming), undermining any efficiencies previously gained through centralising procurement [mid-term review of HSSP III; and Interviews with AfDB and USAID].
  
  - Consistent stock-outs of medicines and supplies in health facilities remains a “big challenge”. The delivery rate of drugs and medical supplies to MSD zonal offices and health facilities by MSD central stores and MSD zonal offices is low. Average MSD central stores delivery rate to MSD zonal offices is 30-40%; MSD zonal offices to health facilities is 49% [USAID; 2011].
  
  - There are delays in procurement processes at MSD from one stage of the procurement cycle to another [Interview with AfDB].
There was no evidence to show that the drugs and medical supplies said to be delivered by MSD reached the intended users as record keeping at both DMO and PHC facilities is poor. Moreover, MSD zonal offices are delivering drugs and medical supplies not ordered by the facilities.

MSD closes its zonal offices for the whole month in June for stock taking purposes thus bringing the whole process of drug delivery to a standstill [National Audit Office; 2011].

There are huge unutilised funds lying idle at MSD (TzSh 24.3 billion). Health centres and dispensaries are not fully utilising the amounts allocated to them by the MOHSW while MOHSW does not monitor the utilisation of funds allocated to health facilities for drugs and medical equipment [National Audit Office; 2011].

Diagnostic equipment (e.g. cartridges) is used at well below capacity (even well below recommended minimum of 50% of capacity) and leads to costly wastage [Interview with USAID].

**Management & supply chain**

- Primary health facilities are either delaying or not placing orders every quarter as required [National Audit Office; 2011].

- There is no functioning quantification system for determining health facility drug needs.
  - Most of the staff at the health centres and dispensaries do not have the knowledge to assess consumption of drugs for purposes of establishing the expected consumption for the year to be communicated to the District Medical Officer (DMO) [National Audit Office; 2011].
  - The process of quantification does not include all stakeholders (particularly MOHSW officials) [National Audit Office; 2011].

- Some of the vertical programmes are much better able to manage their medicine and supplies because there are more staff and other support mechanisms managing a much small set of items. The TB program has regional TB coordinators, while HIV/AIDS has regional and district AIDS coordinators, as well as supply chain monitoring advisors at the zonal level focused solely on supplies [USAID; 2011].

- Implementation of the Integrated Logistics System (ILS) was completed nationally in 2009, but it is clear that additional support to the facilities is needed to improve its functionality. Support and supervision from the district and regional levels is sorely lacking due to limited staffing and a lack of accountability [USAID; 2011].

- There are many competing priorities at the district level and little attention is paid to ensuring that medicines and supplies are available in facilities when needed. Moreover, the DMO is not held accountable for medicines availability [USAID; 2011].

- There is little engagement with private medicine sellers, even though often they are the first source for health care [USAID; 2011].

- District and Regional hospitals do not allocate much of the funds from NHIF, user fees and DRF to purchase drugs and medical supplies.
• **RECOMMENDATIONS – Higher than necessary medicines prices:**

• **Eliminating inefficiencies at the MSD:**
  
  o **Track and monitor the delivery rate** of MSD from national to central stores to zonal offices and on to health facilities [*National Audit Office; 2011*].
  
  o **Reduce delays in procurement process:** Improve MSD procurement processes between stages of the procurement cycle [*National Audit Office; 2011*].
  
  o While exploring manufacturing, procurement and distribution options concentrate attention on **extracting significant cost-saving from existing supply chain inefficiencies.**
  
  o Substantially **improve record-keeping for drugs and medical supplies delivered** (and not delivered) by MSD, particularly at DMO and PHC level. Evaluate delivery against order.
  
  o **Implement operational improvements to increase the efficiency** of MSD and end costly stock-outs: automate ordering processes; optimise distribution routes; improve supervision at district level; etc. [*Interview with USAID and National Audit Office; 2011*].
  
  o MSD zonal office stock-taking should not result in their closure during the month of June, thereby bringing the whole drug delivery process to a standstill [*National Audit Office; 2011*].
  
  o **Consistently monitor that health centres and dispensaries** are fully utilising the amounts allocated to them for drugs and medical equipment [*National Audit Office; 2011*].
  
  o **Improve the efficiency of use of diagnostic equipment** and the monitoring thereof [*Interview with USAID*].

• **Management & supply chain**
  
  o Facilities need additional support to improve the functionality of ILS. Such support must include district and regional level supervision [*USAID; 2011*].
  
  o The lessons learnt of drugs supply and management learnt through vertical programmes (HIV, TB) should be implemented across the health sector (E.g. regional and district coordinators or zonal level supply chain monitoring advisors) [*interviews; USAID*].
  
  o Encourage the horizontal integration of vertical supply-chains (i.e. TB, HIV).
  
  o Implement an appropriate system that assesses drug consumption and assists facilities and staff to quantitatively determine health facility drug needs. Ensure that it includes all stakeholders, particularly MOHSW officials.
  
  o Increase the availability of medicines through the involvement of the private sector. Engage with and have a strategy for private medicine sellers [*USAID; 2011*].
  
  o The DMO is responsible for and must be held accountable for monitoring and ensuring that medicines and supplies are available in facilities when needed.
RECOMMENDATIONS – Use of substandard and counterfeit medicines:

- Evaluate the extent to which substandard and counterfeit medicines are used in Tanzania [Key informant interview].
- Strengthen procurement mechanisms, drug regulation and regulatory structures [Key informant interview].

Inappropriate and ineffective use:

The WHO defines the appropriate or effective use of medicines to occur when “patients receive the appropriate medicines, in doses that meet their own individual requirements, for an adequate period of time, and at the lowest costs to them and their community” (WHO, 2004; p. 75). A WHO report, The World Medicines Situation (2010), estimates that more than half of all medicines are prescribed, dispensed or sold inappropriately. Other analyses have further estimated that half of all patients fail to take their medication as prescribed. Such inappropriate use leads to inefficiencies and to greater costs for the health system. On the other hand, patient under/partial -dosing or taking medication for a shortened duration (particularly antibiotics) not only makes their use of such medications ineffective, it poses serious challenges to global health (such as antibiotic resistance) and are likely to drive cost increases in the future as health systems are forced to turn to more expensive second and third line drugs.

- Inadequate pharmaceuticals and drugs for curative and preventive measures. [FYDP; 2011]

RECOMMENDATIONS – Inappropriate and ineffective use:

- Improve the provision of curative and preventive medicines and enhance preventive care in order to save on treatment costs [FYDP; 2011 and Key informant interview].
- Use medicines appropriately [WHO; 2010].
- Eliminate unnecessary spending on medicines [WHO; 2010].
- Improve quality control for medicines [WHO; 2010].

Over or under-use or supply of equipment, investigations and procedures:

The over or under-use or supply of equipment, investigations and procedures is driven in part by the payment systems in place and by excessive or unnecessary use of investigations or procedures for outpatients.

Over-use is commonly a result of supplier induced demand, fee-for-service payment mechanisms and fear of litigation (defensive medicine). The under-use of services, particularly by people in need but unable to pay is inefficient because as deferring treatment results in patients seeking care at the hospital level only after the problem has worsened (and is consequently become more expensive to treat). (Chisholm and Evans, 2010).

- Inadequate health tools and equipment at all levels. [FYDP; 2011]
• Dedicated HIV & AID medical supplies constitutes a large portion of the medical supplies budget. While the total on-budget allocation for medical supplies (excl. HIV/AIDS) fell by approximately one-third between 2011/12 and 2012/13, the HIV/AIDS related medical supplies allocation nearly doubles.

**RECOMMENDATIONS – Over or under-use or supply of equipment, investigations and procedures:**

• Improve the health tools and equipment available across all levels of the health system.

• Consistently evaluate the allocation of resources across various levels: geographic, per capita, per budget item, etc. [Note that development partners already perform this analysis in their annual Rapid Budget Analysis].
  
  o In light of declining on-budget development partner support for medical supplies, monitor the allocation for medical supplies (overall as well as per programme area (e.g. HIV) and adjust appropriately.

  o Again in light of declining development partner support, continue to aggressively scale up the national government allocation for medical supplies (including medicines).

7. Hospitals

Hospital care is a critical component of a comprehensive health service but it also constitutes a major cost item for the health system. Tertiary health facilities are the top rung in any three-tiered health system and bring together various resource inputs – including physical (buildings), human (health and administrative personnel), medicines and equipment (Chisholm and Evans, 2010).

Table 29 - Key Recommendations – Hospitals

<table>
<thead>
<tr>
<th>Area for intervention</th>
<th>Key Recommendations – Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inappropriate hospital admissions and length of stay</td>
<td>None. The literature does not indicate the extent to which this is a problem in Tanzania.</td>
</tr>
<tr>
<td>Inappropriate hospital size (low use of infrastructure)</td>
<td>None. The literature does not indicate the extent to which this is a problem in Tanzania.</td>
</tr>
<tr>
<td>Medical errors and suboptimal quality of care</td>
<td>Improve hygiene standards in hospitals.</td>
</tr>
<tr>
<td></td>
<td>Provide more continuity of care.</td>
</tr>
<tr>
<td></td>
<td>Undertake more clinical audits.</td>
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<tr>
<td></td>
<td>Monitor hospital performance.</td>
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</table>

**Inappropriate hospital admissions and length of stay:**

Chisholm and Evans (2010) cite four separate studies of adult inpatients in Canada where 24–90% of admissions and 27–66% of inpatient days were inappropriate. The literature abounds with examples of excessive inpatient admissions and overly long lengths of stay (see McConagh et al, 2000).

• Inappropriate hospital admissions and length of stay is commonly due to a lack of alternative care arrangements; insufficient incentives to discharge; and limited knowledge of best practice.
**Inappropriate hospital size (low use of infrastructure):**

"While it may make good economic sense to enlarge the size and scope of a hospital in order to make better use of available expertise, infrastructure and equipment, there comes a point where a hospital departs from its optimal level of efficiency and begins to exhibit diseconomies of scale; at the other end of the scale, small hospitals may also be inefficient because the fixed infrastructural and administrative costs are shared across too small a caseload, thereby pushing up the cost of an average hospital episode" (see McConagh et al, 2000).

- Inappropriate hospital size is commonly due to too many hospital and inpatient beds in some areas while not enough in others as well as to the inappropriate level of managerial resources for coordination and control. Excessive or insufficient hospital size often reflects a lack of planning for health service infrastructure development.

**Medical errors and suboptimal quality of care:**

Medical errors and suboptimal quality of care is commonly due to insufficient knowledge or application of clinical-care standards and protocols; a lack of guidelines; inadequate supervision; and to inadequate disease prevention and control [FYDP; 2011].

**RECOMMENDATIONS – Medical errors and suboptimal quality of care:**

- Improve hygiene standards in hospitals; provide more continuity of care; undertake more clinical audits; monitor hospital performance.

8. **Leakages due to corruption and waste**

Further inefficiencies that diminish the flow of inputs into the health system and, consequently, compromise the capacity of the health system to deliver on its goals are those leakages out of the health system as a result of fraud and corruption.

The following areas are key sources of corruption in health: embezzlement and theft from health budgets or user-fee revenues; corruption in procurement; corruption in payment systems; corruption in the pharmaceutical supply chain; and corruption at the point of health service delivery, especially charging fees for services that are meant to be free. [Transparency International: 2006].

Leakages commonly result from: unclear resource allocation guidance; lack of transparency; poor accountability and governance mechanisms; and low salaries.

There is a great deal that countries can do to significantly reduce fraudulent practice and corruption in the health sector. The key to success is improved health system governance, key principles of which include accountability, transparency and the rule of law”.

Measuring the extent of corruption is by definition challenging. Nevertheless, PWC conducted estimated the rate of leakage in Tanzania at 40%. [PriceWaterhouseCoopers, 1999].

Table 30 - Key Recommendations – Leakages due to corruption and waste

<table>
<thead>
<tr>
<th>Area for intervention</th>
<th>Key Recommendations – Leakages due to corruption and waste</th>
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Waste, corruption and fraud

Continue to eliminate ‘ghost workers’ from the payroll. Implement measures to ensure that personnel records are timeously adjusted to reflect dismissals, absconders, retirements and deaths.

Investigate why the MOHSW is allocating and disbursing funds for primary health facilities that either do not exist or are not yet operational. Implement measures to ensure that this is not repeated.

Eliminate ‘fiscal dumping’ – disbursements to hospitals and health facilities made towards the last quarter of the financial year.

- A 2011/2012 Internal Auditor General audit report on the payroll of the Health, Education and Agriculture sectors indicated delays in adjusting personnel records to reflect dismissals, absconders, retirements and deaths. While payroll cleansing exercises over the last 2 years (facilitated by the HCMIS upgrade) have resulted in a sharp reduction – probably up to 90% – eliminating and preventing ‘ghost workers’ represents an area for significant payroll control. [Public Expenditure and Financial Accountability (PEFA) Assessment, 2013].

- A 2011 Auditor General report into the MSD found that the MOHSW is allocating and disbursing funds for primary 31 health facilities that either do not exist or are not yet operational (in the amount of TzSh 285,049,854 as at 30 June 2011) [National Audit Office; 2011].

- Most disbursements to hospitals are made towards the last quarter of the financial year. A 2011 auditor general report found that disbursements during the last month of the financial year (June) ranged from 17% to 46% of the facility’s annual disbursement [National Audit Office; 2011].

**RECOMMENDATIONS – Health system leakages:**

- Continue the effort to eliminate ‘ghost workers’ from the payroll, and implement measures to ensure that personnel records are timeously adjusted to reflect dismissals, absconders, retirements and deaths [PEFA Assessment, 2013].

- Investigate why the MOHSW is allocating and disbursing funds for primary 31 health facilities that either do not exist or are not yet operational and implement measures to ensure that this is not repeated [National Audit Office; 2011].

- Eliminate ‘fiscal dumping’ – disbursements to hospitals and health facilities made towards the last quarter of the financial year [National Audit Office; 2011].

**9. Intervention mix**

Inefficiencies here refer to the sub-optimal mix of services and interventions provided by the health sector (allocative efficiency). Understanding the extent to which the current mix of interventions is efficient is critical to understanding if more could be achieved with the same resources. What we know from the sector wide analyses that have been conducted suggests that many countries implement interventions that are not very cost-effective, while not fully implementing some that are cost-effective.

Table 31 - Key Recommendations – Intervention Mix

<table>
<thead>
<tr>
<th>Area for intervention</th>
<th>Key Recommendations – Intervention mix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inefficient mix of health</td>
<td>Critically assess which services are needed.</td>
</tr>
</tbody>
</table>
• An inefficient intervention mix occurs (WHO; 2010) as a result of either:
  o Funding high-cost, low-effect interventions when low-cost, high-impact options are unfunded.
  o Having an inappropriate balance between levels of care, between prevention, promotion and treatment; and/or across diseases.

RECOMMENDATIONS – Inefficient mix of health interventions or inappropriate level of strategies:

• Critically assess which services are needed [WHO; 2010].

• Retain an awareness of which interventions are high-cost with low-impact and which interventions are low-cost and high-impact, and direct resources away from the former and towards the latter [WHO; 2010].

• Conduct regular evaluations and incorporate into policy evidence on the costs and impact of interventions, technologies, medicines and policy options [WHO; 2010].

10. Enabling factors for improving health sector inefficiencies

Table 32 - Key Recommendations – ‘Enabling factors for improving health sector inefficiencies’

<table>
<thead>
<tr>
<th>Area for intervention</th>
<th>Key Recommendations – ‘Enabling factors’</th>
</tr>
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</table>
| Health Financing      | Increase per capita Total Health Expenditure (THE) beyond the threshold of US$86 per capita. Evaluate the extent to which to adjust the fact that 64% of THE is spent on HIV/AIDS, reproductive health, and malaria alone. Monitor the increase in household OOP expenditure on health and accelerate the implementation of pre-payment initiatives to reduce payment at the point of service. Increase health improvements that go beyond the narrow scope of disease specific programmes. Improve absorption: Ensure that the full health allocation is spent Improve per capita allocation of resources for health across districts and LGAs. Provide districts and facilities with more accurate budget forecasts and improve the speed with which finances are disbursed. Improve the disbursement of funds (including user fees) by being clear on who is accountable eliminating complicated disbursement procedures. Implement public financial management reforms to strengthen the transfer of funds from central to districts. Work to eliminate parallel donor – government systems. Improve the coordination and integration of funding for health services at the council level. Provide guidance for the use of cost sharing money. Improve cross-subsidisation by combining the NHIF and SHiB insurance pools. Address the slow uptick in membership and high dropout from the CHF by expanding the extent to which CHF can provide services. Improve access for primary health care facilities to shared funds. Overcome the shortage of skills, knowledge and data that make historical budgeting
**Service Delivery**

- Improve the use of all resources so that all health facilities use the resources they have in a more efficient manner.
- Lower-level health facilities will not meet national level standard operating procedures until staff, equipment and commodities shortages are addressed.
- Evaluate the referral system to improve its functionality.
- Improve the clinical monitoring of facilities by increasing the quantity of qualified CHMT members and improving CHMT staff motivation.
- Construction of new facilities will not improve service delivery if those facilities can’t be appropriately staffed (or staffed at all).
- Improve collaboration with private sector providers and increase private sector involvement.
- Evaluate the need to which to integrate components of vertical programmes.

**Leadership and Management**

- Improve coordination among all relevant stakeholders so that common challenges, solutions and actions can be identified, consensus reached and decisions implemented.
- Improve accountability (both willingness and capability) so that organisations and individuals are held responsible for their roles, responsibilities and actions.
- Overcome the challenges brought by a lack of implementation-level mechanisms to ensure that challenges and actions across multiple Ministries and parties are acted upon and addressed.
- Reduce the reliance on appointing senior level staff in an ‘acting’ capacity.
- Improve the dissemination of guidelines, policies and laws and improve the understanding of these and their implications at local levels.
- Remove information ‘gate-keeping’: Improve the dissemination of and access to information to regional teams – from both community and central levels.
- Improve the existence and functioning of governing bodies and committees (e.g. Council Health Service Boards) and ensure that they understand their roles and responsibilities.
- Improve the mechanisms for providing feedback from the implementation level.
- Implement measures to ensure that information captured at all levels is both analysed and used manage the health system.

**Health System Planning**

- Improve efforts to cost national strategies and plans. Costings must:
  - Be fiscally realistic.
  - Account for all activities (including development partner activities).
  - Indicate prioritisation and the logical sequencing of activities.
  - Take capacity constraints into account.
- Implement strategic purchasing.

**Health Information Systems**

- Carry out a local level DHS. Or, link all existing HMIS to get outcomes data.
- Institutionalise good practices like those implemented in Urumba.
- Introduce a national policy on data flow and information use, and use this to eliminate parallel sub-systems.
- Improve coordination and sharing of data among systems.
- Work to reduce the verticalisation of data reporting.
- Introduce consistency between the data collected and the information required to support decision-making processes.
- Encourage greater local level use and analysis of collected data and info.
- Introduce a mechanism to ensure that communities have access to reports.
- Improve staff awareness of the value of health information data and motivate staff to ensure the quality and timeliness of data collection and reporting.
- Improve staff capacity (number and skills) for HMIS at all levels.

**Health Financing**

- Per capita Total Health Expenditure (THE) increased from US$21 in 2002/03 to US$41 in 2009/10.
  - This remains below the threshold of USD 86 used as benchmark for UHC for a basic package of care.
Households compensate for low public health expenditure through Out-of-Pocket (OOP) expenditure, which increased from 25% of THE in 2005/06 to 32% in 2009/10, making households vulnerable in times of financial hardship.

Approximately 64% of THE was spent on the three priority areas: HIV/AIDS, reproductive health, and malaria.

- For FY 2012/2013, the budget absorption rate was only 89.4%.

- Total public expenditure on health as a share of general public expenditure is low by any standard and there is no clear strategy to increase the government budget.

- The health system is highly dependent on donors:
  - Poses a major challenge to sustainability and reliability.
  - Donor reliance has created parallel donor – government systems.

- Geographic inequity in resource allocation among districts: for example, in 2011/12 the best resourced LGA (Pangani) had 7.4 times more resources per capita than the worst resourced LGA (Bariadi). [Rapid Budget Analysis, 2012]

- The gap between what is budgeted vs. what is disbursed is large and sometimes reaches only 50% throughout the year.

- The transfer of funds from central to districts are very inefficient [Key informant interview].

- There are often delays in facilities getting requested funds disbursed (including user fees) due to complicated procedures for funding disbursement, and it is not clear who is accountable.

- At the council level, the funding for health services is fragmented and uncoordinated (including separate pools for NHIF and SHIB). This reduces possible cross-subsidisation. Moreover, there is no clear information on how cost sharing money is used.

- There is slow uptake in membership and high dropout of CHF members, notwithstanding few isolated successes in some districts [Key informant interview].

- Primary health care facilities have no easy access to the funds from cost sharing, NHIF, User fees or to the CHF [National Audit Office; 2011].

- **Districts need discretionary expenditure** to properly manage their budgets to suit their priorities at local level.
  - Currently have earmarked transfers for health and education etc. which are not fungible regardless of specific staffing needs. Their own revenue collection funds are fungible but small [Key informant interview].

- Due to lack of data, planning skills and knowledge, councils primarily rely on historical plans and budgets to guide future activities [USAID; 2011].

**RECOMMENDATIONS – Health Financing:**
Accelerate per capita Total Health Expenditure (THE) beyond the level of US$ 86 per capita.

- Approximately 64% of THE was spent on the three priority areas: HIV/AIDS, reproductive health, and malaria.
- Assess the extent to which to adjust the fact that 64% of THE is spent on HIV/AIDS, reproductive health, and malaria alone.
- Monitor the increase in household OOP expenditure on health and accelerate the implementation of pre-payment initiatives to reduce payment at the point of service.
- Increase health improvements that go beyond the narrow scope of disease specific programmes.

Improve spending. Ensure that the full health allocation is spent.

Improve the per capita allocation of resources for health across districts and LGAs.

Improve disbursement:

- Provide districts and facilities with more accurate budget forecasts and improve the speed with which finances are disbursed [National Audit Office; 2011].
- Improve the disbursement of funds (including user fees) by being clear on who is accountable. Moreover, eliminate complicated disbursement procedures [National Audit Office; 2011].
- Implement public financial management reforms to strengthen the transfer of funds from central to districts (e.g. new ‘epicore’ system is improving ability to track funds and prevent reallocation) [Key informant interview].

Work to eliminate parallel donor – government systems [USAID; 2011].

Improve the coordination and integration of funding for health services at the council level. Provide guidance for the use of cost sharing money.

Improve cross-subsidisation by combining the NHIF and SHIB insurance pools [Key informant interview].

Address the slow uptake in membership and high dropout from the CHF by expanding the extent to which CHF can provide services [Key informant interview].

Improve access for primary health care facilities to shared funds: user fees; funds from cost sharing; the NHIF; CHF [National Audit Office; 2011].

Historical planning and budgeting at council level is not useful and the shortages of skills, knowledge and data that make it necessary must be urgently overcome [USAID; 2011].

Service Delivery
This section draws strongly on USAID: Tanzania: Health System Assessment 2010 (2011).

While it is acknowledged that there are HR, commodity, and equipment constraints, most health facilities are not using the resources they do have in an efficient way [USAID; 2011].
• Although there are written standard operating procedures at the national level, lower-level health facilities are not aware of them, nor can they meet the standards due to shortages of HR, equipment, and commodities [USAID; 2011].

• The referral system does not function appropriately because extensive paperwork discourages referrals, transport costs are a burden, and higher-level facilities do not always have greater expertise [USAID; 2011].

• Clinical supervision is not effective due to the lack of qualified CHMT members who have time to conduct supervisory visits. The facilities are often left unmonitored, and do not have the motivation to improve quality of care [USAID; 2011].

• Mpango wa Maendelo ya Afya ya Msingi (MMAM) funding to build new facilities in Tanzania is a great opportunity to improve service delivery. However, many of the facilities that have been constructed recently are not staffed appropriately, and some have no staff at all [USAID; 2011].

• Vertical programmes such as HIV/AIDS, TB and malaria control have negative impacts (competition for staff and lack of integration) on service delivery that are lead to inefficiency [USAID; 2011].

• The MOHSW recognises the importance of private sector providers, but it is only beginning to develop mechanisms for better collaboration with the private sector [USAID; 2011].

**RECOMMENDATIONS – Service Delivery:**

• Improve the use of all resources (HR, commodities, and general equipment) so that all health facilities are using the resources they have in an efficient way [USAID; 2011].

• Address shortages of HR, equipment and commodities in order to enable lower-level health facilities to meet national level standard operating procedures [USAID; 2011].

• Evaluate the referral system to improve its functionality – extensive paperwork discourages referrals, transport costs are a burden, and higher-level facilities do not always have greater expertise [USAID; 2011].

• Increase the quantity of qualified CHMT members in order to improve the clinical monitoring of facilities and the number of supervisory visits that are conducted. Furthermore, improve CHMT staff motivation so that they are motivated to improve the quality of care [USAID; 2011].

• While MMAM funding provides a great opportunity to build new facilities, service delivery will only improve by ensuring that all facilities are appropriately staffed (or staffed at all) [USAID; 2011].

• Improve collaboration with private sector providers and increase private sector involvement [USAID; 2011].

• Evaluate the need to which to integrate components of vertical programmes such as HIV/AIDS, TB and malaria control [USAID; 2011].

**Leadership and Management**
There is little coordination among and little effort to achieve consensus between all relevant parties so that common challenges, solutions, and actions can be identified and implemented [USAID; 2011].

There is little accountability, willingness or capability to hold organisations and individuals responsible for their roles, responsibilities and actions [USAID; 2011].

Many of the problems which are voiced require action from multiple Ministries and parties, but there are no mechanisms in place at the implementation level to ensure that all relevant Ministries engage, participate and respond to vital health policy planning and implementation issues [USAID; 2011].

There are many staff members in “acting” positions. Acting staff are often not fully aware of their roles and responsibilities, or do not feel accountable for fulfilling their responsibilities [USAID; 2011].

While guidelines and laws exist, they are not always known, followed or understood. The central level often does not check for understanding of guidelines and policies [USAID; 2011].

Regional teams have limited access to information, both from the community and central levels. They are isolated even from their own region and only have access to information that the districts choose to provide to them [USAID; 2011].

Many governing bodies or committees (such as Council Health Service Boards [CHSB]) that should exist do not. Others exist but do not function because members do not understand their roles and responsibilities [USAID; 2011].

The mechanisms for feedback from the implementation level are limited. The MOHSW has an annual meeting with DMO, however, the meetings are filled with lengthy presentations and there is little time for questions and answers. When DMOs voice their concerns, there is rarely time for discussion and concerns are not always well received [USAID; 2011].

Reporting is taking place at all levels but the information is not analysed or used to assist in management of the health system [USAID; 2011].

**RECOMMENDATIONS – Leadership and Management:**

- Improve coordination among all relevant stakeholders so that common challenges, solutions and actions can be identified, consensus reached and decisions implemented [USAID; 2011].

- Improve accountability (both willingness and capability) so that organisations and individuals are held responsible for their roles, responsibilities and actions [USAID; 2011].

- Overcome the challenges brought by a lack of implementation-level mechanisms to ensure that challenges and actions across multiple Ministries and parties are acted upon and addressed [USAID; 2011].

- Reduce the reliance on appointing senior level staff in an ‘acting’ capacity [USAID; 2011].
Fiscal Space and Innovative Financing for the Tanzania Health Sector

- Improve the dissemination of guidelines, policies and laws and improve the understanding of these and their implications at local levels [USAID; 2011].

- **Remove information ‘gate-keeping’:** Improve the dissemination of and access to information to regional teams – from both community and central levels [USAID; 2011].

- Improve the existence and functioning of governing bodies and committees (e.g. Council Health Service Boards) and ensure that they understand their roles and responsibilities [USAID; 2011].

- Improve the mechanisms for providing feedback from the implementation level [USAID; 2011].

- Implement measures to ensure that information captured at all levels is both analysed and used manage the health system [USAID; 2011].

**Health System Planning**

- Very few national plans or strategies are costed (Health Plan and Health Sector Strategic Plan, 2010-2015 are exceptions). Even costed plans, however, are not fiscally realistic: the Health Plan is costed at 8.5% of total public expenditure and yet has an expectation that gaps will be filled. Moreover, many development activities are off-budget (e.g. USAID projects) and not included in ‘costings’. Finally, none of the plans indicate any sense of prioritisation or logical sequencing of activities, or take capacity constraints into account. [PEFA Assessment, Mainland Tanzania; April 2014].

**RECOMMENDATIONS – Health System Planning:**

- Improve efforts to cost national strategies and plans. Furthermore, costings must:
  - Be fiscally realistic.
  - Account for all activities (including off-budget development partner activities).
  - Indicate prioritisation and the logical sequencing of activities.
  - Take capacity constraints into account.

- Improve efficiency by taking a more strategic approach to purchasing. This requires that “health care needs of the population are actively assessed and that the most appropriate services to meet those needs to the greatest extent possible are purchased”. [McIntyre et al. 2014].

**Health Information Systems**

- Tanzania has “Inadequate health information systems to facilitate efficient health planning and programmes”. [FYDP, 2012]. Need to improve data use and the management of data, including for staff management and M&E [World Bank (WB); 2011].

- There is no national policy on data flow and information use, making it easy for parallel sub-systems to be established [MOHSW, undated and USAID; 2011].

- There is lack of coordination and sharing of data among systems [USAID; 2011].

- There is fragmentation in the collection and reporting of health information caused by strong vertical programmes running their own reporting systems [USAID; 2011].
• There is no consistency between the data collected and the information required to support decision-making processes [USAID; 2011].

• There is insufficient health outcome data. [HSSP4 Mid-Term Review].

• There is little use of health information at the local level. Data and information pass through various levels of the administration, but are passed on rather than actively used for local planning. The higher levels of the hierarchy do not provide feedback to the lower levels [USAID; 2011].

• There is no mechanism to ensure that communities have access to reports submitted by service providers in their areas [USAID; 2011].

• Motivation for staff involved to ensure the quality and timeliness of data collection and reporting is lacking and there is no evidence that they understand the value of health information data [USAID; 2011].

• Staff capacity is low, both in terms of number of staff and skills for HMIS at all levels [USAID; 2011].

RECOMMENDATIONS – Health Information Systems:

• Carry out a DHS at local level. Or, link all existing HMIS to achieve health outcomes data. [HSSP4 Mid-Term Review and Interviews with USAID & World Bank].

• Institutionalise good practices like those implemented in Urumba (withholding per diems until report quality improves; use improved reports to organise district stocks of supplies and medicines to eliminate stock-outs; etc.) [Key informant interview].

• Introduce a national policy on data flow and information use, and use this to eliminate parallel sub-systems [MOHSW, undated].

• Improve coordination and sharing of data among systems [MOHSW, undated].

• Work to reduce the verticalisation of data reporting that results in fragmentation in the collection and reporting of health information [MOHSW, undated].

• Introduce consistency between the data collected and the information required to support decision-making processes [USAID; 2011].

• Encourage greater use and analysis of collected data and information at the local level – particularly through progressively higher levels of administration providing feedback to the levels below that have passed information upward [USAID; 2011].

• Introduce a mechanism to ensure that communities have access to reports submitted by service providers in their areas [USAID; 2011].

• Improve staff awareness of the value of health information data and motivate staff to ensure the quality and timeliness of data collection and reporting [USAID; 2011].
• Improve staff capacity (number and skills) for HMIS at all levels [USAID; 2011].

**Ranking efficiency-related policy suggestions: 10 areas to focus on:**

This section of the report has attempted to identify areas for efficiency reform across the entire spectrum of the Tanzanian health system. All identified inefficiencies offer feasibly implementable solutions to current methods that are wasteful and inefficient and all recommendations levied in this report should be considered to be important, particularly within the context of this quote by McIntyre and Meheus:

“...arguments for increased government funding of health and other social services are inappropriate if those resources are not used efficiently and equitably. Indeed, one of the reasons frequently advanced by ministries of finance for not increasing government funding of health services is the perception that the available funds are not being use efficiently.”

Nevertheless, it is recognised that not all interventions can be implemented with the same gusto and at the same time. Thus, Table 33 below extracts from the recommendations ten areas of intervention within which the MOHSW is encouraged to initiate/concentrate efficiency reforms.

**Table 33 - Ten areas for recommended efficiency interventions**

<table>
<thead>
<tr>
<th>Category of inefficiency</th>
<th>Area for recommended intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resources for health</td>
<td>Staff Shortages and Mal-distribution.</td>
</tr>
<tr>
<td></td>
<td>Staff Productivity and Efficiency (including demotivation).</td>
</tr>
<tr>
<td></td>
<td>Skills Shortages and Training.</td>
</tr>
<tr>
<td>Medicines and health products</td>
<td>Payment of higher than necessary prices for medicines.</td>
</tr>
<tr>
<td>Health system leakages</td>
<td>Waste, corruption and fraud.</td>
</tr>
<tr>
<td>Enabling factors for improving health sector inefficiencies</td>
<td>Health Financing.</td>
</tr>
<tr>
<td></td>
<td>Service Delivery.</td>
</tr>
<tr>
<td></td>
<td>Leadership and Management.</td>
</tr>
<tr>
<td></td>
<td>Health System Planning.</td>
</tr>
<tr>
<td></td>
<td>Health Information Systems.</td>
</tr>
</tbody>
</table>
Annex F  Key Informants and Literature sources for ‘efficiency’ section

Key informants

- Deputy Permanent Secretary – Prime Minister's Office: Regional Administration and Local Government (PMO-RALG).
- Deputy Permanent Secretary: Tanzania Ministry of Finance (MoF).
- Tanzania National Health Insurance Fund (NHIF).
- Tanzania National Social Security Fund (NSSF).
- Tanzania Social Security Regulatory Authority (SSRA).
- Ministry of Health and Social Welfare (MoHSW).
- Tanzania Commission for AIDS (TACAIDS).
- Development Partners:
  - African Development Bank (AfDB) representatives in Tanzania.
  - Representatives of the International Monetary Fund (IMF).
  - Representatives of the World Bank.
  - Representatives of the United States Agency for International Development (USAID).
  - Representatives of GiZ.
- Others:
  - Ifakara Health Institute (IHI).
  - Tanzania Private Sector Federation (PSF).

Literature examined

- International:
  - Di McIntyre and Filip Meheus: *Fiscal Space for Domestic Funding of Health and Other Social Services*.
  - T. Powell-Jackson, et. al.: *Fiscal Space for Health: A Review of the Literature*.

- Domestic:
Fiscal Space and Innovative Financing for the Tanzania Health Sector

- Public Expenditure Review (PER) Working Group. Rapid Budget Analysis 2013: Synoptic Note (draft); November 2013
- Tanzania National Audit Office: Report of the Controller and Auditor General on Special Audit on Drugs Availability at Medical Stores Department (MSD) for the period from 30 June 2009 to 30 June 2011; December 2011.
- Tanzania Ministry of Health and Social Welfare: Health Sector Public Expenditure Review for fiscal year (FY) 2011 (PER FY11); July 2012.
- Tanzania Ministry of Health and Social Welfare: Proposal to Strengthen the Health Information System HIS; [undated].