Major health system constraints to improving HIV/AIDS, TB and malaria outcomes, and possible parameters for the Global Fund's response

Introduction
Debate on parameters for allowable health system strengthening (HSS) funding by the Global Fund has a long history. For this consultation it needs to be grounded in a common understanding of the major health system constraints that countries face in improving HIV/AIDS, TB and malaria outputs and outcomes. It needs to be underpinned by a recognition that the Global Fund can influence the development of health systems and services in two basic ways: through direct funding, and more indirectly through its impact on government policies such as cost recovery; the size of the workforce; the roles of different health workers; the role of the private sector etc. Both are important. This consultation is primarily about direct investment, but needs to take the Global Fund's indirect role, which is often overlooked, into account. Discussion also needs to take account of the diversity of countries eligible for Global Fund support.

This note is organised in three parts. First, it provides an overview of the biggest health system constraints or 'bottlenecks' faced by the three diseases. Second, it summarizes the nature of actions that are being supported by the Global Fund to overcome these constraints. Third, it sets out some options for defining appropriate parameters for Global Fund HSS investments, to stimulate discussion.

1. What are the biggest health system constraints to improved HIV/AIDS, TB and malaria outputs and outcomes?

In any health system, good health services are those which deliver effective, safe, good quality prevention and treatment to those that need it, when needed, with minimum waste of resources. Effective delivery of HIV/AIDS, TB and malaria interventions requires staff with the appropriate knowledge and skills, plus medicines, diagnostics and equipment, working in an environment that provides the right incentives to providers and the population.

There are fairly consistent messages on the biggest constraints to improved HIV/AIDS, TB and malaria outputs and outcomes, from many different sources.

One source is the Fund’s own analyses of problems with grant implementation. The constraints listed in box 1 have been identified as a common source of problems:

Box 1 GFATF grant implementation problems due to health system constraints
- health workforce mobilization, payment and management
- local management capacity in general, especially financial management
- infrastructure and equipment maintenance capacity
- monitoring and evaluation systems
- supply chain management
- financing mechanisms that constrain access or create impoverishment
- high level management capacity: for overall sector policy development; to manage multiple partners; manage relations with non health sector actors

source: Background document: Health System Strengthening, 3rd Portfolio Committee Meeting, 2006

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1 Prepared by the WHO Secretariat as a draft to assist discussion
A second source is countries’ own perceptions of their greatest health system constraints to addressing HIV/AIDS TB and malaria. The diagram below provides an indication.

**Box 2 Country priorities as articulated in 30 HSS proposals s in GFATM round 5**

<table>
<thead>
<tr>
<th>Health System Constraint</th>
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<tbody>
<tr>
<td>Human Resources</td>
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<tr>
<td>Information Systems Development</td>
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<tr>
<td>Facility, Lab &amp; Equipment Upgrade</td>
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<tr>
<td>Management Strengthening</td>
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<tr>
<td>Institutional Strengthening</td>
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<tr>
<td>Procurement &amp; Supply Systems</td>
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<tr>
<td>Improved Access (Non-Financial)</td>
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<tr>
<td>Private Sector Involvement</td>
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<tr>
<td>Improved Access (Financial)</td>
</tr>
<tr>
<td>Community Capacity for Care</td>
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<tr>
<td>Transport / Communications</td>
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</table>

Source: WHO, 2006

These findings are echoed in an increasing number of international reviews of health system constraints to achieving the different health MDGs, and in additional discussions prior to this meeting. All agree more resources alone are not enough. A second key message is that similar health system constraints are encountered by almost every major health priority. For HIV/AIDS, TB and malaria, the repeated messages from multiple sources about the biggest and commonest constraints are summarised in box 3.

**Box 3: Summary of the biggest constraints for HIVAIDS, TB, malaria**

- Availability, skills and motivation of **health workers**
- Drug procurement and distribution systems
- Diagnostic services
- Access - especially financial access
- Management and coordination of services
- Information and monitoring systems

The relative importance and particular nature of a constraint will of course vary country by country. Applicants for funds have always been asked to identify programme needs, gaps and health system capacity in their proposals, but the request for an analysis of health system constraints is most explicit in the guidelines for round 7. Feedback on how this has worked should be available in the next few weeks.

2. **Actions to overcome HSS constraints already supported by the Fund**

   Within any of the broad thematic areas listed above, some constraints can be resolved by intervention at the service delivery level, while others can only be resolved by actions at higher levels of the system. Some can be addressed on a programme specific basis while others would benefit from greater coordination across programmes. There are some interventions that should almost always be tackled on a system-wide rather than programme specific basis. Not uncommonly, a package of interventions is needed.

   One way of looking at what the Fund is doing on HSS is to look at its **expenditures**. Within the Global Fund’s seven budget categories, four (human resources; training; infrastructure and equipment; and planning and administration) are considered to
contain 'a significant component of HSS expenditure'. For further information see background note 4 'The Global Fund and health system strengthening: a short history'.

It is useful to examine the nature of funded activities more closely. One crude but informative way is to review activities across approved proposals. The charts below come from a review of 98 approved proposals in 21 countries. The way information is presented varies across proposals, is often limited and not always very concrete, so this is a purely descriptive analysis. Even so, the exercise gives some useful information. Broadly, Box 4 shows that the main activity groups reflect the major constraints. The pattern in box 4 was similar when analysed by disease component, except that laboratory strengthening activities were almost twice as common in TB proposals than in the others.

Box 4:

![Bar chart: Major categories of health system related activities, across proposals](chart1)

Reviewing the nature of activities within these categories provides additional information. Within the 'human resources and training' group, all but 2 proposals have training activities; 80% include the production of training materials, and activities concerning planning and management are also common. Less than 50% have recruitment or remuneration related activities. In terms of target groups for training, box 5 shows that over 80% of proposals contain activities for clinical training of health care providers and community health workers. 14% of proposals contain training in procurement and supply management.

Box 5:

![Bar chart: Training activities: target groups and focus of training, across proposals](chart2)
In summary, the types of activities are all essential actions designed to contribute to improved health systems and services. What is often less clear in the proposals reviewed is

- the extent to which the **mix of activities** funded constitute or are part of a **balanced package of interventions**, for example for health workforce development, that fit with national policy and strategy within the country concerned
- the extent to which these activities are expected to contribute to sustained improvements **across** services and outcomes

Another way of looking at the nature of HSS activities supported by the Global Fund is through individual country examples. The box below gives six examples in which the Fund has financed at least part of a country’s response to an identified constraint.

**Box 6: six country examples of HSS strengthening activities supported by the Global Fund**

<table>
<thead>
<tr>
<th>Country proposal</th>
<th>Definition of the problem in the proposal</th>
<th>Definition of the response, wholly or partly funded by the Fund</th>
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<tbody>
<tr>
<td>Malawi round 5 HSS</td>
<td>Argued, with supporting data, that the health workforce shortage was a key constraint to improving HTM outputs and outcomes but was too severe to be resolved on a disease specific basis.</td>
<td>Asked the Fund to fund a portion of its costed emergency HRH plan, designed to implement the Malawi essential health package (which includes HIV/AIDS, TB and malaria). Plan includes both short and long term measures.</td>
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<tr>
<td>Rwanda round 5 HSS</td>
<td>Argued, with supporting data, that overall low utilization of health services was due to financial barriers and poor quality, and these were critical obstacles to the success of HTM programmes.</td>
<td>A package of measures that included the extension of ongoing community based health insurance to additional provinces; providing electricity to health centres in 6 provinces; and a mix of pre and in-service financial and HRH management training.</td>
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<tr>
<td>Cambodia Round 5 HSS</td>
<td>Argued that Cambodia’s achievements for HIV, TB and malaria have been at the cost of increased system fragmentation; noted Cambodia is seriously off track for maternal and child health MDG targets. Argued for integrating GF programmes with core MOH functions. Focused on 2 areas of fragmentation: health sector planning; procurement and distribution systems.</td>
<td>The response focused on activities to promote alignment of GF and other programmes with the Health Sector Strategic Plan; strengthen managers’ planning, monitoring and evaluation mechanisms at all levels, and strengthen drug forecasting, procurement storage and distribution systems.</td>
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<tr>
<td>Kenya round 6 TB</td>
<td>TB is rising mainly because of HIV, and TB case detection remains low. Proposal argued that the most effective response, as stated in the national sector strategy and the TB plan, is by improving delivery of essential health services that include TB/HIV, at primary health care facilities. Argued that gains will not be realised if management capacity remains weak. Noted that a national HRH plan is still in development, &amp; that districts have increased managerial responsibilities.</td>
<td>Focus of response: renovation of 33% of public dispensaries; some recruitment; accelerated activities to strengthen district level planning and management and HRH productivity. Aim is for all districts to have comprehensive health plans by the end of the 5 year grant. In the TB proposal, the MOH Planning and Health Sector Reform units are responsible for the Service Delivery Areas on district planning and management. Recruited lab techs will be trained in Kenya’s essential lab ortatory package.</td>
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<tr>
<td>Mozambique Round 6 HIV/AIDS</td>
<td>Argued, with supporting data, that constraints included inadequate infrastructure; scarce human resources; cumbersome HR management procedures; weak laboratory and drug procurement and distribution systems; referral constraints; coordination and management bottlenecks.</td>
<td>Emphasized the integration of scaled up HIV services with existing out and in-patient services. One of the 5 objectives (‘strengthen health systems’), included investing in pre-service training of basic and mid-level health professionals as part of a national HRH plan, and establishing 11 provincial HTM coordination teams.</td>
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<tr>
<td>Ethiopia</td>
<td>Early Fund grants for TB and malaria, and round 4 HIV, had large budget allocations for drugs and commodities. Ethiopia’s national pharmaceutical supply service (PASS) was overwhelmed and slow. As a result, Fund disbursements were delayed. The MOH argued this was an opportunity to strengthen PASS, rather than bypass it - even temporarily.</td>
<td>While not part of a specific proposal to the Fund, these difficulties accelerated implementation of solutions to improve procurement and supply management procedures. Only a small amount of GF funds were used - to hire additional PASS staff to manage pharmaceuticals; vehicles, computers &amp; office equipment - but with a major effect. By mid 2005, drugs and commodities were arriving at lower levels of the health system more reliably.</td>
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3. Clearer parameters for Global Fund support to overcome HSS constraints

As already stated, the Global Fund can influence health system development in two ways: through direct funding and through indirect influences. Both need to be kept in mind.

Some parameters for Fund investment already exist. Activities must clearly contribute to improving (and sustaining) HTM outcomes, in ways that strengthen health systems. Activities that are catalytic in nature, for example that encourage bridging opportunities across programmes where appropriate (such as HIV and reproductive health; blood safety) are allowable. Major infrastructure is excluded. The Fund's commitment to responding to country-defined investment could suggest that the Fund should not further 'cherry pick' areas for HSS investment. However, the lack of more specific parameters, or boundaries, has caused confusion: for countries in understanding what is 'allowable funding'; and for the TRP in reviewing proposals. Concerns about Fund mandate creep, and the sense that spending on health systems is a 'bottomless pit' have also repeatedly surfaced in Board meetings.

An increasing number of countries have credible national health sector strategies, Medium Term Expenditure Frameworks; national health workforce development plans etc. The costing of these and also disease programme specific plans is becoming more common place, though it is by no means universal. In line with its commitment to the Paris harmonization and alignment agenda, the Global Fund is already increasing its support for such 'programme based' approaches (a term which includes both technical programmes and sector programmes). Global Fund support to Mozambique and to Uganda are two examples of the latter. Partners need to have confidence in the strategies and plans to which they are committing support, and principles for validating such strategies and plans are currently being developed2.

Where such strategies are not in place, the Global Fund can certainly encourage their development. In addition to doing this, an acceptable and workable approach to clarifying the scope of what the Fund can invest in and how, is needed. It needs to be as simple and flexible as possible. The rest of this note sets out a few ideas on possible approaches, for discussion at the consultation.

3.1 Parameters for 'allowable HSS activities' can be set in a number of different ways

- As a set of 'thematic' or focus areas - for example, health workforce development; procurement and supplies management; diagnostic services; information systems
- Based on a particular level of the health system - for example, the primary focus of funding could be on activities that have a service delivery, or district level, focus
- By defining excluded or non-allowable activities more explicitly.
- By having greater clarity of what types of HSS activities it makes sense to fund on a programme specific basis, and what should be funded through other means - see Box 7.

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2 These include proposals from various bilateral donors, and the 'Health as a Tracer Sector' workstream for the Third High Level Forum on Aid Effectiveness to be held in Accra in September 2008
3.2 'Parameters plus': parameters need to be combined with a few principles....
However the parameters for allowable funding are eventually articulated, some additional features or good practice principles are needed for them to work as intended. The following are set out for discussion. They would apply whether or not there is a separate HSS component in Fund proposals.

1. **Parameters** should be considered as a guide not a rigid blueprint. They must retain some flexibility to respond to different country circumstances, provided a compelling case is made in a proposal.

2. Proposed interventions should be based on **best available evidence**. Such knowledge is increasing but it could be made more readily accessible. Box 8 gives one example. It is a draft framework, being developed by GHWA and WHO from an analysis in eight low income countries, that could be used as an 'aide memoire' for developing or reviewing proposals concerned with scale up of health workforce education and training.

Box 8 Draft framework for successful country scale-up of health workers education and training
- Political will, including sustained government involvement and support
- Government commitment to short and long-term workforce planning
- Collaboration between several partners including government actors; professional groups, providers and donors
- Significant financial investment, including government and if necessary donor budgets
- Commitment to fill the gap with appropriately trained health care workers
- Focus on health outcomes in the choice of types of workers to be produced, and a multi-skilled team
- Significant expansion of pre-service training capacity for all types of workers, including management and administration
- Strengthened health workforce management and leadership
- Health information systems producing reliable health and health workforce data
- A labour market with the capacity to absorb and retain new health workers, and ensure productivity

3. **Proposals** should build on wide experience of **good strategy design**
The effects of similar interventions can vary in different settings, and can be unpredictable. However, in many instances there are some reasonably well-accepted 'good' design principles to enhance system-wide positive effects.
Box 9: Proposal design principles: some examples of do's and don'ts

**DO**

- Build on existing primary level services, support systems, training approaches and materials to the maximum extent possible. Where this is not possible in the short run, have a plan of how to do so in the longer run
- Ensure proposed activities constitute or are part of a balanced package of interventions, and fit within a national strategy where it exists
- Think through the implications of programme-specific activities for other national health priorities and services - for example the effects of individual programme incentives
- Set out the actions to be taken to mitigate any possible negative effects

**DON'T**

- Develop separate financing systems for individual services or programmes
- Demand data outside national plans; unreasonably frequent reporting
- Forget to keep an open mind, and look out for unintended as well as intended effects
- Forget to think of investments that reflect the Global Fund's comparative strength but would benefit all programmes and services

4. **A sense of costs is needed**

There are many different ways of looking at costs, that serve different purposes. Global price tags, for example for the health workforce crisis, or the overall resource envelope for meeting the health MDGs, generate much needed attention to a problem but can also generate alarm and resistance in Ministries of Finance. Some cost estimates are based on what it would cost to entirely eliminate all constraints, while others focus on costing a reduction of selected constraints. The costs of 'unblocking' some bottlenecks can be large, but the costs of removing others can be rather small - for example, funds for fuel to carry out supervisory visits. Pooling of resources may allow funds to go further. The well-known TEHIP project in Tanzania estimates that its impressive gains in child survival were achieved with an extra US$0.80 per person per year. It was the flexibility given to district teams in the use of their additional funds, which they spent on a package of often unspectacular but effective actions, that was more important. The costs of certain types of 'catalytic activities' may also be fairly small - e.g. seed funding to develop a workforce strategy - but may help release a much larger tranche of funding from elsewhere.

Realistic cost estimates - maybe for several different 'scale-up' scenarios - provide a basis for debate and agreement with key stakeholders. Subsequent financing can then be mobilised from multiple sources. One of the factors behind Malawi's success with its Emergency Human Resource Programme, which was costed at US$272 million, was that it was based on what was thought to be an ambitious but attainable goal of raising Malawi's staffing to Tanzanian levels over six years. It was subsequently funded by the Government of Malawi, DFID and the Global Fund.

5. **Confidence** that returns from investment are possible, within a reasonable **timeframe**.

Some HSS activities take time to deliver results, but others can generate returns relatively quickly. Two examples are given here. *Malawi's* six year Emergency Human Resources Programme began in April 2005. It has a five pronged approach that includes salary top-ups. It aims for short term improvements while pursuing longer term goals. Nine months later a positive impact could already be seen: 430 more employees were receiving salary top-ups. Health managers thought the top-ups were the main factor in stemming the flow of staff, especially nurses, from the public sector. In *Tanzania*, there have been rapid national gains in child survival between 1999 and 2004. Preliminary assessment suggests that a series of health systems events have contributed to improved coverage of essential interventions: SWAp and basket funds; increased public spending; improved planning and management; an increased drugs budget; innovative approaches to expanding bed net distribution and malaria treatment. There is optimism that the trend will continue.
6. **Credible metrics** exist for tracking changes in health systems performance. Tracking progress is a key element of good practice, for two reasons: for good management - allowing timely 'course corrections' to be made if needed; and for accountability. A health system monitoring system needs to capture trends in health system inputs and outputs, supported by coverage data with a small set of indicators. Progress can be summarized with a **country health system metrics dashboard** that includes key indicators for these core areas and describes progress on an annual or bi-annual basis. An international meeting organized by the Health Metrics Network and WHO in 2006 took stock of the status of indicators and measurement methods and developed guidance for the potential contents of a dashboard\(^3\). Around 50 countries are engaged with HMN, and are also in the process of assessing their information systems and developing their individual Health Information System development 'road maps'.

7. The **process** of proposal development, not just its technical content, is critical to achieving effective implementation. The short GAVI note provides lessons from its recent experience with the GAVI HSS window.

8. Lastly, mutually acceptable ways (to countries and to GHIs) to **channel funds is needed**. Session 6 will focus on this.

**In summary**
This note is designed as a starting point for discussion at the consultation. There are consistent messages about the biggest health system constraints to improving HIV/AIDS, TB and malaria outcomes. In determining any response, it is important to remember that a health system, like any other system, is a set of inter-connected parts. Changes in one part will have repercussions elsewhere, which may be positive or negative. Second, in whatever way the parameters are finally framed, there will be practical implications to consider: for the Fund, for countries and for partners. Box 10 sets out a framework for considering these implications.

**Box 10**

![Diagram showing the process of proposal development and implications for Global Fund, countries, and partners.](http://www.who.int/healthinfo/health_system_metrics_glion_report.pdf)