hdrc
DFID
human development
resource centre

UKaid
from the Department for
International Development

Impact Evaluation of the Sector Wide Approach (SWAp), Malawi

Final Report

Mark Pearson

22 June 2010

Contents

Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
AIP	Annual Implementation Plan
ANC	Antenatal care
ARI	Acute Respiratory Infection
ART	Anti-Retroviral Therapy
ARV	Anti-Retroviral
BLM	Banja La Mtsogolo
BOD	Burden of Disease
CABS	Common Approach to Budget Support
CB/HBC	Community Based/Home Based Care
CHAM	Christian Health Association of Malawi
CMR	Child Mortality Rate
CMS	Central Medical Stores
CPIA	Country Policy and Institutional Assessment
CPR	Contraceptive Prevalence Rate
CPT	Cotrimoxasol Preventive Treatment
CRS	Creditor Reporting System
DAC	Development Assistance Committee
DALY	Disability-Adjusted Life Year
DFID	Department for International Development
DHMT	District Health Management Team
DHO	District Heath Officer
DHS	Demographic and Health Survey
DOTS	Directly Observed Therapy Short-course
DPs	Development Partners
DTP	Diphtheria – Tetanus – Pertussis
EHP	Essential Health Package
EHRP	Emergency Human Resource Programme
EmOC	Emergency Obstetric Care
EPI	Expanded Programme of Immunisation
FMR	Financial Monitoring Report
GBP	UK sterling
GBS	General Budget Support
GDC	German Development Corporation
GDP	Gross Domestic Product
GFATM	Global Fund to Fight AIDS, TB and Malaria
GOM	Government of Malawi
GTZ	Gesellschaft für Technische Zusammenarbeit
HAART	Highly Active Anti- Retroviral Therapy
HCs	Health Centres
HDRC	Human Development Resource Centre
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HPR	Health Portfolio Review
HRH	Human Resources for Health

HSA	Health Surveillance Assistant
HSRG	Health Sector Review Group
ICB	International Competitive Bidding
IMF	International Monetary Fund
IMR	Infant Mortality Rate
ITN	Insecticide Treated Net
IUCD	Intrauterine Contraceptive Device
JICA	Japan International Cooperation Agency
LDCs	Least Developed Countries
LLIN	Long Lasting Insecticidal Nets
M&E	Monitoring and Evaluation
MDG	Millennium Development Goal
ME&R	Monitoring, evaluation and research
MICS	Multiple Indicator Cluster Survey
MK	Malawi Kwacha
MMR	Maternal Mortality Ratio
MNH	Maternal and Neonatal Health
MOF	Ministry of Finance
MoH	Ministry of Health
MoU	Memorandum of Understanding
MSF	Medecins sans Frontieres
MTEF	Medium Term Expenditure Framework
MTR	Mid-Term Review
NAC	National AIDS Commission
NAO	National Audit Office
NHA	National Health Account
NTP	National Tuberculosis Programme
ODA	Overseas Development Assistance
ODPP	Office of the Director of Public Procurement
OI	Opportunistic Infection
OPD	Out-Patient Department
ORT	Oral Rehydration Therapy
PER	Public Expenditure Review
PETS	Public Expenditure Tracking Study
PM	Project Memorandum
PMTCT	Prevention of Mother to Child Transmission
POW	Program of Work
PPP	Public Private Partnership
PRBS	Poverty Reduction Budget Support
PRSP	Poverty Reduction Strategy Paper
RH	Reproductive Health
SBS	Sector Budget Support
SDSS	Service Delivery Satisfaction Survey
SLA	Service Level Agreement
SMP	Safe Motherhood Programme
SWAp	Sector-Wide Approach
TA	Technical assistance
TWGs	Technical Working Groups

U5MR	Under 5 Mortality Rate
UN	United Nations
VCT	Voluntary Counselling and Testing
VFM	Value for Money
VSO	Voluntary Service Overseas
WHO	World Health Organisation

Key Messages

This review responds to an NAO request for further work to assess the impact of the health Sector-Wide Approach (SWAp) in Malawi. This was carried out as a desk review and has a number of limitations.

Malawi has been a relatively strong performer in terms of health outcomes for many years. Since the early part of the decade, key health indicators such as infant and under five mortality rates (IMR/U5MR) have been better than average for least developed countries (LDCs). This raises the question as to whether the SWAp is sustaining or even accelerating those gains or whether such progress is being made in spite of the SWAp. There are some suggestions that the rate of improvement is declining (suggesting that perhaps easier gains have been made, that the SWAp is performing less than ideally or that external factors are responsible).

Good progress has certainly been made during the SWAp period, although Malawi is unlikely to achieve the Millennium Development Goals (MDGs) health targets; it may achieve the U5MR but is well off-track to achieve the Maternal Mortality Ratio (MMR) target. This is perhaps not surprising as it was recognised at the outset that the Programme of Work (POW) was resource-based rather than needs-based and provided for too few resources to achieve the MDGs. In practice, more resources have been made available than was anticipated (and it appears that DFID and its role in the SWAp process can take some credit for this given the higher than expected levels of pooled funding which would likely not have occurred without the SWAp). However, it is far from clear that Malawi could have absorbed and utilised significant amounts of additional resources effectively (though there is some evidence of spare capacity which might have been better exploited to expand access to key services, e.g. for Banja La Mtsogolo).

Improvements in terms of outputs – whether in terms of service coverage or the implementation of reforms - have been made. However, the picture is mixed and huge challenges still remain. Gains remain fragile. The SWAp has enabled two broad systems issues – the delivery of a prioritised essential health package and human resources – to be addressed in ways which would almost certainly not have been possible under earlier vertical approaches. Innovative, but to a large degree short-term, emergency approaches (to addressing human resource constraints) have been adopted which appear to have had some effects (to be verified in an ongoing evaluation), but raise questions about long-term sustainability. Results are fragile and reversible – for example, if drug and health supply procurement systems are not addressed adequately, gains in the Expanded Programme of Immunisation (EPI), malaria prevention, HIV testing, counselling and treatment and Prevention of Mother to Child Transmission (PMTCT) may be lost and even reversed.

Aid dependency is high, and has been increasing, though this was anticipated. Some progress has been made in terms of key reforms – stronger in some areas than others e.g. decentralisation - whilst progress has been much weaker in terms of pharmaceutical supply. Services are generally relatively pro-poor compared to similar countries and whilst indicators are improving for the poorest in absolute terms, inequity also appears to be increasing. Lack of recent data makes it difficult to assess recent trends and it remains to be seen whether previous such trends have carried over into the SWAp era. The forthcoming Demographic and Health Survey (DHS) will shed light on this.

The period after 2004 has seen the gradual evolution of a SWAp process. This replaced a fragmented vertical disease-based approach, which appears to have had disappointing results. The counterfactual considered likely by this review assumes that this situation would have continued, though some of the lessons might have been learned and such an

approach might have been implemented more effectively. The SWAp process has undoubtedly had serious weaknesses, which largely reflect the low level of national capacity, but also declining commitment (according to a recent World Bank review) which means that the process is less developed than in many other SWAp countries. (This might suggest that the question “Has a SWAp been tried?” may be just as relevant as *Has the SWAp worked?)

Assessing impact and attribution pose particular problems. It is not possible to attribute results achieved to DFID support or the SWAp. (Attribution continues to be far easier under vertical programmes. If DFID wants attribution it should go down this route, but should recognise that this may be at the expense of impact). The pathways are too complex and there are many confounding factors. If DFID is serious about attribution it needs to invest more upfront in baselines, identifying any counterfactual and clearly spelling out how it sees the causal pathways. However, it is possible to make some qualitative judgements, and whilst it may not be possible to say interventions had a certain impact, it may be possible to suggest areas where more impact might have been achieved had alternative approaches been taken.

There is a further question as to whether a SWAp should actually have to show impact. Some would argue it is a good thing in, and of, itself – reflecting a mature and civilised way of doing business and that the question is not *whether* to make it work, but *how* to make it work better. It is fairly clear from the evidence that the SWAp in Malawi could have worked better. Nonetheless considerable progress has been achieved within a relatively hostile governance and economic environment, underpinned by the HIV crisis which has placed further strains on the health sector whilst, at the same time, reducing its capacity to respond.

A lot of additional resources have been made available (in part due to the SWAp). It would have been surprising if some improvements had not been achieved – the key question is whether they are commensurate with the level of resources available. It also seems apparent that resources have not always been put to their best use with continuing regional imbalances in resource allocation and a considerable amount of resources allocated to services which, although within the essential health package, do not necessarily represent the most cost-effective use of resources.

The government is spending far more than was initially expected on health in absolute terms - though it has fallen a little behind in its commitment to the Abuja Declaration (to allocate 15% of the national budget to health) - and recent years have seen some drop-off. This spend has been complemented by significant increases in donor support, which again raises questions of sustainability particularly in terms of maintaining or increasing access to ARVs and supporting enhanced conditions for health workers.

The concept of supporting an essential package – a key element of the Programme of Work - is reasonable. A key question is whether its content is compatible with sector objectives. This raises questions for DFID support for scaling up ARVs more generally rather than applying specifically to the Malawi programme. Evidence suggests that spending on ARVs – which form a large part of spending – is not cost-effective or well-targeted to the poor and thus offers poor value for money. There has been a recent shift in emphasis towards HIV prevention, which is potentially far more cost-effective, though it is too early to detect any impact. Discussions with key informants suggest that HIV programmes may have been implemented less vertically, as a result of Global Fund engagement in the SWAp, than might have been the case otherwise. In practice, a SWAp is only as good as the PoW it supports. As the Mid-Term Review (MTR) points out the PoW, although undoubtedly a step forward, suffers from a number of weaknesses: “the pillars in the POW are input-oriented, and as a result planning, monitoring and reporting are equally input-oriented. It is very difficult to translate these inputs into programme outputs and outcomes, though “the SWAp M&E framework makes an admirable attempt to do so”.

Clearly, and quite rightly, DFID wishes to respond to NAO concerns about demonstrating impact. However, given the timing (in relation to other studies which will address many of the questions posed in this review in far greater detail) and the wish to harmonise efforts and reduce transactions costs to Government, it would have been better to have waited and support the national evaluation which will take place shortly.

Progress at different levels is summarised in **Table 1**.

Table 1: Summary of Progress

Level	Progress
INPUTS: Financial, Technical, Other	The SWAp seems to have leveraged more support: Higher than expected funding from both Government and donors, but remain well below "need" (though this was understood at the outset). Human resources – increased availability of human resources, but significant shortfalls remain (to be verified by EHRP evaluation). World Bank recognizes that the technical support provided may have been insufficient.
DESIGN AND IMPLEMENTATION **PROCESSES** Degree to which they are country driven; aligned; harmonized; predictable; inclusive and collaborative; catalytic; results-oriented; sustainability conscious	Increased alignment and harmonization of donor support around POW. POW considered to be of reasonably good quality – realistically costed and well-prioritized - although input-based. Predictability remains an ongoing concern. SWAp processes in place – annual reviews now embedded – but weaknesses remain, e.g. TWGs meet rarely. Staff turnover and weak capacity have been major concerns. Sustainability concerns remain – large ongoing liabilities will need to be met especially from ARVs and EHRP. A significant and increasing share of donor support is provided through pooled funding. The POW's largely input-oriented M&E framework sets out a range of key outputs and outcomes though links between inputs and expected results are not clearly set out. Sustainability is a key concern, especially given the degree of aid dependency.
OUTPUTS STRONGER HEALTH SYSTEMS progress in terms of 6 building blocks IMPROVED SERVICES Better quality, access, safety, efficiency	Progress in many areas. Financing has increased – more goes to districts, but allocation remains largely input-based. Inefficiencies remain and allocation bias continues. Drug supply has improved but challenges remain. Little progress has been made in terms of procurement. Government leadership remains hampered by regular turnover of staff. Decentralization appears to have had positive effects, with health managers having greater control over resources. Public private partnerships (PPPs) have been expanded, though there may be scope for taking them further. Coverage has generally improved though the picture is somewhat mixed. There are concerns about quality and evidence of ongoing inefficiency, both in terms of allocation efficiency and technical efficiency.
OUTCOMES i) Increased Coverage ii) Reduced Inequality iii) No undermining of other areas iv) Progress likely to be sustained	Coverage has improved, though the picture is mixed with some services faring better than others and unmet needs are large. Little evidence on inequality (pending DHS), but this is set against a background in which access generally appears to be becoming more pro-poor, whilst outcomes less so. Concerns that heavy investments in certain areas may be undermining progress in other areas (e.g. ARVs account for a large share of investment but are cost-ineffective).
IMPACT i) Improved health outcomes ii) Reduced disparities in health outcomes iii) Impact likely to be sustained iv) Improved social and financial risk protection	Health outcomes have been improving at a more rapid rate than comparable countries – and though the health status of poorer groups has generally been improving, equity in health outcomes does seem to have been declining. The DHS will make clear whether such trends have continued throughout the SWAp period. Progress remains fragile. There are sustainability concerns given the high and increasing level of aid dependency, ongoing governance concerns and the HIV and AIDS crisis. Economic growth prospects, by contrast, appear to be favourable at least in the medium-term despite the global crisis. The increased role of public financing of health care and the corresponding decline in the share of private funding and the fact that the resources appear reasonably well-targeted should have afforded the population – and especially the poor – greater protection against health care costs.

Key Quotes

The quotes below graphically illustrate many of the points made in this review:

"There are more financial and human resources available for health services now than there were three years ago. Decentralisation of health service management has allowed financial resources to flow directly to districts, where services are delivered; giving greater control over how these resources are used to district health managers. There are more places in training institutions, and more students entering pre-service training, in some cases doubling annual intakes over numbers in 2004. The numbers entering the health workforce have been boosted by increased pay and special allowances for health professionals, incentives to bring retired workers back into the workforce, and by creative initiatives that allow health staff to work additional hours and be paid for their time. While assuring a steady supply of essential drugs has been problematic it is also clear that there are more drugs and medical supplies in stock in health facilities and hospitals than before, even though they are not always the most needed. Some of the crisis in essential drug supply has been eased by districts having their own budgets from which they can purchase drugs privately that are not available through the public system".

SWAp mid term review.

"The availability of maternal health services has increased significantly as a result of the SWAp and the decentralisation process; more emergency obstetric care facilities are available and they are better resourced. The EHRP has enabled more staff to be trained, recruited and retained, so providing better clinical cover in the facilities. The key benefits that District Health Officers note concerning the SWAp are the improvements made to infrastructure, and their own ability to use funding for supplies and maintenance to improve the quality of their services, particularly in terms of infection prevention and innovation to address local constraints".

Maternal Health Results Analysis.

"Flexibility and level of funding to the SWAp have enabled the improvements that have been seen to date, but it is crucial that these are not eroded. Continued support to the health sector and its human resources are likely to be required for the foreseeable future since although the Malawian economy has gained strength in recent years, it is not sufficiently large to provide the basic level of care that the population requires".

Maternal Health Results Analysis.

"There is no evidence to suggest that all the resources available to be spent on delivering the EHP are indeed fully spent on doing so, or that they are spent as efficiently as possible".

Maternal Health Results Analysis.

"DFID have provided, in partnership with MoH, both the impetus and the majority of the finance for the Health SWAp".

Maternal Health Results Analysis.

"Despite under-funding of the EHP, Malawi has achieved measurable improvements in mortality, service delivery and equity of access. This has been achieved in the face of a human resource crisis and an AIDS epidemic that consumes a large proportion of health resources".

Health Portfolio Review.

"More women are coming to facilities to deliver and more of those deliveries are resulting in a live child".

Maternal Health Results Analysis.

"The previously worsening trends for maternal mortality have been reversed and indications are that improvements in health service provision are accelerating".

Maternal Health Results Analysis.

"The EHP contains broadly cost effective interventions. By implication the SWAp supports a cost effective basic package, and in this sense DFID's SBS can be described as cost effective in general terms".

Health Portfolio Review.

"The innovative recruitment and employment strategies currently in place are both labour intensive and probably quite expensive. The TA and volunteers are not being used effectively to build local capacity. Without wishing to detract from these successes, these emergency measures are easier than developing and implementing the longer term policies and strategies for sustaining the workforce".

Health Portfolio Review.

"…worrying view expressed by some senior MOH staff that even though the POW remains the national health strategy, should any development partner offer to provide services outside the framework of the POW and EHP, the Ministry is unable to say 'no', and must accept what is on offer".

SWAp Mid Term Review.

"Alignment is working well in terms of:

- Sharing a common strategic plan (POW).
- Sharing a common financial report (FMR).
- Agreeing to fund a common operational plan (AIP) on an annual basis.
- Using the MOH's programme progress reports and bi-annual review process as their own review and reporting mechanism.
- Sharing successes and failures and losing attribution of outputs and outcomes to particular partner inputs.
- Recognising that there is a trade off on both sides with government sharing its prerogative for decision making while retaining reasonable final say; with partners forgoing attribution and hands-on control of their inputs".

SWAp mid term review

"This governance structure is in line with international best practice on SWAp governance, as it is built around the principles of partnership and transparency, with clear lines of responsibility for decision making. … (but) governance structures and partnerships are not being used effectively at present, and, as a result, lines of communication and coordination between government, non-governmental and development partners are weakening".

SWAp mid term review.

"Planning and Review meetings – and the sheer size of these meetings -- along with the heavy day-to-day involvement of DPs in many aspects of sector management, involve large transaction costs for government and drain capacity. Continuing parallel structures caused by some donors' resistance to using country systems and common reporting requirements place demands on limited national capacity and engender inefficiencies".

World Bank 2009.

1. Introduction

DFID Malawi underwent a value-for-money (VFM) audit by the UK National Audit Office in 2009, which examined its overall support from 2004 to 2008, focusing on health and agriculture. Among the recommendations arising from the audit was the need to establish greater evidence of impact, value for money and efficiency savings. Within this context, DFID has agreed with the Government of Malawi to commission an impact evaluation of SWAp Phase I. The findings of the evaluation will also assist towards the design of Phase II of the SWAp, due to commence in July 2011. The work will also feed into the current global debate on the effectiveness of SWAps and of aid effectiveness principles, specifically feeding into the Phase II evaluation of the Paris Declaration, and the Malawi country study.

The DFID Human Development Resource Centre (HDRC) was contracted to carry out this work. The work was led by Mark Pearson who conducted the review in April and May 2010. Terms of Reference are in **Annex 1**.

The report is structured as follows: **Section 2** sets out the approach adopted and outlines some of the limitations associated with the analysis. **Section 3** looks at what the SWAp was expected to achieve and the approach adopted. **Section 4** sets out the key results achieved. **Section 5** addresses the issue of attribution and the extent to which the results can be attributed to the SWAp.

2. SWAps and Impact – Methodology

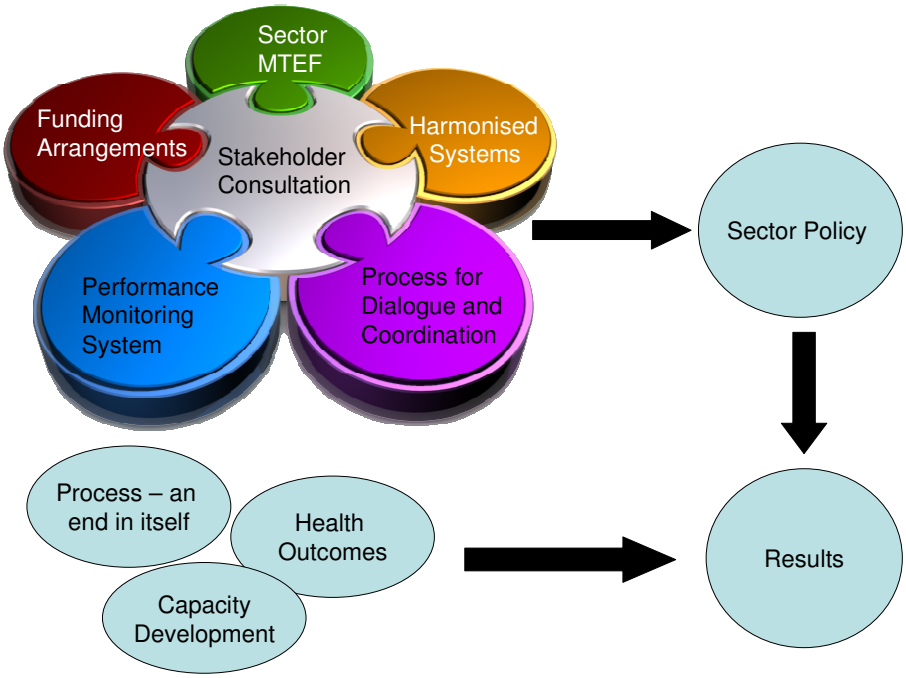
What is a SWAp?

There is no 'official' definition of what a SWAp is, but it is usually defined as an approach in which:

- All significant funding agencies support a shared, sector-wide policy and strategy, which has clear sector targets and is focused on results;
- A medium-term expenditure framework (MTEF) or budget supports this policy;
- Government provides leadership in a sustained partnership;
- Shared processes and approaches for implementing and managing the sector strategy and work programme are agreed, including reviewing sectoral performance against jointly agreed milestones and targets; and
- There is a shared commitment to move to greater reliance on Government financial management and accountability systems.

The components of a SWAp are set out in Figure 1. These include the funding arrangements (or use of aid instruments), the presence of a sector MTEF, the adoption of harmonised systems, process issues such as frameworks for dialogue and coordination and stakeholder consultation and a performance monitoring system.

Figure 1: SWAp Components



A SWAp is not an aid instrument. There is no specific presumption as to how a SWAp should be financed – it is often a mix of projects, pooled funding and sector budget support[1] – although implicitly it is assumed that over time an increasing share should be provided in the form of budget support as a means of reducing transactions costs.

Assessing the Impact of a SWAp

The assessment of the impact of a SWAp poses particular methodological challenges. In terms of the individual SWAp components, we know too little about how important each component is and how they interact. Additionally, there is often ambiguity on the extent to which the key components are actually in place. (For example, there could be a sector MTEF, but there may still be doubts as to how effective this might be if there is no government-wide MTEF, where there is significant off-budget funding and also doubts about whether the process actually supports a rational resource allocation process).

There is often a lack of clarity on the results we expect a SWAp to achieve. Measuring health outcomes is often relatively easy, but evidence suggests that health sector and health systems often contribute relatively little to health outcomes (see later in section 5).

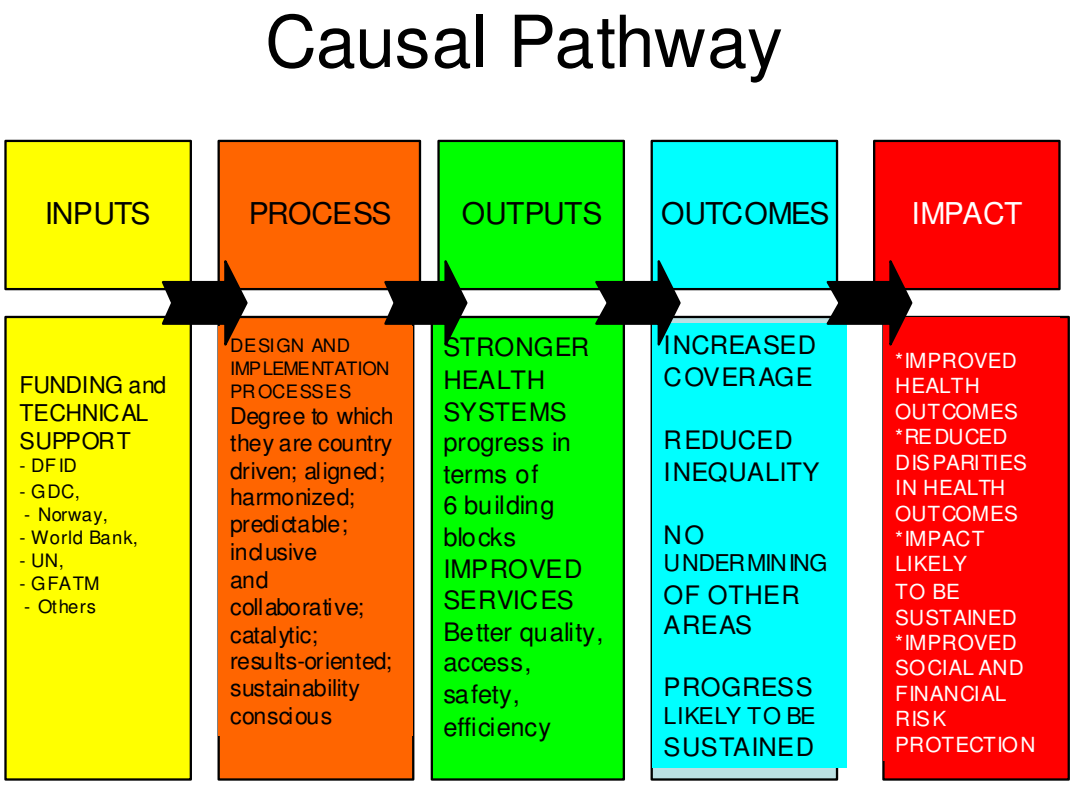
It is also extremely difficult to measure the extent to which intermediate outcomes such as capacity development are achieved; though it should, in principle, be easier to attribute any such improvements to a SWAp process. It is further far from certain that capacity development will improve outcomes even in the long–term, although the expectation is that it will. Finally, and more controversially, one could argue that a SWAp is an end in itself and, if done well, represents a civilised way of doing business and is a good thing to do irrespective of whether it improves health outcomes or not.

[1] Implicitly it also includes Poverty-Reduction Budget Support (PRBS) though this would be reflected in any Government contribution to a SWAp.

Another important caveat is that impact can only be as good as the quality of any POW and the extent to which it is effectively implemented. Whilst a sound SWAp process could help ensure that a POW is well-designed and create a framework in which implementation is more likely, a good SWAp process supporting a flawed POW will achieve little.

Expected causal pathway

Figure 2: Assumed Causal Pathway



The causal pathway set out in figure 2 has gained some degree of international consensus and, in its adapted version shown here, is a useful basis for the purpose of this review (in the absence of an existing causal pathway).

The approach taken in this review is to compare progress against the expectations set out at the time the programme was adopted. This does raise concerns that there may be a natural degree of (over)optimism bias at the time the programme is appraised. Post-approval there is often a tendency to raise expectations, especially when better-than-expected progress is being made. Whilst it is clear and indeed welcome that changes are made as the programme goes along (responsiveness is clearly a good sign), for the purposes of this review the aim is to assess whether what has been achieved seems reasonable against what was expected at the time.

Caveats and limitations to the analysis

A number of methodological challenges are set out above. Further considerations relate to the fact that:

- This was a desk-based study relying heavily on available literature. A key problem with the literature is the fact that it suffers from significant shortcomings: it can often focus on what is going wrong rather than on what progress is being made and, as set out in a recent World Bank report (Vaillancourt (2009), review and dialogue often lack candour.
- There was limited follow-up with key stakeholders and the results of such interviews are essentially subjective.
- A lack of coherence between indicators means it is difficult to tell whether the SWAp has achieved what it set out to do or not. For example the SWAp Project Memorandum sets out expected contributions from GOM as well as an expected share of the overall budget allocation. In practice, one has been met – one has not.
- Difficulties in identifying the counterfactual. This is a matter of judgement rather than fact and should best be done at the time the programme is approved rather than retrospectively. (The DFID appraisal process is supposed to look at alternative approaches which sometimes does include a "do nothing" option. It may make sense to require an appraisal to explicitly set out a 'do nothing' option which could act as the counterfactual for any subsequent evaluation).
- The timing of the review which precedes key studies that would have contributed significantly to the findings including:

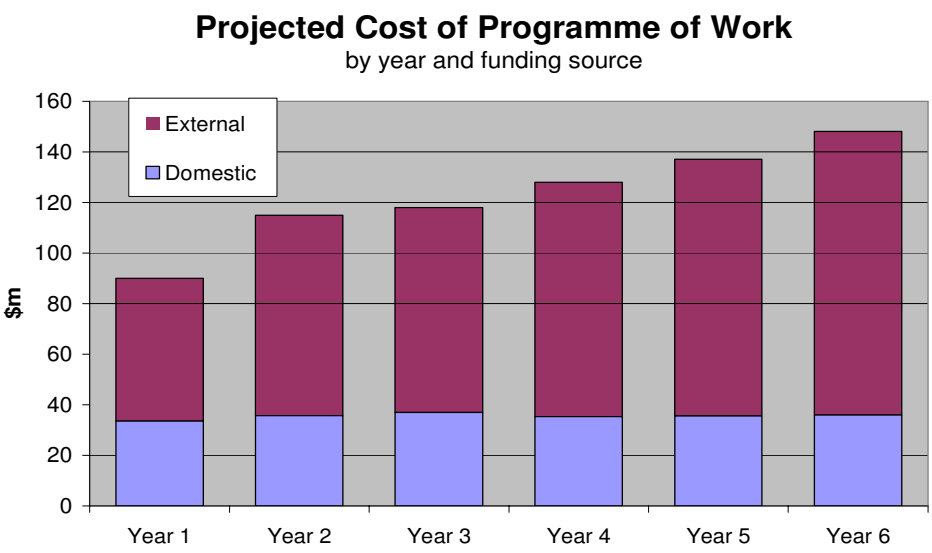
  a) An evaluation of the EHRP which will shed light on the cost-effectiveness and sustainability of the incentives put in place to recruit and retain health workers;
  b) A District Expenditure Tracking Survey which will provide more information on resource allocation at district level, including for the EHP, and provide recommendations to improve the resource allocation formula;
  c) A national evaluation of the POW scheduled for 2010 to inform a new 5-year POW (the second phase of the SWAp) from 2011 onwards; and
  d) The Demographic and Health Survey which is now not due until 2011.

The findings of this review will have to be updated in the light of the findings of these exercises.

With these considerations in mind, the consultant made it clear the specific assessments of impact and attribution and assessments of value for money related to particular programmes would not be possible. As noted above, and given the lack of specified baselines, it is not possible to say whether expectations were met and impossible to attribute results. It is, though, possible to set out what results have been achieved and make limited judgements about the role the SWAp might have played in this. It is also possible to identify areas where things might, with hindsight, have been done differently.

3. Approach adopted: What was the SWAp expected to achieve? What was DFID's expected role?

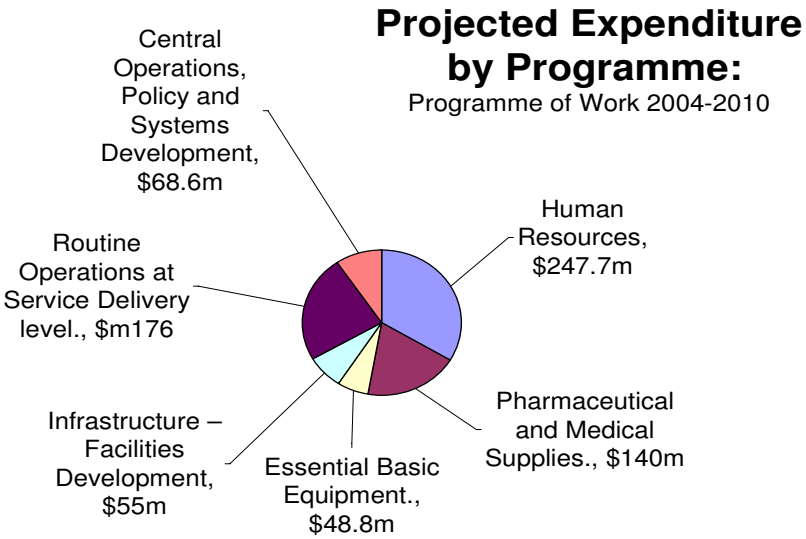
Figure 3: Projected Cost of Programme of Work



The implementation programme – against which progress should be measured – is set out in the Programme of Work 2004-2010. The POW was costed at some US$735 million over six years (around half of the estimated "ideal" resource requirements according to WHO estimates) based on likely available funding and an assessment of absorptive capacity.

Thus it is important to note that **the POW was not considered to be ambitious enough to achieve the MDGs and should not, therefore, necessarily be judged on its failure to achieve them.**

Figure 4: Projected Expenditure by Programme



Expectations at the time of SWAp approval are set out in the bar chart above. A gradual increase over time was expected (with a small jump in Year 2 related to a one-off recapitalisation of Central Medical Stores) with Government support constant at under US$40 million per annum and increasing donor support. Within donor support, it was anticipated that there would be a shift towards pooled funding. In terms of the content of the POW, the pie chart shows the allocation by pillar. (A more detailed analysis of expected costs by pillar is presented in **Annex 2).**

The World Bank – which led the economic appraisal for the SWAp partners – concluded that: 'The POW costing exercise was found to be generally sound'; and 'based on the trends of diseases analyzed …[earlier] …. and the global cost-effectiveness rates, it is clear that the Malawi EHP has been chosen judiciously based on universally accepted "global best-buys".'

The expectation was that the Government would increase domestic allocations "by the full amount of pooled aid" though, at the time, the context was rather unfavourable with intermittent fiscal crises[2] and lack of a medium-term financing framework. Significant improvements were also expected in governance following the inauguration of a new President and early efforts to address corruption.

Key bottlenecks - as outlined in DFID's proposal for Support to the SWAp - included the high levels of poverty, high fertility rates and the HIV and AIDS epidemic (which both increased the demands placed on the health system whilst also reducing its ability to support services), low access to services due in large part to its perceived poor quality and major staffing shortfalls.

Although largely input-based, the POW did set out a range of indicators which was subsequently developed into a monitoring and evaluation framework to monitor progress during joint annual reviews. Parts of this are reproduced in the sections that follow**.**

The approach involved a significant shift in both the form of the aid relationships and the health systems approach as outlined below.

A change in system focus

i) Prioritising Delivery of an Essential Health Package (EHP). MoH adopted from the Essential Health Package, a list of eleven cost-effective interventions, which respond to the Burden of Disease (BOD) in the country, which were to be provided free of charge to all Malawians. Table 2 summarises the intervention areas of the Essential Health Package.

[2] Government domestic debt more than doubled to 26% of GDP over the two years to June 2004. As a result, interest jumped to 33% of domestic expenditure in 2003/04 - crowding out much essential expenditure.

Table 2: Essential Health Package Components

	Essential Health Package Components
1	Prevention and treatment of vaccine preventable diseases.
2	Malaria prevention and treatment.
3	Reproductive and neonatal health interventions (including reproductive health, family planning, safe motherhood and PMTCT).
4	Prevention, control and treatment of tuberculosis.
5	Management of Acute Respiratory Infections (ARIs).
6	Prevention, treatment and care for Acute Diarrhoeal Diseases (including cholera).
7	Prevention and treatment of sexually transmitted infections (HIV and AIDS, ART and VCT).
8	Prevention and treatment of Schistosomiasis and related complications.
9	Prevention and management of malnutrition, nutrition deficiencies, and related complications.
10	Management of eye, ear and skin infections.
11	Treatment for common injuries.
	Support services
1	Essential laboratory services.
2	Drug procurement, distribution and management.
3	Information, Education and Communication.
4	Pre- and in-service training.
5	Planning, budgeting and management systems.
6	Monitoring and evaluation.

The EHP was originally costed at US$18.4 per capita subsequently to US$28.57, with the inclusion of ART and other AIDS costs, the new first line treatment for malaria, and elements of the Maternal Health "Road Map".

ii) Emergency Human Resource Programme': The POW also launched the 'Emergency Human Resource Programme' (EHRP) which aimed to address the growing human resource crisis (as illustrated in **Table 3**).

Table 3: Staff per 100,000 Population

Cadre	Botswana	South Africa	Ghana	Tanzania	Malawi
Physicians	28.7	25.1	9.0	4.1	1.6
Nurses	241.0	140.0	64.0	85.2	28.6

Source: DFID SWAp PM

Key factors underlying shortages were seen to be:

- poor retention of existing staff due to low pay and poor working conditions resulting in low morale and productivity;
- inadequate production of trained workers, with HIV and AIDS responsible for doubling attrition rates and also increasing absenteeism due to ill health and attendance at funerals;
- and growing migration of staff to both the private sector and overseas markets.

EHRP included a 52% increase in the basic salaries of 11 key cadres of health workers and a range of innovative measures – such as recruitment of overseas personnel – to fill gaps whilst training capacity was being scaled up

A shift in the Aid Relationship

Establishment of the SWAp: As set out in the Health Portfolio Review (HPR) "the POW has been supported and financed by the Government and Development Partners (DPs) through a Sector Wide Approach (SWAp), with a common framework for planning, budgeting, and performance monitoring". This was intended to replace a system which involved the 'Balkanisation' of the health sector by donors which led to 'islands of excellence' operating within an ever-weakening public health structure. Many of the individual donor projects were 'off-budget', but required significant support from government in terms of management time, supervision and reporting. The Maternal Results Analysis did suggest that whilst "many years of project funding had not yielded the desired results in terms of maternal and other health outcomes" such projects did "provide valuable lessons regarding barriers in access to care and potentially successful interventions".

Adoption of a Range of Health System Reforms

Content of the POW: Financial management systems in government were generally weak with low capacity. Both Ministry and district level were characterised by the use of an antiquated manual accounts system. At the outset of the SWAp, Government was embarking on a process of procurement reforms. These included the decentralisation of the public procurement function to line Ministries under the supervision of a new Office of the Director of Public Procurement (ODPP) - though a shortage of procurement specialists was seen as a key constraint. The SWAp also intended to implement an agreed, time-bound Procurement Improvement Action Plan designed to accelerate full implementation of the 2003 Procurement Act. Key measures were to include the use of World Bank procedures for International Competitive Bidding (ICB), an annual independent procurement audit; and the recruitment of three long-term technical assistants to build capacity and assist the Ministry to manage procurement more effectively.

Despite sustained support for Central Medical Stores, little progress had been made. DFID saw movement on CMS as a "deal breaker" in terms of its investment in the SWAp. The Office of the President and Cabinet in the Malawi Government had indicated its willingness to consider a number of options including contracting out the Stores function, contracting in a whole new management or recruiting new staff for the key management posts. Agreement on an approach was a precedent condition for pooled funding. Delays in resolving this issue (especially for the Global Fund) has held back disbursements and threatened stock-outs of essential supplies and drugs. Malawi plans to devolve control of services at the district level including health to District Assemblies**.** (DFID SWAp Project Memorandum)

Role of DFID in the Health Sector in Malawi

DFID has been a lead donor in the Malawian health sector for many years. According to the Health Portfolio Review, DFID provided 30% of all donor funds in 2007/8 and around 36% of donor commitments in 2008/9[3]. The US and Norway are other key donors in health, whilst the Global Fund for AIDS, TB and Malaria (GFATM) has also contributed substantial amounts - nearly US$500 million - since 2003. Data from the Development Assistance Committee Creditor Reporting System (DAC CRS) database provides similar results as shown in **Annex 3.**

[3] SWAp Mid Year Report, Ministry of Health, April 2009. The share of total disbursements is likely to be lower because the depreciation of the GBP has reduced the value of DFID's aid in $ and Kwacha amounts.

Prior to 2004, DFID had supported the health sector through a range of project and programme interventions including a Safe Motherhood project in the Southern Region. Since the establishment of the SWAp, DFID has increasingly provided support through Sector Budget Support (SBS) and General Budget Support (GBS) instruments, on the grounds that whilst "these projects were effective and achieved some successes, their impact on health outcomes was limited by restricted geographical coverage and weaknesses in supporting health services" (SWAp Project Memo). The Global Fund was expected to join the pool whilst USAID, JICA, German Development Corporation (GDC) and UN agencies were expected to contribute through project funding. DFID expected to co-finance the Emergency Human Resource Programme with the Global Fund with smaller contributions from UN agencies and other donors.

DFID also supports two major service delivery projects off-budget, but under the SWAp:

- Banja La Mtsogolo (BLM), which provides family planning and sexual and reproductive health services in a Joint Financing Agreement with Government and other donors; and
- VSO which manages a large volunteer programme which complements the EHRP.

DFID expected to engage with Government alongside other partners through a SWAp governance structure made up of:

- The Health Sector Review Group, incorporating representatives of all collaborating partners (pooled and non-pooled donors[4]) and NGOs and private sector providers (and co-chaired by Ministry of Health), to review progress in the implementation of the Programme of Work and annual work plans. A health donor sub-group reports to this Health Sector Review Group.
- An Annual Joint Review, coordinated by the SWAp Secretariat, supported by a Health Sector Annual Report and Annual Consolidated Financial Audit and Procurement Audit.
- A Memorandum of Understanding (MoU) which spells out the timing and mechanisms for joint planning and review (unlike many countries Malawi also has a Code of Conduct).

To improve aid effectiveness and lower transactions costs, DFID also intended to set up a joint health office with Norway and SIDA which did not take place.

[4] The Chair and Secretary of the Health Donor Group sit in the HSRG, representing all DPs

4. Progress to Date

This section spells out progress in terms of input, processes, outputs (service-related and reform-related) and outcomes as set out in the expected causal pathway. In overall terms of the 52 SWAp programme indicators with annual targets: 19 have achieved their targets to date, four partially achieved the targets, 11 did not achieve the targets, 11 more were awaiting the results of the Demographic and Health Survey (DHS) and seven awaited specification of target and/or baseline (2009 SWAp review).

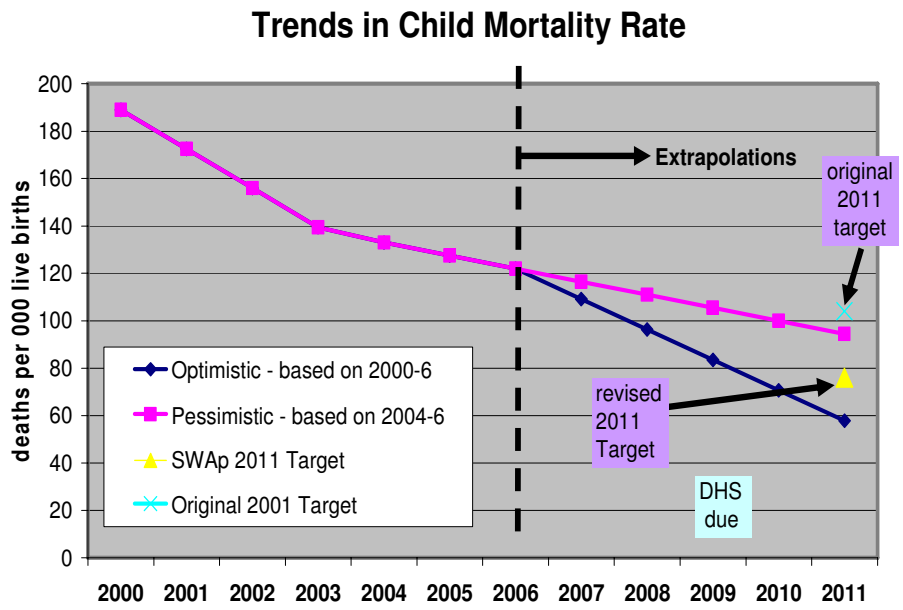
Improvement in Health Outcomes

Progress has been made against key health outcome indicators. In some cases the 2010/11 targets seem likely to be met (e.g. HIV prevalence rate). In other cases – notably for the MDG-related outcomes – the picture is less clear due to the lack of a recent DHS. Based on available data the MMR target looks unlikely to be met – the IMR target may be met. The Health Portfolio Review reported that "the corner has been turned on maternal mortality with a reduction from 1,120 maternal deaths per 1000,000 live births to 807. Reductions in infant and child mortality have been sustained with Malawi on track to reach MDG 4 before 2015 (though the data presented below would raise some questions as to whether this is the case)".

Box 1: Improvement … but not enough

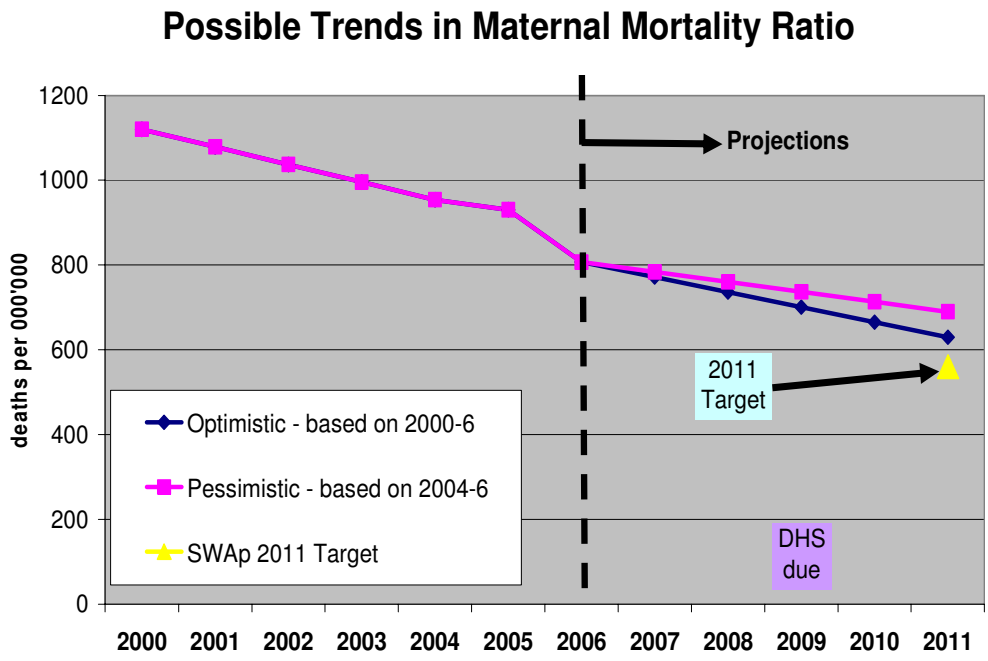
Malawi faces acute challenges to improve the status of healthcare and health outcomes with limited resources. The **last five years have seen significant improvements**, but the country **remains off-track** with the maternal health MDG, ranked 164 out of 177 in the Human Development Index, and has an HIV prevalence rate of 12%. There is much work still to be done and using limited resources in a cost-effective manner is imperative. (Health Portfolio Review)

Figure 5: Trends in Child Mortality Rate



Source: SWAp Annual Review 2008

Figure 6: Trends in Maternal Mortality Ratio



Elsewhere the picture is mixed. There has been a substantial decline in the in patient fatality rate for malaria. Some progress has been made in reducing the proportion of children born to HIV-infected mothers who are also infected but too little to achieve the targets. Very little progress has been made in reducing the proportion of underweight children.

However, these improvements are not insignificant. As a result of improvement in the MMR "it is estimated that a minimum of an additional 630 mothers per year are surviving pregnancy and birth because of such improvements[5]**.**

It is worth pointing out though, that Malawi has been a good performer in terms of health outcomes for a considerable period of time, as its key health indicators have consistently improved more rapidly than comparable countries. Infant and under 5 mortality rates were well above LDC (Least Developed Country) averages in 1990 and this remained the case in 2000. By 2005, however, Malawi's outcomes were better than the LDC average and the gap between the two seems to be widening. This would suggest that whilst Malawi's good performance preceded the SWAp era, progress is still being maintained (although data for the period 2004-6 suggests that the rate of progress may be declining. Detailed discussion about performance during the SWAp period as a whole needs to wait for the results of the DHS, now expected around mid-2011. **Annex 4** presents further data on health outcomes with a particular emphasis on comparisons with other countries. **Table 4** presents progress against the outcome indicators included in the SWAp M&E framework).

[5] Based on DHS 2004 and MICS MMRs.

Table 4: Progress against key Health Outcome Targets

Indicator	Baseline	Progress July 08-June 09	Target (2010-11)
- IMR	76/1000 (2000-2004)	72/1000 (MICS 2006)	48/1000 by 2011
-U5MR	133/1000 (2000-2004)	122/1000 (MICS 2006)	76/ 1000 by 2011
- MMR	984/ 100,000 (2000-2004)	807/100000 (MICS 2006)	560/ 100,000 by 2011
-Life expectancy (at birth)	40 yrs (NSO, 2005)	-	45 by 2011
- Prevalence of HIV among 15-24 year old pregnant women attending ANC	14.28% (2005)	12.3%	<12% by 2011
- % of infants born to HIV-positive mothers who are infected	21% (2005)	Not Estimated	13%
- Malaria In-Patient Case Fatality rate	7%	3.95%	3%
-% of children that are under weight	18% (2005)	16% (2008)	7%

Improvement in Health Service Outputs

Health sector outputs have generally increased in both absolute and per capita terms throughout the SWAp period.. Again, though, the picture is mixed. The proportion of pregnant women receiving antenatal care visits remained broadly constant, whilst family planning activity declined sharply until a recent up-turn. Caesarean rates have increased. ART roll-out has been particularly rapid and well above target (see **Table 5** below). Coverage is now more than two-thirds of those in need, though there are doubts (see later) as to whether such investment represents value for money. Immunisation coverage remains high. There has been an increase in clinic attendance, treatment of malaria and diarrhoea. Children presenting with malnutrition has fluctuated over the same period (which may explain, in part, the high prevalence of underweight children). The Health Portfolio Review concluded that "the data available suggests an increase in health sector activity over the last 6 years, despite staff shortages, particularly in the early years".

Table 5: Patients Alive and on Anti-Retroviral Therapy December 2006 – June 2009

Year	Target	Actual
December 2006	60,000	59,980
June 2007	70,000	79,398
December 2007	90,000	100,649
December 2008	130,000	147,479
June 2009	150,000	169,965

Source: 2008 Joint Annual Review report

Table 6 shows progress against POW targets. Again it shows a mixed picture – most figures are quantitative and do not shed any light on the quality of services nor the equity of access.

Table 6: Progress against Health Service Output Targets

Measure	Baseline	Latest 2008/09	2011Target11 ?)	
OPD service utilization	800/1000 population (HMIS 2004-05)	1290/1000 population	>1000/ 1000 population	Target already exceeded by ~ 30%
Proportion of 1 year-old children immunized against measles	82% (EPI 2005)	89%	90%	Well on track
-CPR (modern methods)	28.1% (DHS 2004)	41% (MICS 2006)	40%	Already exceeded
-Proportion of births attended by skilled health personnel	38% (HMIS 2004 05)	52%	75%	Unlikely to be met at current rates
% of eligible[6] pregnant women receiving at least two doses of intermittent preventive therapy (for malaria)	46.8%	46.7% (MICS 2006)	90%	Little sign of improvement – very unlikely to be met
-% of pregnant women and under 5 children who slept under an insecticide treated net (ITN) the previous night	14.7% pregnant women 14.8% children (DHS 2004)	25.6% pregnant women 24.7% children (MICS 2006)	90%	Significant progress but unlikely to be met
% of HIV+ pregnant women who received a complete course of ARV prophylaxis to reduce mother to child transmission	2.30%	66%	80%	Good progress
% of children under 5 years of age with fever who received anti-malarial treatment according to national policy within 24 hours of onset	23.4% (DHS 2004)	21.1% (MICS 2006)	80%	Decline in coverage – target very unlikely to be met
- EHP coverage (% Facilities able to deliver OPD, Imm., FP & mat. services)	9% (JICA study 2002)	74% (420/571)	60%	Already met
-% of health facilities with at least the minimum package of PMTCT services	7% (2005)	100% (544/544 facilities)	100% (All 544 facilities)	Already met
- TB case notification (rate	not available	196/100,000	29,903	

[6] *HIV positive women receiving Cotrimoxasol Preventive Treatment (CPT) should not be given sulphadoxine pyrimethamine (SP). This is estimated to be around 12.6% of pregnant women according to 2007 ANC Sentinel Surveillance data.*

Measure	Baseline	Latest 2008/09	2011Target11 ?)	
per 100000)		(NTP)		
- TB cure rate	74% (NTP, 2004 2005)	83%	81%	Already met
-% of HCs offering basic EmOC services	2% (2005, EmOC survey)	65% 71/109	100% 109	Good progress
-Doctor/ population and Nurse/ population *(CABS Indicator)* and HSA/ population ratios	1 doctor /62,000 pop (2005) 1 nurse/ 4,000 pop (2005)	1 doctor /53,662 pop 1 nurse/ 3,062 pop 1 HSA / 1,315 pop	1 doctor /31,000 pop 1 nurse / 1,700 pop 1 HSA / 1,000 pop	Significant progress but target unlikely to be met
-% of pregnant women starting antenatal care during the first trimester	7% (HMIS 2004 2005)	9%	20%	Some progress but unlikely to meet targets at current rates
-TB default rate among new smear positive cases	4% (NTP 2004)	1%	2%	Already met
-% of private practitioners participating in some aspect of DOTS among all private-for-profit health units	To be provided by NTP	67%	50%	Already met
- % of sexually active population using condoms at last high-risk sex (sex with non-cohabiting or non-regular partner)	30% women 47% men (DHS 2004)	40% women 58% men (MICS 2006)	40% women 60% men	Substantially met
- % of TB patients accessing HIV Testing and Counselling	50%	84%	90%	Almost met
- # of people tested and counselled for HIV, and receiving results in the last 12 months	167,393 (HMIS 2004-05)	1,712,170	1,000,000	Exceeded by over 70%
- # of people alive and on treatment (HAART) at the end of each year	30,000 (HIV Unit, Dec. 2005)	169,965 (March 2010 data suggests over 198,000 covered)	208,000 (Dec. 2007)	Significant progress
-# of ITNs/LLINs distributed in the country (annually)	1,323, 557 (2004)	890,305	1,800,000	Decline in performance
-Routine Vitamin A supplementation coverage in children 6-59 months.	21% (HMIS, 2004 05)	21%	40%	No progress
-% of young people aged 15 24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV	23.6% women 36.3% men (DHS 2004)	41% women 42% men (MICS 2 006)	75% women 75% men	Good progress

Nonetheless significant gaps remain (especially for health facility deliveries, treatment of ARI in under-5s, abortion complications, treatment of acute malnutrition and supplementary feeding), whilst some services remain "overprovided" (e.g. malaria treatment, likely due to the over-diagnosis of malaria in out-patients). The Health Portfolio Review showed that the EHP had delivered over half of the services required (**Table 7**).

Table 7: Comparison of EHP Services: Requirements against actual

Intervention	National Incidence Levels	Total number of cases nationwide, for the EHP, per annum	Provision at present per 1000 of the population	Total burden not met by the EHP per 1000 of the population	The gap between need and delivery
Full immunization		764,511	41.9	58.5	**40%**
Measles		588,790	39.4	45.1	**14%**
ARI in under-5s	1,829,077	1,829,077	68.1	140.0	**106%**
Malaria – bednets	1,200,000	1,200,000	91.8	91.8	**100%**
Malaria - under 5	2,238,248	2,238,248	195.7	171.3	**-12%**
Malaria - 5 and over	1,932,413	1,932,413	208.2	147.9	**-29%**
Antenatal Care	797,313	797,313	45.7	61.0	**34%**
Normal Delivery	637,850	574,065	22.7	43.9	**94%**
Postpartum Haemorrhage	49,584	49,584	0.3	3.8	**1301%**
Eclampsia	34,374	34,374	0.1	2.6	**1739%**
Obstructed Labour	9,314	9,314	2.3	0.7	**-69%**
Severe Anaemia in pregnancy	22,514	22514	0.2	1.7	**599%**
Sepsis in pregnancy	0,772	20,772	0.3	1.6	**406%**
Newborn Complications	127,570	127,570	0.8	9.8	**1054%**
Abortion Complications	55,481	55,481	1.4	4.2	**201%**
Treatment of Syphilis in Pregnancy	31,095	31,095	2.2	2.4	**10%**
Postpartum Care	637,850	637,850	13.0	48.8	**276%**
Condoms	12,301	84,663	5.0	6.5	**30%**
Oral Contraceptive Pill	10,854	101,595	6.0	7.8	**30%**
Depo-provera injection	100,582	122,291	7.2	9.4	**30%**
Norplant	2,894	941	0.1	0.1	**30%**
IUCD	724	941	0.1	0.1	**30%**
Bilateral Tubular Ligation		38,496	2.1	2.9	**40%**
Vasectomy		1,013	0.1	0.1	**40%**
Passive Case Detection		80,458	4.4	6.2	**40%**
Treatment -smear negative and extra-pulmonary TB		47,290	2.6	3.6	**40%**
Treatment -smear positive TB		11,432	0.6	0.9	**40%**
Treatment - relapsed cases		3,014	0.2	0.2	**40%**
Treatment of Dehydration in U5s	3,815,318	3,815,318	25.5	292.0	**1044%**
Case management in Cholera		1,496	0.1	0.1	**100%**
Case management of Dysentery		186,023	8.5	14.2	**67%**
HIV Testing & Counselling (HTC)	1,191,648	1,191,648	54.7	91.2	**67%**
Management of OIs	261,325	261,325	12.0	20.0	**167%**
Screening/treatment of syphilis	148,956	148,956	6.8	11.4	**167%**

Intervention	National Incidence Levels	Total number of cases nationwide, for the EHP, per annum	Provision at present per 1000 of the population	Total burden not met by the EHP per 1000 of the population	The gap between need and delivery
Prevention of MTC transmission	78,137	159,463	0.6	12.2	**1900%**
Testing and Treatment of Other STIs	436,676	436,676	12.8	33.4	**162%**
CB/HBC	37,892	37,892	0.8	2.9	**275%**
ARV (adult)	79,200	73,333	3.4	5.6	**67%**
ARV (child)	10,800	10,000	0.5	0.8	**67%**
ARV Supplementary Feeding (adult)	79,200	13,200	0.6	1.0	**67%**
ARV Supplementary Feeding (child)	10,800	11,880	0.5	0.9	**67%**
Diagnosis and Case Management	4,401,521	150,728	6.9	11.5	**67%**
Mass Treatment	352,647	352,647	16.2	27.0	**167%**
Growth Monitoring of U5 Children	2,383,085	2,383,085	183.2	182.4	**0%**
Micronutrient supplementation	2,383,085	2,383,085	109.4	182.4	**67%**
Severe Acute Malnutrition (Inpatient)	44,162	44,162	1.4	3.4	**139%**
Moderate Acute Malnutrition (Outpatient)	40,375	40,375	2.5	3.1	**24%**
Supplementary Feeding	244,732	244,732	7.7	18.7	**145%**
Treatment of conjunctivitis		595,517	27.3	45.6	**67%**
Acute otitis media in under 5s	1,089,317	94,841	4.4	7.3	**67%**
Scabies	-	818,082	37.6	62.6	**67%**
Treatment of Fractures and Dislocations	164,244	164,244	10.1	12.6	**25%**
Treatment of Wounds	213,765	213,765	15.3	16.4	**7%**

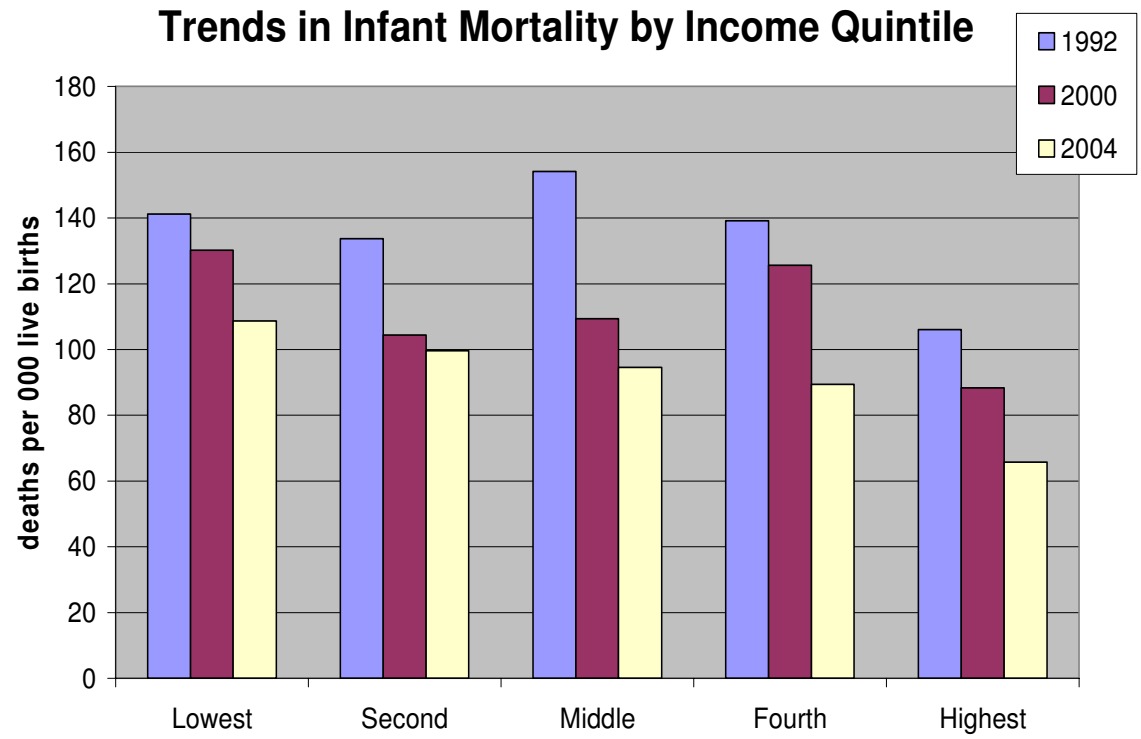
Source: Health Portfolio Review

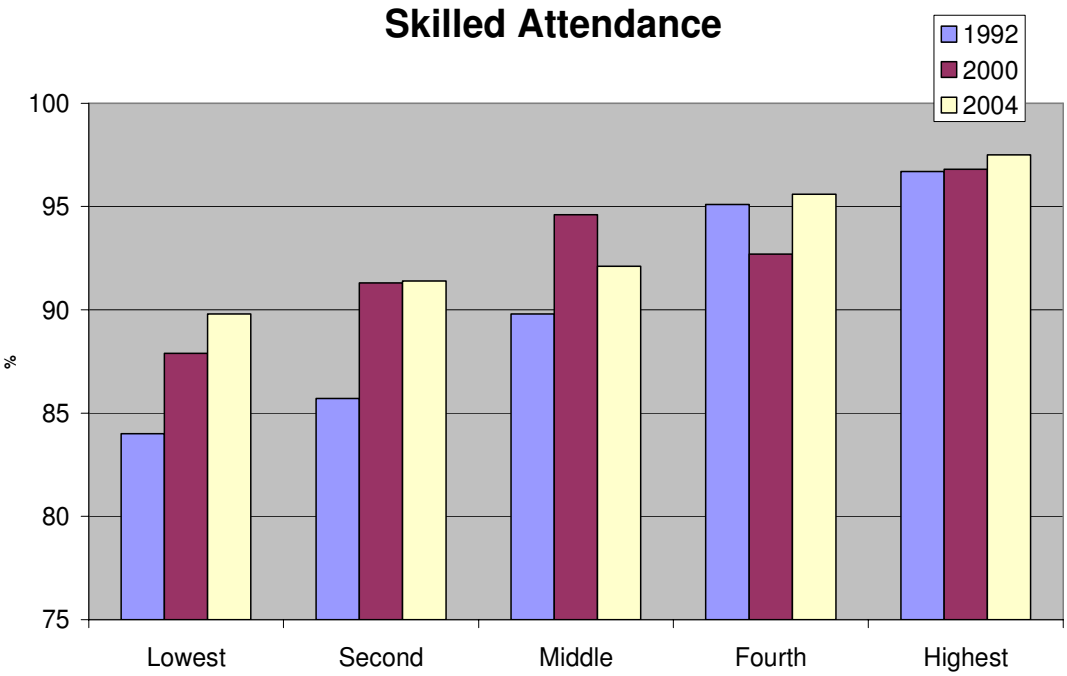
Further data on health service outputs are presented in **Annex 5.**

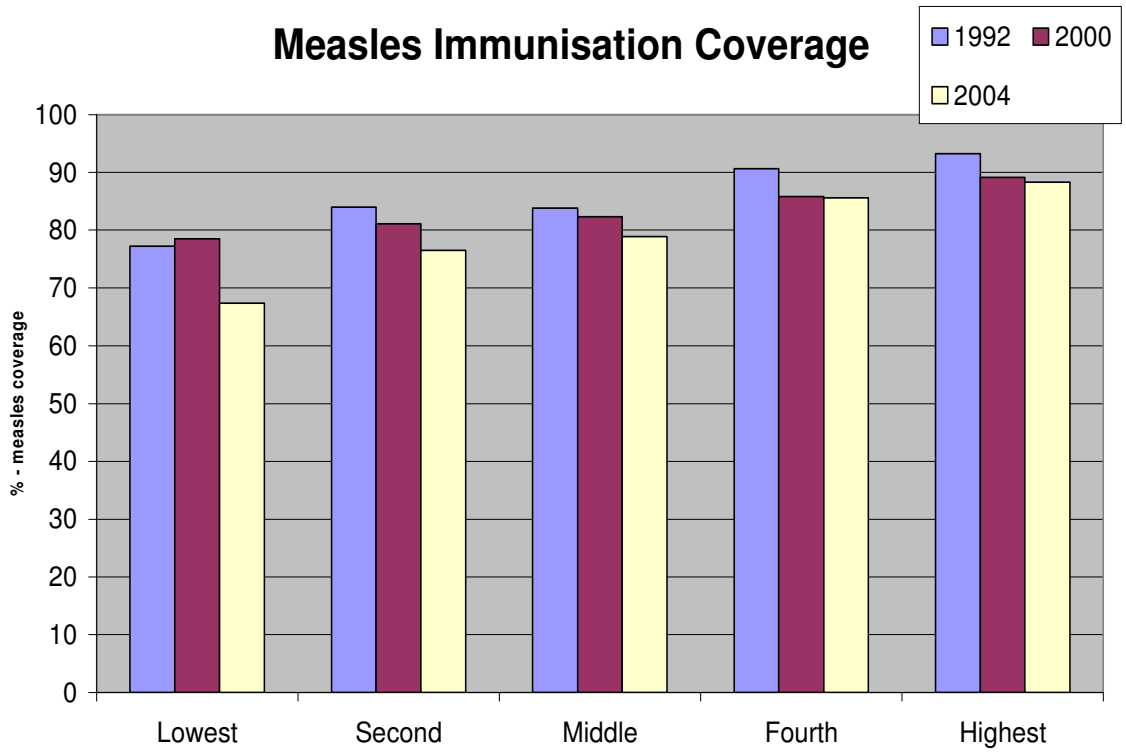
Equity of Access

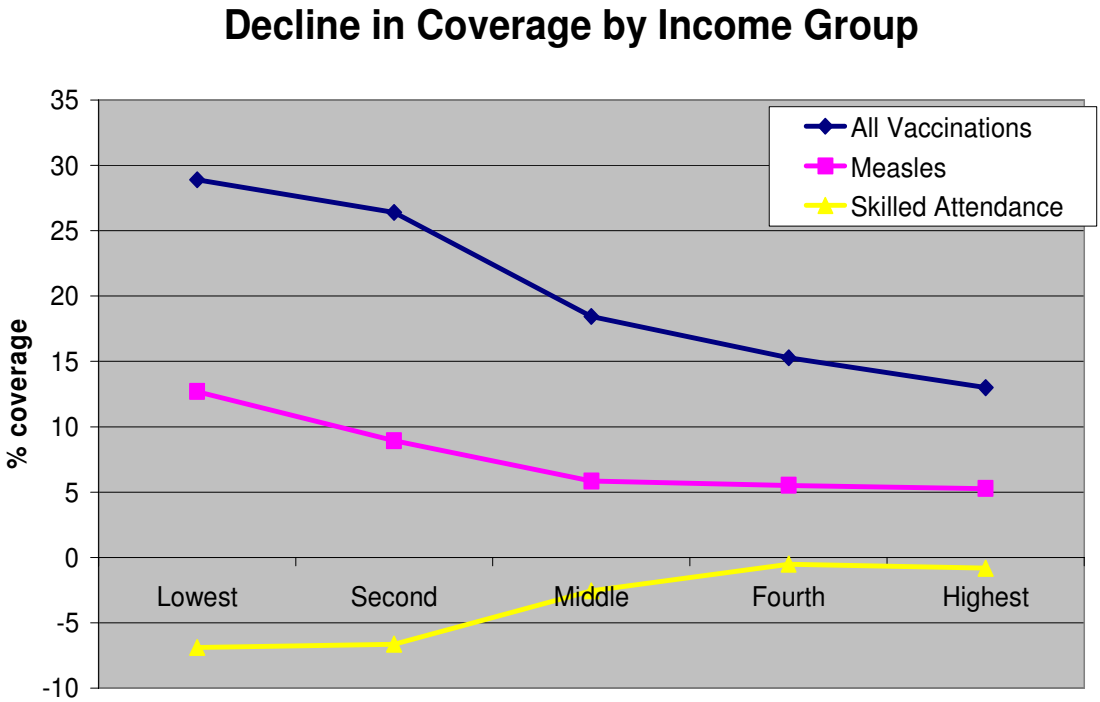
DHS data is only available to 2004 and, as already noted, field work for the next DHS is ongoing. Whilst health outcomes and access to services have generally improved, there are concerns about growing inequity in access and outcomes. Health outcomes were generally less equitable in 2004 than in 1992. Equity in access to most forms of vaccination has also declined since 1992. It remains to be seen what the trends show over the SWAp period. Selected results are shown below. Malawi does, though, compare reasonably well against other countries in term of equity of access and outcomes. For more details **see Annex 6.**

Figure 7: Selected Results of Equity of Access






Measles Immunisation Coverage
1992
2000
2004
% - measles coverage
100
90
80
70
60
50
40
30
20
10
0
Lowest
Second
Middle
Fourth
Highest


Decline in Coverage by Income Group
All Vaccinations
Measles
Skilled Attendance
% coverage
35
30
25
20
15
10
5
0
-5
-10
Lowest
Second
Middle
Fourth
Highest

Implementation of Health System Reforms

Table 8 provides an overview of progress in terms of a range of systems reforms. Progress in some areas, notably decentralisation and public private partnerships, has been strong. In other areas such as procurement progress it has been much more limited.

Table 8: Progress in terms of the reform agenda

Reform Area	Summary of progress
Decentralisation	Significant progress: The Mid-Term Review reported that "The Ministry of Health has taken significant steps to decentralise the delivery of the Programme of Work and the Essential Health Package to strengthened District Health Management Teams and has developed zonal offices to support the decentralisation process. Decentralisation of health service management has enabled financial resources to flow directly to districts, where services are delivered, giving greater control over how these resources are used to district health managers. In particular, operational health budgets have already been devolved to District Assemblies with the District Commissioner as the Controlling Officer for those funds. District Health Officers are, increasingly, empowered to develop and implement District Implementation Plans to ensure these reflect local priorities in the context of delivering the EHP to all Malawians".
Pubic Private Partnerships	66 SLAs have been signed representing coverage of around 40% of all CHAM facilities. The mid term review reported that "service level agreements with non-governmental providers has improved access to existing facilities that poorer community members could not previously afford to use". The Maternal Health Analysis reported that "most DHMTs have used some of their flexible and decentralised funding to sign SLAs with CHAM facilities".
Procurement	Key shortcomings persist: The MTR reported "confusion over who takes responsibility for procurement, as well as capacity to initiate and manage procurement. Procurement capacity is weak across the health system, and most worryingly so at Central MOH level". Other problems include "weak forecasting - no systematic measure of consumption of drugs at hospitals or health facilities". "No consultation has been made by the CMS in determining the equipment needs of the hospitals. The CMS has regardless proceeded to supply in large numbers at different times and to different hospitals equipment that is not required such as mattresses, beds, wheelchairs, blood pressure equipment, medical trolleys and bedside screens". In terms of procuring essential drugs and medical supplies the MTR observed that (i) there is a lack of clarity of procurement responsibilities for health sector goods between MoH Headquarters and Central Medical Stores; (ii) there is no capacity at MoH Headquarters for procurement of health sector goods; (iii) there is inadequate procurement planning including financial planning for procurement of these goods; (iv) quantification to determine country needs is not systematic and there is no central point of reference for quantification of requirements; (vi) there is inadequate experience in process requirements for procurement of health sector goods at Central Medical Stores; and (vii) there has been over-reliance on UNICEF as a stop-gap measure with little informed desire to build capacity within the system". The transition of oversight arrangements following the World Bank withdrawal from the health SWAp in September 2008 has also posed further challenges. Following the pulling out of the World Bank from the health SWAp in September 2008, Pool Partners could not finalize oversight arrangements for all health SWAp procurements until November 2008 when it was agreed to recruit an interim procurement oversight firm for non-health products. DFID had offered to facilitate the recruitment of the interim oversight firm. The contract for the interim oversight firm expired in January 2009 and it was expected that the intermediate oversight firm would be recruited with financing from DFID by February 2009. As at January 2009, expressions of interests for the intermediate oversight firm had been done. DFID extended the contract with Charles Kendall to coincide with the

Reform Area	Summary of progress
	recruitment of the intermediate oversight firm. The intermediate firm was expected to be in place by end of April. Following a six-month no-cost extension of CKP, substantive procurement oversight has been in place since around October 2009 by EPOS, with a two-year full time placement in the Office of the Director of Public Procurement (ODPP). Recognizing that some medical supplies are critical, pool partners and government agreed that UNICEF could be used in the procurement of health-related supplies including drugs, vaccines and other medical necessities. UNICEF, however, agreed to be responsible for procurement of the following under the new arrangement with government: vaccines and ITNs, nutrition supplies, GFATM-funded supplies for AIDS, TB, and Malaria. (source: DFID)
Drug Supply, Equipment and Logistics	Limited progress – especially in relation to the other pillars 'Pharmaceuticals' was the only key element in the POW where health service staff suggested that the 'SWAp hasn't started yet'. Unlike improvements in other pillars, there has been little progress in ensuring a stable and reliable medicine supply is available through the public health service in Malawi" (MTR). Stock-outs for certain products – often extremely important ones – remain, though there is some evidence of improvement in recent years[7]. The situation has been somewhat alleviated by the provision of budgets to districts which they can use to purchase products not available from the public systems. Despite overall reductions in stock-outs, the annual report showed serious ongoing problems in relation to the supply of HIV test kits and other essential items such as quinine tablets, sutures and hepatitis vaccines. CMS has been transformed into a non-profit trust following a recapitalisation in 2008. The intention is that it will now move towards operating on a full cost-recovery basis without the need for ongoing public subsidies. The mid-term review reported that "While assuring a steady supply of essential drugs has been problematic, it is also clear that there are more drugs and medical supplies in stock in health facilities and hospitals than before, even though they are not always the most needed. Some of the crisis in essential drug supply has been eased by districts having their own budgets from which they can purchase drugs privately that are not available through the public system". In terms of equipment according to the annual report, "most of the available equipment functioned optimally throughout the year" though in some cases there were problems, e.g. only around 85% of X ray machines were functional. In addition, only 332 of the vehicles operated by district health offices were functioning. Of major concern – from a long-term sustainability perspective – the lack of budget for, and failure to undertake essential preventive equipment maintenance. The actual budget 66Mk million fell well below the estimated requirement of Mk 1.1 billion.
Leadership	Limited. Although MoH staff have assumed a leadership role in the conduct of Joint Annual Reviews and other elements of the SWAp, "its very low capacity, high turnover of key staff, and high vacancy rates for key positions have undermined its ability to carry out strategic management and oversight responsibilities" (World Bank 2009). Moreover "MoH's high commitment at the outset waned at the time of the mid-term review and has remained low, and technical working groups met less frequently".
Financing	*Unlike many other countries in a SWA- setting Malawi has continued to face problems with underspending. There are also questions as to whether undue focus has been on improving capacity at the central level rather than district level in view of the decentralisation strategy.*

[7] "a number of facilities have experienced stock-outs of more than one week for Fansidar and Tetanus Toxoid during the previous year. Nevertheless the situation is reported to have improved during the last two years". (Maternal Health Analysis)

Implementation of SWAp processes – 6 building blocks

Table 9 summarises progress in terms of the key SWAp building blocks.

Table 9: Progress against SWAp building blocks

Building Block	Progress
Strategic Plan	According to the Mid-Term Review "Malawi has a national health strategy, the Programme of Work, which is well known by all stakeholders, and which forms the basis of all strategic and operational discussions on how to engage with the health sector. The annual implementation planning process is a needs-driven exercise, starting with compiling health facility level plans into district plans, and then finally pulling these together into the national annual plan. All the major national technical programmes have strategic plans, which outline what is required to achieve improved health outcomes within their particular technical area. Many of the support functions within the MOH, such as human resources, monitoring and evaluation, procurement and central medical stores, have strategic plans or improvement plans that give guidance for how these departments need to develop over the next few years. At the same time Vaillancourt found that the PoW was "more input- than outcome-oriented" and "overly ambitious and complex".
Processes: Coordination and Dialogue	The Mid-Term Review reported that "Malawi has put in place a number of oversight and coordination mechanisms, including a Memorandum of Understanding between Development Partners and the MOH, a SWAp governance structure (as outlined in the MOU), a multi-stakeholder joint bi-annual review process and a SWAp Secretariat". In terms of whether such mechanisms are effective "a worrying view expressed by some senior MOH staff that even though the POW remains the national health strategy, should any development partner offer to provide services outside the framework of the POW and EHP, the Ministry is unable to say 'no', and must accept what is on offer. Such a viewpoint would indicate that MOH staff may not be willing to prioritise interventions and not hold development partners to account when they stray too far away from agreed strategies and work plans". Processes are less than fully effective. "Coordination, cohesion and accountability are also being hampered by irregular meetings of key technical working groups, the health sector review group and the senior management committee"[8]. In addition, "many of the key ministry departments do not have permanent directors in place and there has been very high turnover of staff in these positions". It further found that "coordination and cohesion for guiding the implementation of the EHP also needs strengthening. Many of the technical units continue to operate in a vertical fashion, often with little discussion between them, or at a higher level in the MOH, about what the consequences of new programmes or interventions might have on the rest of the health system - training as an example: technical programmes do not appear to have integrated their training activities with those of the Central Ministry, and the training policy that would ensure this has yet to be approved. As a result, a multiplicity of technical workshops are held, often targeting the same district or frontline health staff, adding to the sense that human capacity is being spread far too thinly across the health system". Institutional responsibilities are often unclear (e.g. the MTR refers to the lack of clarity of the role of the zonal office vis a vis the Ministry of Health. One key criticism has been an overemphasis on process tasks such as *setting up, using, and fine-tuning common systems for implementation, DP coordination and collaboration) at the expense of health sector performance and achievement of targets and objectives.* Conflict-resolution mechanisms were felt to be poorly elaborated and failed to fully "address the ambiguity and challenges of the elements of harmonization, arising from differences across the mandates, policies, and instruments of

[8] The latest annual report reinforced this suggesting that "most Technical Working Groups (TWGs) did not manage to meet for four times as scheduled. On average TWGs met twice with exception of the Quality Assurance TWG which never met. Failure to meet was attributed to busy schedule of Chairpersons. To address this problem, all TWGs have a now a co-chair who can conduct meetings if the chairperson is busy with other duties. Proposed amendments to the SWAp MOU have now been agreed upon by most partners and signing of the amended version will take place any time in the next financial year".

Building Block	Progress
	donors, and between DP policies and country systems". The review found that whilst overall there had been modest improvements in country-led partnerships and modest improvements on the use of national systems and capacities, progress was less than in other countries, all of which found at least substantial improvements. A key reason was that in Malawi, "government leadership has been more fragile and fleeting, due to weak capacity and high turnover of key staff".
M&E	Significant weaknesses remain. According to the Mid-Term Review "the absence of a central coordinating body for all monitoring, evaluation, and research in the health sector has left the implementation of ME&R activities to occur in the margins of the national plan, without clear direction, leadership, or integration. Multiple donor-driven demands for data give way to multiple reporting forms, draining resources and precious time from the system. A stronger coordinating unit with a larger scope of work would be able to manage a more cohesive and streamlined M&E system" and "it is clear that health information is underused throughout the health system". According to Vaillancourt, the Malawi SWAp, alongside those in many other countries "show(s) a lack of synergy between management systems that would allow measuring and linking the components of the results chain" and "lacked fully developed M&E strategies and plans and fail(s) to define roles and responsibilities in carrying out this function". Key recommendations resulting from joint review meetings are often not implemented, and were repeated in subsequent reviews, year after year. During the early stages of the SWAp the World Bank "provided substantial resources for M&E capacity building to Malawi under a supplemental grant, but the bulk of resources were not used, due to low interest and weak incentives on the part of government and inadequate technical support by the Bank. Important dimensions of sector performance – such as efficiency – are relatively neglected in the M&E framework. The review also reported concerns that "the performance of the programs/projects were overly optimistic and neglected to raise issues and concerns" and that "it is likely that the lack of candor in reporting on program performance was also reflected in its dialogue with government".
Financing and Sector MTEF	The SWAp has helped support significant progress towards achieving the Abuja Declaration. It is credited with fulfilling the Abuja Declaration commitment to allocate 15 percent of the total government budget to the health sector. This has also earned credibility for the health sector in its efforts to improve the stewardship and governance of the sector. Sustainability: Of the nine PoWs reviewed, GoM contribution of the total at 29% was the lowest – in seven of the cases the domestic share exceeded 50%. (In practice the share has been much higher).

Inputs (Intermediate Outputs)

A. Human Resources

More staff are available ….

Staff numbers appear to have increased (though data is not always accurately collected) and data on activity suggests that productivity has increased. The Health Sector Needs Assessment study reported that "an estimated 2,000 additional staff (including health surveillance assistants) being employed"[9]. In addition in 2005/06 "all graduates of the Kamuzu College of Nursing were recruited by the government compared with the previous year when none of them took posts with MoH" (Maternal Health Analysis). Vacancy rates had declined, but remained substantial. A review of District Health Officers suggested that "staffing levels were still inadequate, particularly for maternal health, but improving".

….and are better trained

Measures have been put in place to ensure that nurses have midwifery skills: 79% of nurses in 2007 have such skills compared with 65% in 2006 and 78% of health centres now have at least one midwife (Maternal Health Analysis).

….but they are not necessarily in the right place

As shown in **Table 10** in 1995/96, the North had more clinical officers, medical assistants and nurses per 100,000 people than the other two regions in Malawi. This situation continued in 2007/08. The North also has better health indicators than other regions. As such HRH remains poorly allocated in terms of the needs in the Malawian health sector[10]. Most poor Malawians reside in rural areas, yet most medical assistants and nurses work in urban areas. On the other hand "a number of districts have had some success in deploying their new staff in rural facilities, which will have an impact on equitable access to services". (Maternal Health Analysis.)

[9] Ministry of Health and GTZ. Human Resources/Capacity Development within the Health Sector Needs Assessment Study. 2007

[10] Data on the distribution of HRH in government health facilities and CHAM in the 2008 Census by various categories - urban/rural and region as indicated in the Table were not available. Only 1995/96 HRH data obtained from a study by Mwase 1998 had such data whose calculations were based on Manpower Development Survey of 1996 and 1997.

Table 10: Allocation of human resources for health: Trends over time

	Financial Year							
	1995/96				2007/08			
	Doctors	Clinical officers	Medical Assistants	Nurses	Doctors	Clinical officers	Medical Assistants	Nurses
	Per 100,000 pop				Per 100,000 pop			
North	0.4	4.4	12.3	39.8	1.6	7.9	8.5	48.5
Centre	1.4	3	6.4	28.6	1.9	4.5	4.7	28.6
South	1.9	3	7.3	36.3	1.9	5.3	5.2	34.7
National	1.5	3.2	7.5	29.1	1.9	5.3	5.4	33.7
Urban	2.3	9	9.3	49.7	9.7	13.9	5.5	87.6
Rural	0	0.2	3	8.3	0.7	3.9	5.4	25.3

Source: Manpower Development Survey 1996, 1997 and HRH Census 2008

…. but huge challenges remain

The SWAp Mid-Term Review reported that "there are still substantial vacancies of between 30% and 60% against establishment (including against the revised EHRP targets) for all cadres. There are further risks that having been upgraded staff are no longer willing to fill the gaps they once did or having become more marketable they find employment elsewhere. Staffing gaps are being filled by effectively paying staff overtime and in remote postings by the "relief" system. Both solutions are being financed from the Other Recurrent Transactions (ORT) budget, reducing the money available for other needs. Short and long-term technical assistance, as well as clinically-trained volunteers are being brought in to fill capacity gaps. The innovative recruitment and employment strategies are both labour-intensive and probably quite expensive. The TA and volunteers are not being used effectively to build local capacity. Without wishing to detract from these successes, these emergency measures are easier than developing and implementing the longer-term policies and strategies for sustaining the workforce. A further concern is that the emphasis of the EHRP has been on increasing staff numbers and less attention has been given to improving staff performance".

B. Financial Resources

Public spending has increased rapidly. Donor funding has been a key driver … but Government has played its part …

Table 11 shows trends in pubic spending by source over the first 5 years of the SWAp. The total spent amounted to just under US$700 million (thus well on track to exceed the US$735 million POW estimate). Spending increased rapidly over the period in both absolute and per capita terms – with per capita spending more than tripling over the period. Government contributions far exceeded expectations (as set out in the PM). There are sustainability concerns reflecting the increased dependency on aid – due in most part to the increase in donor funding – though this was anticipated in the POW. Government support has been almost three times that expected – donor support has also exceeded expectations with particularly large increases in support through pooled funding. However, 2008/9 did see a

decline in public spending – due mainly to other pressing priorities rather than any specific decision to reduce support for health[11].

Table 11: Support for the Programme of Work: Expenditure Trends

US$million		2004/5	2005/6	2006/7	2007\/8	2008/9	Total 2005/6 to 2008/9
Government	Expected		39	39	39	112.8	
	Actual	46.3	63.8	50.5	115.8	102.5	378.9
Donor Pooled	Expected		25	29	32	94.1	
	Actual	9.6	49.9	64.6	53.6	103.2	280.9
Donor Discrete	Expected		75	71	68	21.4	
	Actual	11.7	2	3.7	0.8	16.3	34.5
Total	Expected	-	139	139	139	228.3	
	Actual	67.5	115.7	118.8	170.2	222.0	694.2
$ per head		**5.3**	**8.9**	**8.9**	**12.5**	16.3	
Government Share		68.6	55.1	42.5	68.0	46.2	54.6

* relates to expectations set out in SWAp PM

Uses 2008/9 exchange rate US$1 = MK 142

Government has increased the share of the overall budget to health – the share accounted for some 13.6% in 2008/9 broadly on target to meet the 2010/11 target of 15%, in line with the Abuja commitment. "Government has increased support in line with its additionality commitment, documented in the SWAp Memorandum of Understanding (MOU)". Predictability of donor disbursements remains an ongoing concern though the Annual Review reported an improvement in 2008/9 as compared to 2007/8.

Box 2: Strong initial commitment … but will it be sustained? Generally, the share of GoM budget allocated to health sector has increased from 11.1% in 2005 to 13.6% in 2008/9 (which is only a 0.4% point below the annual target of 14%). The question is then whether GoM have reached a critical level in 2008/9 difficult to surpass, or will the coming years show the required momentum so that GoM health spending will achieve the Abuja Declaration on 15% by 2010/11. A DFID analysis of the 2009/10 Proposed National Budget indicates that the overall GoM allocation to health for next year will be reduced by 12% from MK 26bn to MK 23bn thereby putting health down from a second to fourth priority position relative to other top-spending budget areas. (2009 SWAp review)

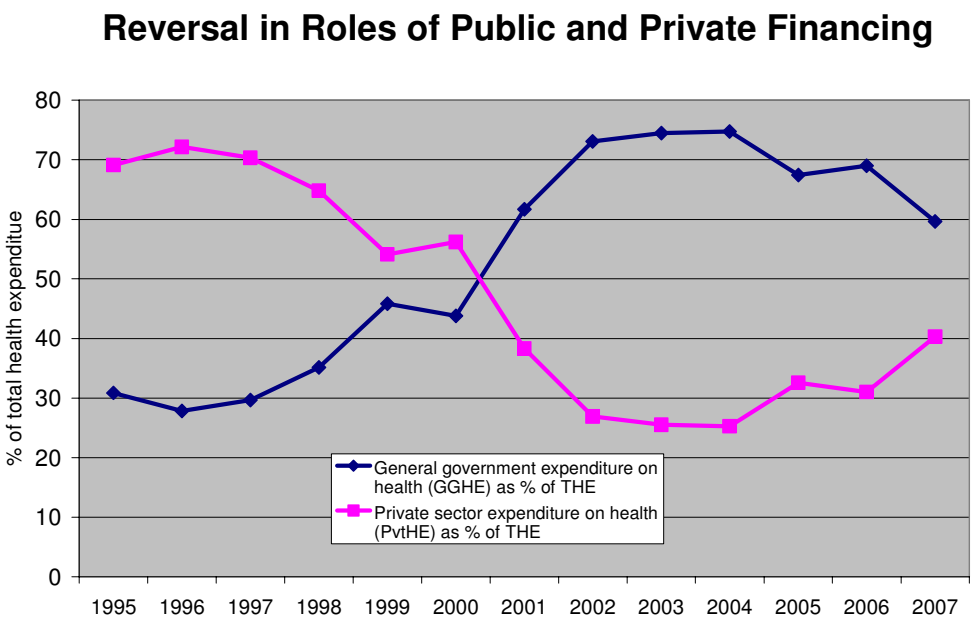
It seems likely that DFID's pooled funding has leveraged additional funding both from donors and Government (although much, e.g. GFATM, might have occurred anyway).

There has been a major shift in the health financing pattern in Malawi in recent years, accelerated by SWAp funding. Although public spending is not necessarily that well-targeted

[11] Budget pressures on fuel and fertiliser imports during 2008/9 were partly to blame for the reallocation of resources between sectors during the year. Health remained the second-highest spending sector, following agriculture and food security.

, this is likely to have increased the level of protection enjoyed by the poor against catastrophic health costs (though little data is available to substantiate this). As a result, public spending now exceeds private spending. However, the latter remains a key funding source and ensuring people get value for money from such spending remains an ongoing concern.

Figure 8: Reversal in Roles of Public and Private Financing



Progress against key financing targets as set out in the SWAp M&E framework is shown below.

Table 12: Progress against health financing targets

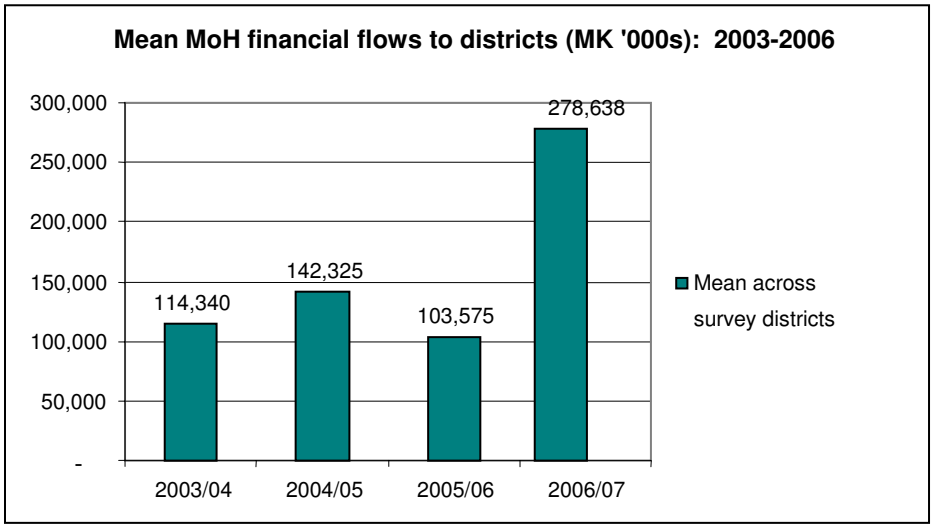
Indicator	Baseline	Progress July08-June 09	Target (2010-11)	Comments
- % GoM budget allocated to health sector	11.1% (MOF, 2005)	13.6%	15.0%	Health sector budget of MK31.1 billion out of GoM budget of MK229.52 billion
- % of Recurrent Budget funded and utilised annually	% Annual Recurrent Budget Funded: 91% (2004-05) % Annual Recurrent. Funding Utilised: 101% (2004-05)	% Annual Recurrent. Budget Funded: 100% % Annual Recurrent. Funding Utilised: 100%	% Annual Recurrent Budget Funded = 100% % Annual Recurrent. Funding Utilised: = 100%	
Per capita allocation (GoM and donor) to health sector (USD)	US$ 7.6 (2004-05)	$16.2	US$ 17.53	*Per capita allocation* is based on total budget/actual funding to sector converted at average exchange rate. *Per capita national expenditure* on health was found to be 22 US$ in 2004 2005 as per NHA 2002-2004.

…. and more has gone directly to the districts

Peripheral facilities were typically starved of resources[12]. The SWAp has been undertaken during a time of decentralisation. As a result, there has been a significant increase in resources being received and managed by the districts involving a doubling of resources in nominal kwacha terms (which amounts to a 55% increase in real terms. A planned expenditure tracking exercise will shed greater light on whether this trend has continued and on the appropriateness of allocation between districts). One recommendation from the Mid-Term Review was for the establishment of a specific cost centre for peripheral facilities to further support this process, ensuring that district hospitals do not monopolise district level resources.

[12] Mills (1991) and Mwambaghi (1995) estimated that of the total district health office cost centre recurrent expenditures, only around 30% of it is spent on peripheral facilities (health centres, dispensaries, rural hospitals), outside the district hospital itself.

Figure 9: Mean MoH Financial Flows to Districts



Funding remains insufficient (to achieve the MDGs) and there are questions as to whether what is available goes to the right places and is used most effectively.
The total expenditure per capita still falls short of the US$28.27 which was estimated to be needed by the EHP[13]. In addition, there is no evidence to suggest that all the resources available to be spent on delivering the EHP are indeed fully spent on doing so, or that they are spent as efficiently as possible. A review of reproductive health expenditure confirms spend in this area did not increase sufficiently "and certainly not in proportion to the rise in sector funding". Against an EHP estimate of US$87.3 million per year for maternal health activities[14], actual spending had only increased from US$22 million in 2003/04 to US$26 million in 2006/07. The review found that "had it risen in proportion to the increase in estimated available resources shown below (which rose by 65 percent in dollar nominal terms) then it would need to have been around US$36 million". In practice, total spend at just over US$16 per head is less than 2/3 of the estimated requirement.

There has been little shift towards a needs-based allocation formula
It was initially envisaged that the burden of disease would be used as a basis for allocating resources and though attempts have been made, the formula has not been adhered to. However, allocation according to BoD is often a poor way of allocating resources[15] . In practice, resources still tend to be allocated according to facilities (on an input basis).

A regional bias in resource allocation remains – with the North receiving more resources as facility coverage tends to be similar yet the population is smaller.

[13] This includes a recosting to include the costs of antiretroviral therapy (ART) and those required for implementing the Road Map.
[14] Mann G, Bokosi M and Sangala W. Reaching the Poor: Synthesis studies in the health sector - Maternal Mortality. 2005.

[15] Greater health impact can be achieved by allocating resources to interventions according to their relative cost effectiveness rather than the burden of disease they account for

Table 13: Allocation of Ministry of Health Recurrent Expenditure per capita by Region

	1995/96		1998/99		2004/05		2007/08	
	Per capita MWK (Nominal)	Per capita US$	Per capita MKW (Nominal)	Per capita US$	Per capita MWK (Nominal)	Per capita US$	Per capita MWK	Per capita US$ (Nominal)
North	79.6	5.31	46.87	1.09	558.73	5.17	732.87	5.23
Centre	33	2.20	23.58	0.55	340.03	3.15	451.27	3.22
South	29.1	1.94	33.45	0.78	390.06	3.61	516.56	3.69

Source: Mwase 1998, Ministry of Health 2007, Ministry of Finance 2008

The National AIDS Commission (NAC) has established a district resource allocation formula which uses proxy indicators of need and is applied effectively. However, the approach places little emphasis on cost-effectiveness (see Glellier 2006), and the MTR suggested that "there is scope for further improving the disbursement of HIV and AIDS funding through the NAC to better align resource allocation with need".

Some allocation trends are going the "wrong" way

The MTR reported "a worrying trend with declines in district allocations in relative terms with MOH headquarters[16] including Health Services Commission and central hospitals cost centres experiencing increases".

C. Other key inputs

Progress had been made but – as reported in the Maternal Health Analysis - challenges remain in terms of the provision of other key sector inputs or intermediate outputs:

- **Infrastructure**: Forty percent of all health centres and hospitals surveyed indicated that infrastructure for RH had improved in the past three years. No-one indicated that the situation had worsened, and about 50% felt that there had been no change. The Mid-Term Review reported that improvements had been made, but that significant improvements were still required for MNH.
- **Communications**: Around 20% of facilities had no means of calling for an ambulance in the case of an emergency, despite the high availability of mobile phone signals. It should be noted however that 68% of the facilities reported that communication systems have improved since the inception of the SWAp.
- **Transport**: Staff at nearly three quarters of facilities believed that their emergency referral systems had improved since the inception of the SWAp. More than half of those facilities that had no form of motorized transportation of their own reported that waiting times for ambulances had improved since 2003. One quarter of facilities responded that there had been no change.

[16] Also includes expenditures for the zonal offices and support for all regulatory bodies.

5. Attribution of Results

Introduction

As already noted, attribution of results to DFID inputs is next to impossible. To do this satisfactorily would have required a significant upfront investment at the design stage in terms of establishing a baseline, defining a counterfactual and outlining a causal pathway. In the absence of this it is possible to make limited qualitative judgments and draw from available literature - though it is often easier to set out things that (with hindsight) might have been done better/differently. It is also possible to retrospectively outline a broad counterfactual - though this is, of course, impossible to verify.

The counterfactual? (What would have happened otherwise?)

In broad terms, this is judged to have been a continued reliance on vertical disease-based approaches. It is further assumed than in the absence of DFID support for a SWAp, other donors would have continued to have provided support in a similar fashion and focused exclusively on disease-based programmes and not provided health systems support. Whilst the previous track record of such support was not particularly good, it is debatable as to whether the lessons learnt from earlier periods would have been fully taken on board. It is perhaps reasonable to have expected at least some improvement in programme quality. This being the case, one might have expected perhaps some improvement in health outcomes in some areas, but only limited (if any) progress in areas such as maternal health where a functioning health system is essential.

Box 3: Lack of Progress under Previous Approaches

DFID Malawi has considered its move from project support pre-2004 to SBS as a means to improve effectiveness and efficiency of spend. Maternal health presents an opportunity. From 1998-2004, DFID financed a Safe Motherhood Project in the Southern Region of the country. Despite what were judged to be high-quality inputs the project failed to achieve the desired outcomes and impact. The Project Completion Report noted that the number of births in health institutions decreased from 34% in 1998 to 29% in 2002 in the project catchment area – "Due to constraints within the health system (i.e. skilled attendants and enabling environments) the SMP has been unable to demonstrate sustainable improvements", and "the project was not specifically designed to tackle the issue of the Human Resource constraint".

Health Portfolio Review

Possible effects of the SWAp

Inputs and Process

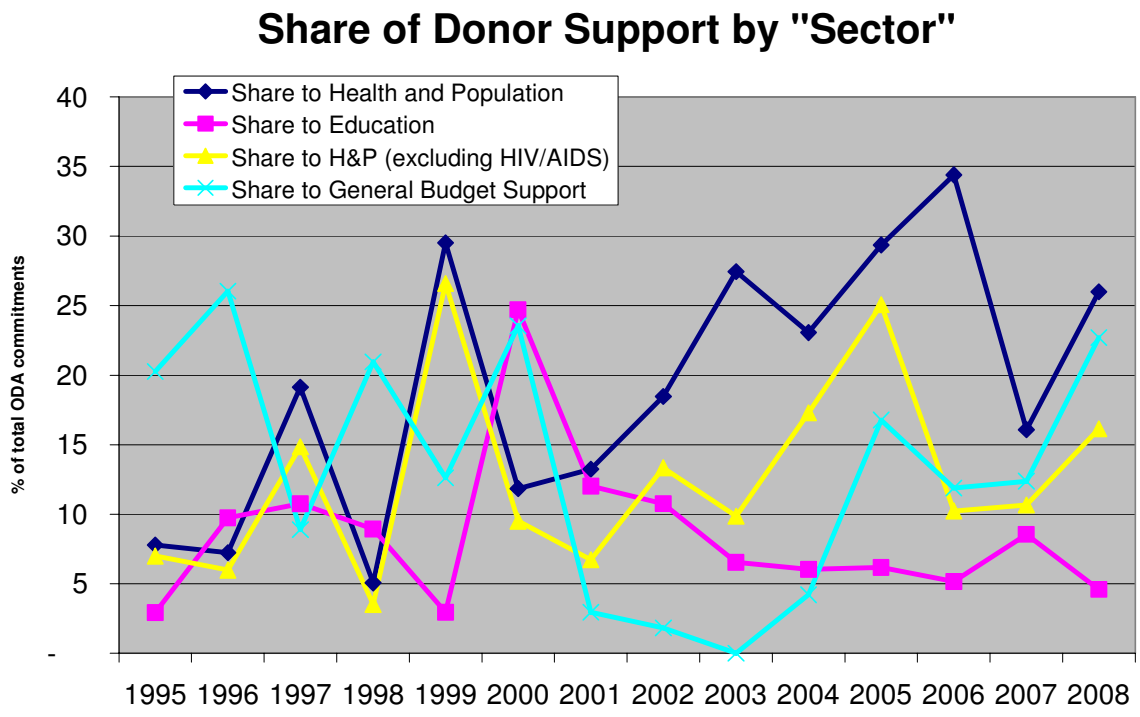
The SWAp is largely responsible for the adoption of a more coherent programmatic approach

DFID cannot take full credit for the establishment of the SWAp and its contents and many of the results may have been down to the additional funding or external factors rather than the SWAp process through which it was delivered. However, the conclusion that **"DFID have provided, in partnership with MoH, both the impetus and the majority of the finance for the Health SWAp"** would seem valid.

"the step change in health benefits relative to the period before the SWAp was established when health service delivery was projectised and uncoordinated, and did not place as strong an emphasis on systems and human resource issues".

Maternal Health Analysis

Figure 10: Share of Donor Support by 'Sector'



The SWAp seems to have leveraged increased funding – both from donors and from Government. Given that aid flows, in general, have increased, an increase in aid for the health and population sector might not be too surprising. However, as the chart shows the *share* of development assistance going to Malawi which went to the health and population sectors has increased. Commitments for health and population accounted for around 15% of total ODA pre-SWAp, but 25% post-SWAp This is particularly impressive given the resumption of general budget support around 2004 (some of which will have been channelled anyway to health) which coincided with the establishment of the SWAp. Much, but not all, of the increase is due to HIV and AIDS support, but the share to non- HIV and AIDS interventions in the sector still rose from 10 to 15% of aid commitments. As the chart also shows, there was considerable variability between years.

Health Service Outputs

The SWAp has contributed to improved access to key services

The SWAp has helped channel donor resources towards a range of interventions that generally represent good value for money – through its support of the essential health package. For example, the volume and quality of institutional deliveries has improved as a result of "improvements in human resources and infrastructure; the signing of service level agreements with Christian Health Association of Malawi (CHAM) facilities; quality improvements to services; the increased availability and uptake of PMTCT; and the implementation of demand side interventions". Most of

Box 4: Contribution of the SWAp to Maternal Health Services The analysis shows that **the availability of maternal health services has increased significantly as a result of the SWAp and the decentralisation process**; more emergency obstetric care facilities are available and they are better resourced. The EHRP has enabled more staff to be trained, recruited and retained, so providing better clinical cover in the facilities. The key benefits that District Health Officers note concerning the SWAp are the improvements made to infrastructure, and their own ability to use funding for supplies and maintenance to improve the quality of their services, particularly in terms of infection prevention and innovation to address local constraints.

Maternal Health Analysis

these activities have been supported by the SWAp process and the demand-side interventions whilst not directly using pooled funding is still aligned with Government policy.

Health Reform Outputs

The SWAp has supported the implementation of key health reforms. Progress has been patchy and links to health outcomes are often difficult to make

During the SWAp, a number of institutional reforms have been implemented relating to procurement and drug supply chain monitoring; innovative approaches to human resource management; and public private partnerships through Service Level Agreements (SLAs) to expand service delivery.

> **"Successful implementation of health sector reforms has led to some positive outcomes over the past five years"**
> *Health Portfolio Review*

Reforms and their possible impact The World Bank Public Expenditure Review (2007) highlighted some key recommendations to improve the efficiency of health spending. One related to improved procurement and drug-tracking systems in order to realise cost savings from bulk procurement. Procurement was often undertaken on an emergency basis, and therefore more costly. It is now being increasingly 'normalised' and incorporated in a centralised procurement plan. This has the advantage of being consolidated, rather than fragmented, across the different cost centres. The larger orders allow for better prices to be negotiated, lowering costs. The Central Medical Stores (CMS) now has an electronic drug-tracking system which better identifies stock levels at various health facilities, including hospitals and pharmacies. This allows for advance warning when stocks are falling low, reducing the need for emergency procurement that does not achieve the same VFM. The reforms to drug tracking may have also helped deliver a lower level of leakage as identified in a Public Expenditure Tracking Survey subsequently carried out by Government[1].

In the case of SLAs, it is relatively easy to link funding directly to the services delivered (see below). In other cases the links are less apparent. However, to use transport as an example, the Maternal Health Analysis suggests that "the problems in 2002-3 with lack of recurrent funding to run transport for outreach clinics was resolved, and has continued to improve under the SWAp, where more predictable recurrent costs have sustained higher levels of service delivery".

Further examples include:

- **Improved drug supply.** Reforms have improved the efficiency of health spending. They may also have improved service delivery by curbing the frequency of drug stock-outs. The PETS finds that over 80% of patients were given all their prescribed drugs; although **user satisfaction with the supply of drugs is slightly lower at 68%,** as reported in the 2008 SDSS. Source.
- **Service Level Agreements** The provision of free essential maternal and neonatal health services by CHAM mission hospitals through Service Level Agreements (SLAs) addressed a key access barrier. St. Anne's Mission Hospital saw a 288% increased in antenatal contacts and a considerable increase in hospital deliveries. Access to Emergency Obstetric Care services improved and institutional deaths decreased.[17] The study showed that the institutional maternal deaths at St. Anne's Mission Hospital dropped from 0.7% pre-SLA to 0.4% post-SLA which translates to a considerable improvement from 728 deaths per 100,000 deliveries pre-SLA to 367 deaths per 100,000 deliveries post-SLA. Based on maternal deaths that were

[17] Peterkins Kalungwe

reported from the community and audited during the two periods, a decline in maternal deaths for the whole district was also realised from 0.046% pre-SLA to 0.030% post-SLA.

- **Innovative human resource approaches:** Examples have included the locum scheme piloted in Dowa District which sought to increase the provision of skilled deliveries at the district hospital and health centres and was found to improve staffing both in the district hospital and surrounding health centres.

There is little evidence that transactions costs declined

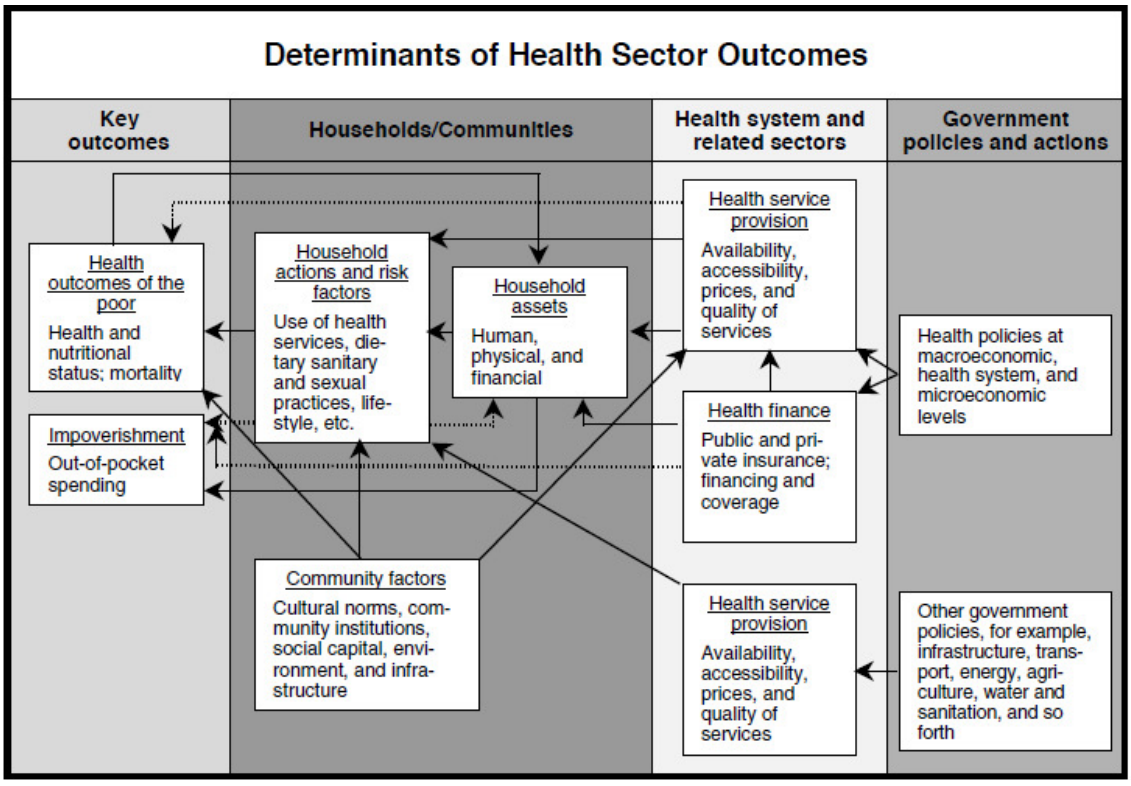
One, often implicit, aim of a SWAp is to reduce transactions costs on Government. In practice, there is often little evidence this actually takes place. Transactions costs are rarely (if ever measured) and this was certainly the case in Malawi. However, it seems likely that they remained high with "the sheer size of (planning and review) meetings - along with the heavy day-to-day involvement of DPs in many aspects of sector management, involve large transaction costs for government and drain capacity" (World Bank 2010). The transition to new procurement arrangements following Bank withdrawal imposed additional costs.

Health Outcomes

The SWAp has contributed to modest improvements in health outcomes though other factors have also played a key role

In terms of health outcomes, although the extent of causality is unclear the Maternal Health Analysis does suggest that "previously worsening trends for maternal mortality have been reversed and indications are that improvements in health service provision are accelerating". The reasons for the improvement in health outcomes are not always clear. A range of initiatives has been introduced in recent decades which may have had an impact at different times in different ways.

Figure 11: Determinants of Health Sector Outcomes



Much of the credit should go to progress in other complementary sectors or areas … although the external environment has not always been supportive.

A range of external factors have been demonstrated to be closely linked to health outcomes. (Figure 11 is taken from the PRSP sourcebook)

Economic status is particularly closely associated with health status (per capita GDP remains extremely) and despite modest improvements (of around 30%) over the SWAp period, remains well behind many of its neighbours and is still less than half of the LDC average (**Table 14**). This being the case it is to Malawi's credit that health indicators are generally better than average. Poverty rates have declined, as has income inequality, which should also have contributed to better health outcomes.

Table 14: GDP per capita (constant 2000 US$)

	1960	1970	1980	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008
Malawi	99	122	161	132	143	150	139	129	134	138	138	145	154	165
Ethiopia	..	..	..	129	115	125	132	130	124	137	150	162	175	190
Kenya	261	291	435	450	417	406	411	402	404	413	426	441	460	464
Mozambique	..	..	203	185	186	234	255	270	280	295	312	332	349	365
Rwanda	216	215	263	234	196	218	227	245	241	250	263	275	290	313
Tanzania	..	..	..	267	248	266	275	288	296	307	321	333	347	362
Zambia	545	576	473	383	310	309	317	318	329	339	348	361	374	387
Uganda	..	..	..	181	215	253	258	266	274	283	291	312	328	348
LLDCs	..	..	261	254	244	274	283	289	296	309	323	340	358	375

Future prospects appear to be reasonably good. The recently concluded Article 4 Consultation with the IMF highlights the significant improvement in macroeconomic performance in the last two years. Malawi's agriculture-based economy has weathered the global economic crisis well, with real GDP growth of 9.8% in 2008, an estimated 7.6% in 2009 and expected to remain at or above 6% into 2011.

> "We can expect continuity of downward trend in child mortality as newer health sector initiatives take effect. This is encouraging and supports the public health approach adopted in the 1980-90s and the SWAp and EHP approach adopted this decade" (Health Portfolio Review).

In terms of overall **governance,** Malawi performs relatively poorly compared to many of its neighbours according to the World Bank's CPIA methodology. It performs relatively well in terms of trade policy and resource mobilisation, but relatively poorly in terms of debt policy, the quality of budget and financial management and, to a degree, human resource development. There has been a slight deterioration during the period 2005 – 2008 (in contrast to the high expectations set out in the original SWAp memorandum).

Figure 12: Recent Trends in Key Governance Indicators

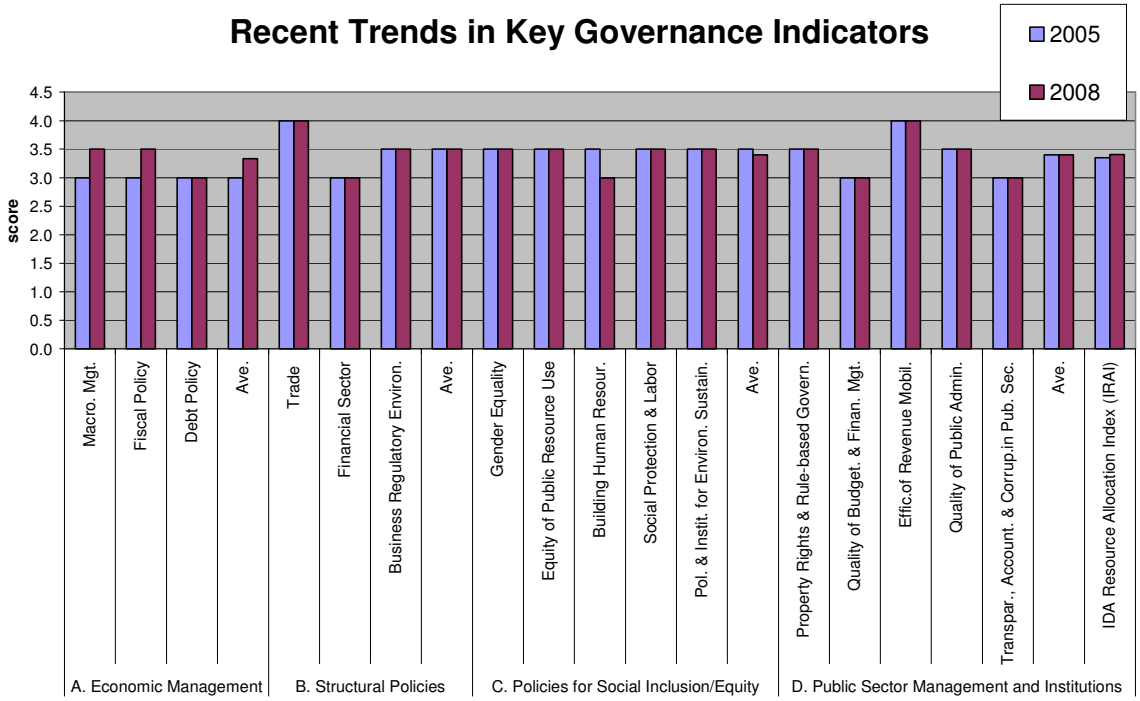


Figure 13: Change in Country CIPA Scores

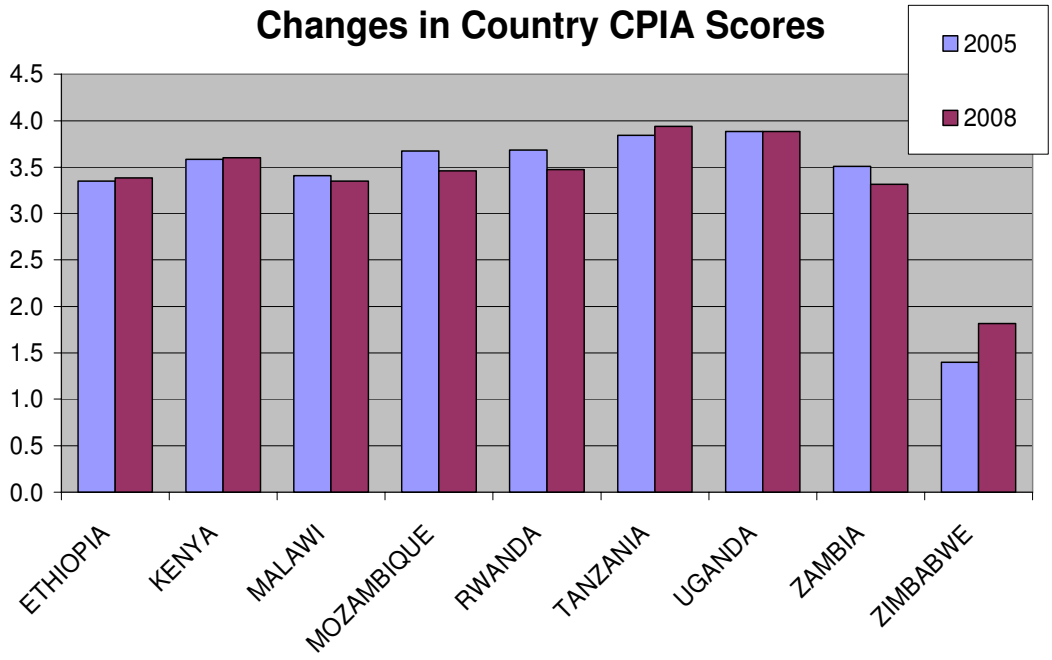
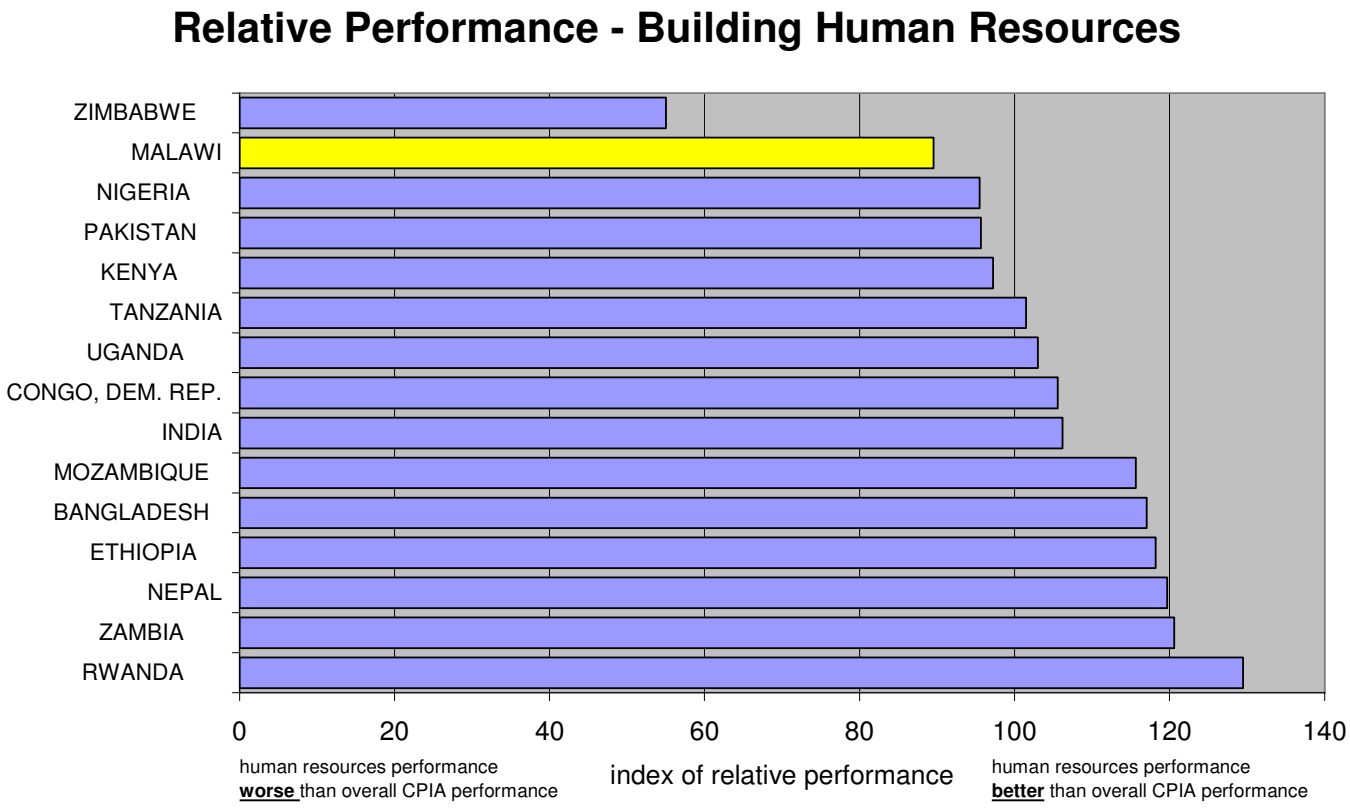


Figure 14: Relative Performance – Building Human Resources



Malawi has relatively high coverage of improved **water and sanitation** facilities, compared to its neighbours and has enjoyed modest improvements over the last decade. Completion rates for **primary education** have declined over recent years and remain well below those of Tanzania and Zambia (though well above Ethiopia and Mozambique) (**see Annex 7**).

More could have been achieved

A number of factors suggest that any impact achieved may have been less than might have been possible. These include:

- Questions about the appropriateness of the essential health package and the fact that it contains services which are not necessarily the most cost-effective,[18] and the fact that facilities continue to provide services outside the essential health package. Road traffic accidents and mental illness, major causes of burden of disease, are not reflected in the essential health package. Such findings are not specific to Malawi. With regards to traffic accidents health Ministries tend to prioritise interventions which fall under their authority. Mental health tends to be neglected, in part, because of an emphasis on conditions which affect mortality rather than morbidity. Broad system-wide effects of dedicated funding for HIV and AIDS are not well understood.

[18] Using the WHO's US$150 benchmark, most EHP interventions are, or are potentially, highly cost-effective. Preventative interventions tend to be more cost-effective than treatment, as in HIV and AIDS, where **ARVs are not cost-effective**. There are a number of cost-effective interventions that could be taken forward in coordination with other sectors, for example prevention of road traffic accidents, improved sanitation and school health. Some EHP interventions are not cost-effective, including: Pentavaccine (US$298 per DALY averted) which costs far more than the basic DTP and measles vaccine (US$7); TB interventions, except for DOTS; the 'Tanzi' ORT which is more expensive than the homemade option; and supplementary feeding for children.

- The fact that resources are not allocated according to need and tend to be input-based, on historical trends.
- The presence of inefficiency: For example as part of a second phase of BLM-support the aim was to improve efficiency and cost-effectiveness by 30%. A study of district and rural hospitals found significant levels of inefficiency and estimated that it would be possible to increase outputs by around 40% without increasing the current level of inputs. It found major underutilisation of capacity in mission facilities suggesting that performance-based contracts might be a cost-effective way of increasing access. The NHA also shows that the MoH continues to provide free care for services that fall outside the EHP e.g. the substantial cost of overseas referrals.
- Unpredictability of donor resources can skew the financing burden towards Government, and make national budget management more difficult.
- Lack of funds: Had Government adhered to its agreed allocation of the national budget additional resources would have been available and they could have been used to accelerate the expansion of service level agreements and/or other innovative performance-based approaches.

Outstanding Policy Issues

Although progress has been made, many of the challenges outlined at the outset in the Programme of Work remain. These are:

- To mobilise the necessary resource envelope from the government, development partners, NGOs and the private sector to facilitate the implementation of the POW.
- To translate the POW, national policy priorities and targets into actions at the local level.
- To put in place the necessary capacity and institutional arrangements in the context of a decentralized health system.
- To provide adequate support to the DHMT to plan, budget and implement the POW at the local level.
- To allocate resources in an equitable manner and utilize them in the most efficient and effective manner.
- To develop appropriate modalities for the flow of resources to where they are required most, the point of benefit by the community.
- To collect and apply the necessary evidence for decision-making through research and other appropriate means.

This review further emphasises:

- The need to ensure resources are available at peripheral facilities.
- The need for efforts to further improve donor predictability.
- The benefits of decentralisation and the need to consider scope for further autonomy in higher-level facilities.
- The key role played by private expenditure and the need for it to be put to good use-making better use of private spending.
- The need for greater transparency on funding flows (e.g. all donor support is treated as capital expenditure).
- The challenge of securing funds to meet huge ongoing needs especially for ART and human resources.
- The need to focus more on quality of services and, for example, human resources rather than just a focus on number.
- The need to consider how performance management can be used to improve results from both public and private sectors.
- The need to strengthen procurement capacity.

- The need to make service agreements work effectively and tap other opportunities for public private partnerships as appropriate.

References

- Programme of Work for SWAp I, 2004-10
- Annual reports of the Health Sector: 2008 and 2009
- DFID Programme Memorandum for support to Health SWAp
- DFID Health sector log-frame
- Memorandum of Understanding between Government of Malawi and Development Partners
- VSO annual reports and evaluations, Project Completion Report (2008), log-frame
- Banja La Mtsogolo annual reports and evaluations, Project Completion Report (2009), logframe and Joint Financing Arrangements I and II
- SWAp Monitoring Framework and Indicators, and M&E reports 2008 and 2009
- DFID annual reviews of support to the health sector, 2008 and 2009
- Mid-Term Review of the Health SWAp, 2007
- Health Portfolio Review (2009)
- Malawi Health Sector Employee Census Centre for Social Research, University of Malawi December 2007
- Do Health Sector Wide Approaches Achieve Results: Emerging Evidence and Lessons form 6 Countries World Bank IEG Working Paper 2009/4 Vaillancourt
- Malawi Public Expenditures Review Poverty Reduction and Economic Management, AFTP1 AFCS2, Africa Region September 2007
- Mills AJ, Kapalamula J, Chisimbi S: The cost of the district hospital: a case study from Malawi. Population and Human Resources Dept., World Bank 1991
- Mwambaghi F, Mtonya B, Manda J: Rural Health Unit Expenditure Study in Lilongwe District. Lilongwe, Malawi, Planning Department, Ministry of Health 1995
- Glellier R, Mwase T, Reynolds D, Sibale B: Evaluation of the Malawi Grant Facility of the National AIDS Commission. Lilongwe, Malawi, National AIDS Commission 2006

Annex 1: Terms of Reference: Impact Evaluation of the Sector Wide Approach (SWAp), Malawi

Background

The Government of Malawi (GOM), in collaboration with the Development Partners (DPs), finalised a six-year Programme of Work (PoW) for the Health Sector in 2004, which has been implemented at the national and district level. The basis of the PoW was two-fold: delivery of the Essential Health Package (EHP), which entails a minimum package of services to be provided free of charge at the point of delivery to all Malawians; and implementation of the Emergency Human Resources Programme (EHRP), a comprehensive package that aimed to address the human resource crisis in the health sector.

The agreement to finance and support the POW was formalised in a Memorandum of Understanding with signatories agreeing to work together under the umbrella of a Sector Wide Approach (SWAp). Since 2004, this has provided a common framework for health sector planning, budgeting, financing, financial management, and reporting; monitored and evaluated, at bi-annual joint sector reviews. DFID Malawi has committed £109 million to the health SWAp over six years (2005 – 2011), with £94 million provided as sector budget support and £15 million as technical cooperation, with disbursement on track.

DFID Malawi underwent a value-for-money (VFM) audit by the UK National Audit Office in 2009, which examined our overall support from 2004 to 2008, focusing on health and agriculture. Among the recommendations arising from the audit was the need to establish greater evidence of impact, value for money and efficiency savings. Within this context DFID has agreed with the Government of Malawi to commission an impact evaluation of SWAp Phase I. The findings of the evaluation will also assist towards the design of Phase II of the SWAp, due to commence in July 2011. The work will also feed into the current global debate on the effectiveness of SWAps and of aid effectiveness principles, specifically feeding into the Phase II evaluation of the Paris Declaration, and the Malawi country study.

Objectives

The purpose of this evaluation is to demonstrate the evidence of impact of SWAp Phase I.
The study will evaluate:

a) health trends, impact, outcome and output data pre-SWAp I (2000 to 2004)
b) health trends, impact, outcome and output data during SWAp I (2005 to 2009)
c) the results of the investments made, using similar measures of success
d) projected trends, impact and outcome data for the future

The report will clearly assess the impact of all trend, impact, outcome and output data and evidence on gender and socio-economic factors.

Analyse and make observations on:

e) cost-effectiveness, cost-benefit, and value for money of SWAp I (including interventions outlined in the EHP and EHRP)

Analyse attribution of impact to SWAp principles, including:

f) the design and implementation of the EHP and EHRP
g) service level agreements between the Christian Health Association of Malawi [CHAM] and Ministry of Health [MoH]
h) financial management and procurement, funding mechanisms (e.g. pooled vs. discrete funding)
i) decentralisation of resources

The report will draw together what is known about the impact of these measures, and will need to consider intermediate outputs as well as evidence of effects on health outcomes,

while also analysing their impact on gender. The report will also define the levels of performance under each programme which equate to good value for money. Finally, the report will also make recommendations for further relevant work on this topic and its application to the health sector.

Potential data sources:

a) Programme of Work for SWAp I, 2005-11
b) Annual reports of the Health Sector: 2002-2004; 2005 to date
c) DFID Programme Memorandum for support to Health SWAp 2005-11
d) DFID Health sector log-frame
e) Memorandum of Understanding between Government of Malawi and Development Partners
f) VSO annual reports and evaluations, Project Completion Report (2008), log-frame
g) Banja La Mtsogolo annual reports and evaluations, Project Completion Report (2009), log-frame and Joint Financing Arrangements I and II
h) DFID health sector Project Completion Reports (e.g. of support to National TB Programme, Safe Motherhood Project, National Malaria Programme)
i) SWAp Monitoring Framework and Indicators, and annual M&E reports 2005 to date
j) DFID annual reviews of support to the health sector, 2005 to date
k) UK NAO report and Public Accounts Committee briefing
l) Development partners' independent reports of the health sector
m) SWAp reviews, e.g. from HLSP Institute database
n) Mid-Term review of the Health SWAp, 2007
o) National Health Sector Plan and strategies
p) Country mid-term reviews and evaluations of health sector strategies and National AIDS plans
q) Country monitoring of Paris indicators, World Bank aid effectiveness reports and analyses
r) Health Portfolio Review (2009)
s) Interviews with MoH and Development Partners

Outputs

A report of no more than 30 pages (excluding annexes), to include a one-page Executive Summary outlining key findings and conclusions. The final report will be provided in electronic format to DFID Malawi. It is expected that this report will state whether or not the Health SWAp in Malawi has had impact, will highlight key policy issues, and will attempt to quantify and attribute success to DFID's direct or indirect investment.

Reporting Requirements

The consultant will be required to conduct one week of work in Malawi for up to five days, followed by an additional five days from the UK finalising the written outputs, during March 2010. At all times, the consultant will work closely with the Human Development team.

Main Recipient

Government of Malawi, Development Partners

Reporting

The consultant will report to Jason Lane (Team Leader, Human Development).
Technical oversight will be provided by Sarah Mtonya (Health Adviser).

Skills

Health expertise (health finance/economics)
Knowledge of sector wide approaches, particularly in health
Malawi experience (preferable)
Strong evaluation skills

Good people/team/relationship-building skills
Flexibility and responsiveness
Good writing, presentation and analytical skills
Understanding of VfM and cost-benefit analysis

Annex 2: Programme of Work: Breakdown of Estimated POW Costs by Pillar

PURPOSE/ OUTPUT	IDEAL REQUIREMENTS - FULL EHP(US$M) over 6 yr		% total	ANNUAL▫ PROGRAMMED▫ COSTS▫						TOTAL PROGRAMMED COST (US$M)	% total PoW
	Capital	Recurrent		04/05	05/06	06/07	07/08	08/09	09/10		
Purpose 1: Finance adequate numbers of trained and skilled personnel for all health facilities (incl. CHAM)	**55.3**	**407.3**	**30.3%**	**28.2**	**34.1**	**39.1**	**44.6**	**48.6**	**53.1**	**247.7**	**34.0%**
Output: Pre-service Training	55.3		3.6%	9.2	9.2	9.2	9.2	9.2	9.2	55.2	7.3%
Output: Maintaining current staff, filling establishments and aiding retention through salary top-ups	0.0	350.8	23.0%	18.25	23.7	28.7	34.2	38.2	42.7	185.8	25.9%
Output: Provision of in-service training	0.0	28.1	1.8%	0.75	1.2	1.2	1.2	1.2	1.2	6.7	0.9%

PURPOSE/ OUTPUT	IDEAL REQUIREMENTS - FULL EHP(US$M) over 6 yr		% total	ANNUAL▫ PROGRAMMED▫ COSTS▫						TOTAL PROGRAMMED COST (US$M)	% total PoW
	Capital	Recurrent		04/05	05/06	06/07	07/08	08/09	09/10		
Purpose 2: Finance adequate volume of pharmaceuticals and medical and laboratory supplies at service delivery points (incl. CHAM)	**17.0**	**445.3**	**30.3%**	**15.38**	**29.7**	**19.9**	**22.2**	**24.9**	**27.9**	**140.0**	**19.0%**
Output: Procurement of adequate pharmaceuticals, medical and laboratory supplies for EHP and related services	17.0	434.5	29.6%	15	29.3	19.4	21.7	24.3	27.2	136.9	18.6%
Output: Storage of and delivery of supplies	0.0	10.9	0.7%	0.75	1.2	1.2	1.2	1.2	1.2	6.7	0.9%

PURPOSE/ OUTPUT	IDEAL REQUIREMENTS - FULL EHP(US$M) over 6 yr		% total	ANNUAL PROGRAMMED COSTS						TOTAL PROGRAMMED COST (US$M)	% total PoW
	Capital	Recurrent		04/05	05/06	06/07	07/08	08/09	09/10		
Purpose 3: Finance essential medical equipment (incl. CHAM)	**27.5**	**45.6**	**4.8%**	**6.2**	**7.6**	**8.1**	**8.6**	**9.0**	**9.4**	**48.8**	**6.6%**
Output: Procurement of equipment within standard equipment guidelines	27.5	0.0	1.8%	2	2.4	2.6	2.8	2.9	3.0	15.7	2.1%
Output: Adequate equipment maintenance budget in place	0.0	12.4	0.8%	1	1.2	1.3	1.4	1.4	1.5	7.9	1.1%
Output: Adequate equipment capital (replacement) budget in place	0.0	33.2	2.2%	3.2	3.9	4.2	4.4	4.6	4.9	25.2	3.4%

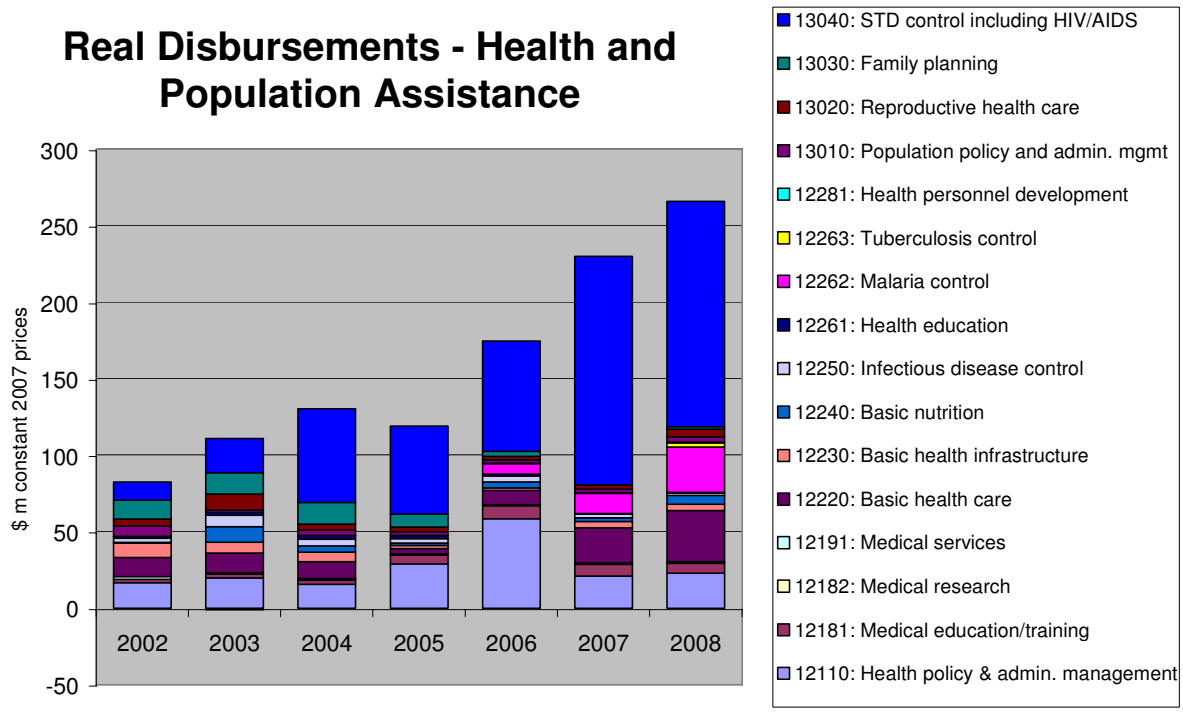
PURPOSE/ OUTPUT	IDEAL REQUIREMENTS - FULL EHP(US$M) over 6 yr		% total	ANNUAL PROGRAMMED COSTS						TOTAL PROGRAMMED COST (US$M)	% total PoW
	Capital	Recurrent		04/05	05/06	06/07	07/08	08/09	09/10		
Purpose 4: Finance improvements in access to services through facility development (incl. CHAM)	**24.9**	**167.9**	**12.6%**	**7**	**6.7**	**9.0**	**10.0**	**10.5**	**11.0**	**55**	**7.4%**
Output: Install/repair utility systems and rehabilitate all existing facilities	17.7	0.0	1.2%	3.8	3.8	3.8	1.7	1.4	1.4	16.1	2.0%
Output: Upgrade existing facilities	5.3	0.0	0.3%	0.9	1.5	3.8	3.4	4.0	2.4	16	2.1%
Output: Facility Construction	1.9	0.0	0.1%	1.5	0.4	0.0	0.0	0.0	0.0	1.9	0.2%
Output: Adequate infrastructure maintenance budget in place	0.0	38.7	2.5%	1	1.0	1.2	1.4	1.6	1.6	7.71	1.1%
Output: Adequate infrastructure capital (replacement) budget in place	0.0	129.1	8.5%	0	0.0	0.2	3.5	3.5	5.7	12.857	2.1%

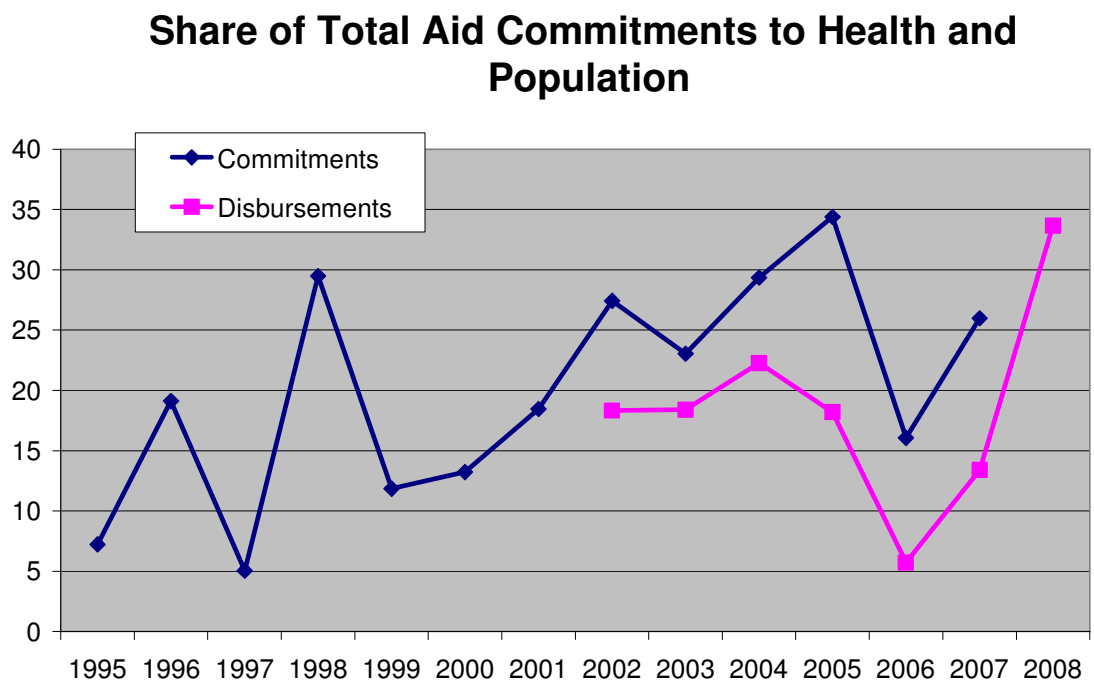
PURPOSE/ OUTPUT	IDEAL REQUIREMENTS - FULL EHP(US$M) over 6 yr		% total	ANNUAL PROGRAMMED COSTS						TOTAL PROGRAMMED COST (US$M)	% total PoW
	Capital	Recurrent		04/05	05/06	06/07	07/08	08/09	09/10		
Purpose 5: Finance routine operations at service delivery level (incl. CHAM)	**5.4**	**265.2**	**17.7%**	**24**	**27.3**	**30.1**	**30.0**	**31.7**	**33.3**	**176**	**23.7%**
Output: Transport Operations Provided - district level	5.4	35.9	2.7%	7	7.2	7.5	5.9	5.9	5.9	39	5.1%
Output: Other Routine Operations - district level	0.0	211.1	13.8%	14	16.5	18.6	19.6	20.7	21.9	111	15.1%
Output: Other Routine Operations - MoHP Central Hospitals	0.0	18.1	1.2%	3	3.5	4.0	4.5	5.0	5.5	26	3.5%

PURPOSE/ OUTPUT	IDEAL REQUIREMENTS - FULL EHP(US$M) over 6 yr		% total	ANNUAL□ PROGRAMMED□ COSTS□						TOTAL PROGRAMMED COST (US$M)	% total PoW
Purpose 6: Central institution's support to service delivery and policy and systems development	**2.5**	**61.8**	**4.2%**	**9.4**	**10.4**	**10.9**	**12.0**	**12.6**	**13.2**	**68.6**	**9.3%**
Sub-purpose 6.1: Finance inputs for central level operations	**2.5**	**50.0**	**3.4%**	**7.7**	**8.7**	**8.6**	**10.0**	**10.6**	**11.2**	**56.8**	**7.7%**
Output 6.1.1: Finance HR inputs for central level operations	0.0	28.5	1.9%	2.69	3.92	4.81	5.52	5.6	5.7	28.24	3.8%
Output 6.1.2: Finance other routine inputs for central level operations	2.5	21.5	1.6%	5.02	4.76	3.81	4.50	5.0	5.5	28.59	3.9%
Sub-purpose 6.2: Policy and Systems development to support EHP implementation	**0.0**	**11.8**	**0.8%**	**1.72**	**1.76**	**2.29**	**2.03**	**2.0**	**2.0**	**11.75**	**1.6%**
Output: Human Resource Management and Development Systems in place	0.00	1.24	0.08%	0.11	0.11	0.56	0.15	0.2	0.2	1.24	0.16%
Output: Pharmaceutical and Medical Supplies Management and Development systems in place	0.00	1.11	0.07%	0.14	0.17	0.34	0.17	0.1	0.2	1.11	0.14%
Output: Policies and systems in place to ensure continuous availability of functional essential equipment and infrastructure for delivery of EHP	0.00	0.98	0.06%	0.18	0.07	0.23	0.17	0.1	0.2	0.98	0.13%
Output: Develop a range of Cross-Cutting Systems	0.00	1.86	0.12%	0.26	0.28	0.37	0.32	0.3	0.3	1.86	0.25%
Output: Strengthen central and district planning systems	0.00	1.20	0.08%	0.21	0.19	0.24	0.19	0.2	0.2	1.20	0.16%
Output: Implementing a Sector Wide Health Information System.	0.00	2.61	0.17%	0.48	0.74	0.28	0.55	0.4	0.2	2.61	0.32%
Output: Undertake Institutional Reform and Strengthening in a range of areas	0.00	1.35	0.09%	0.35	0.19	0.28	0.18	0.2	0.2	1.35	0.17%
Output: Contingency fund for Policy and Systems Development	0.00	1.40	0.09%	0.00	0.00	0.00	0.30	0.5	0.6	1.40	0.23%

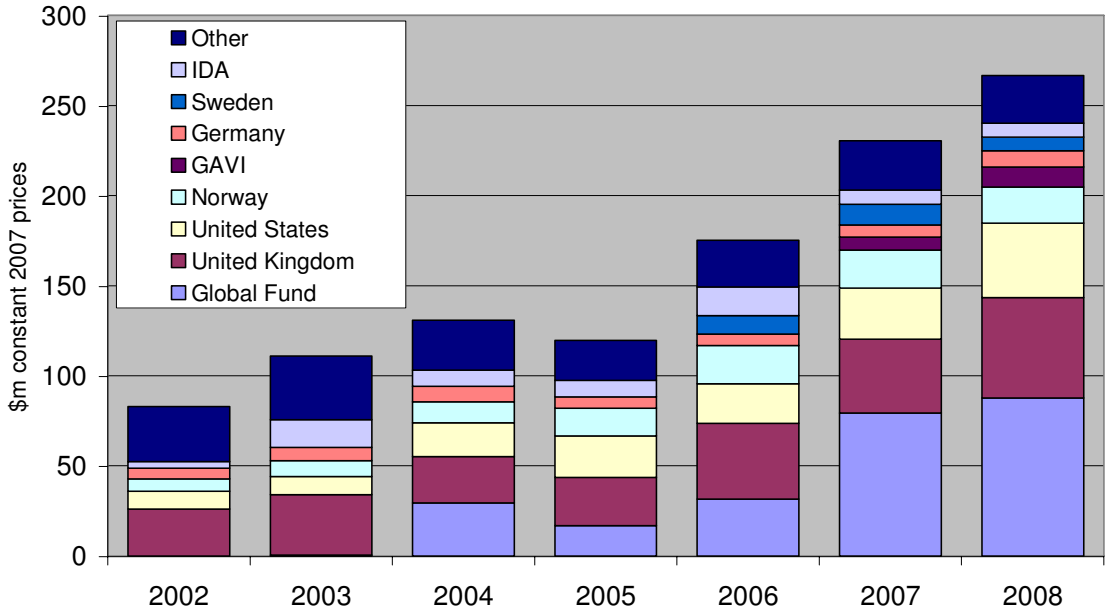
Annex 3: Key Health Financing Data

Sources: DAC CRS database, WHO National Accounts database

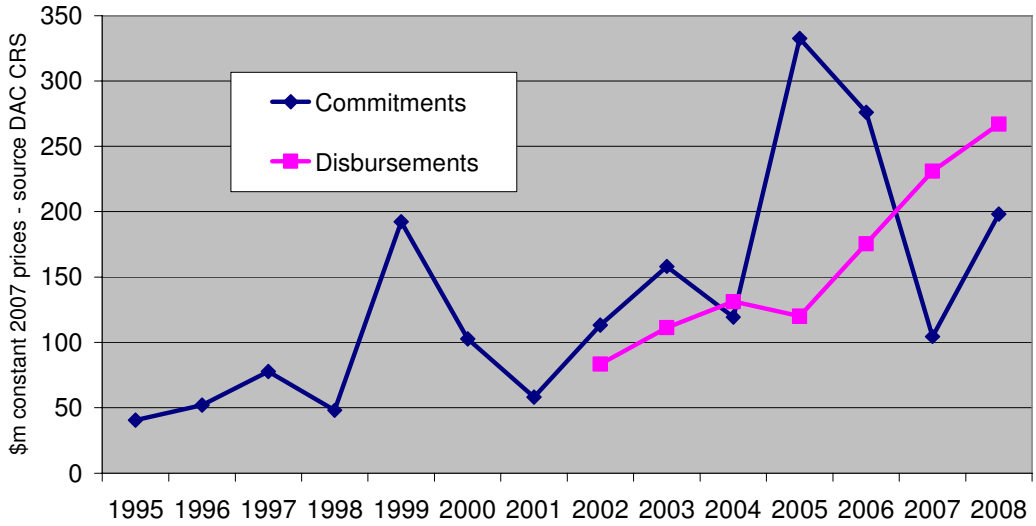


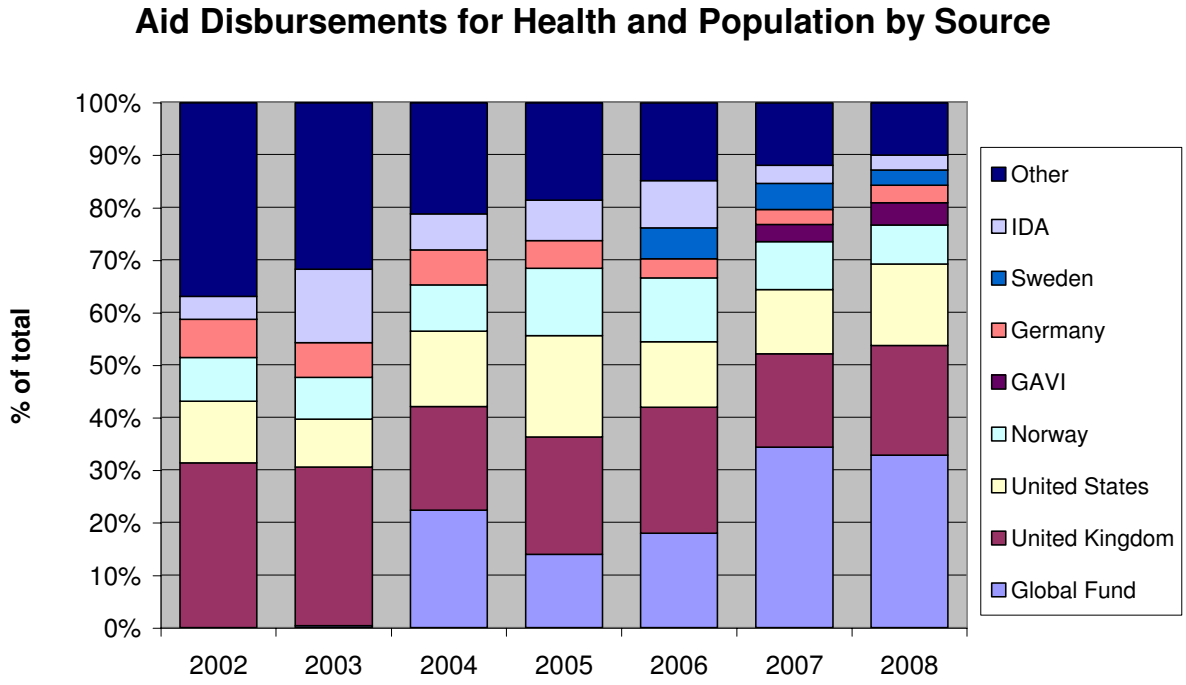


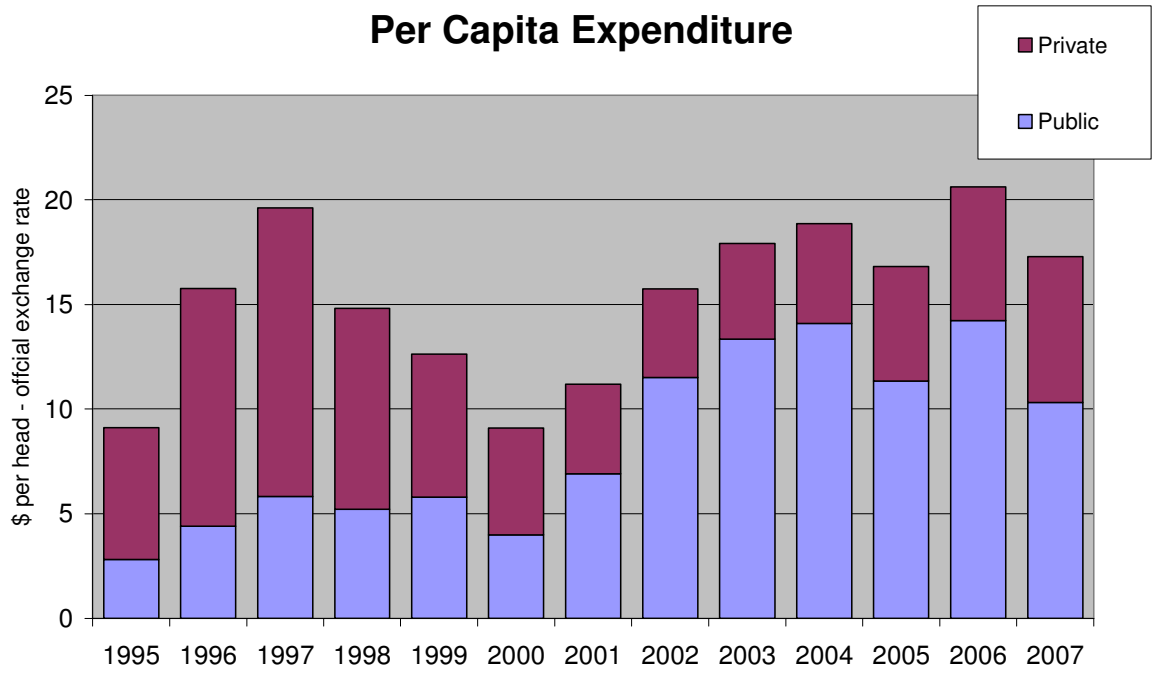
Aid Disbursements by Funding Source



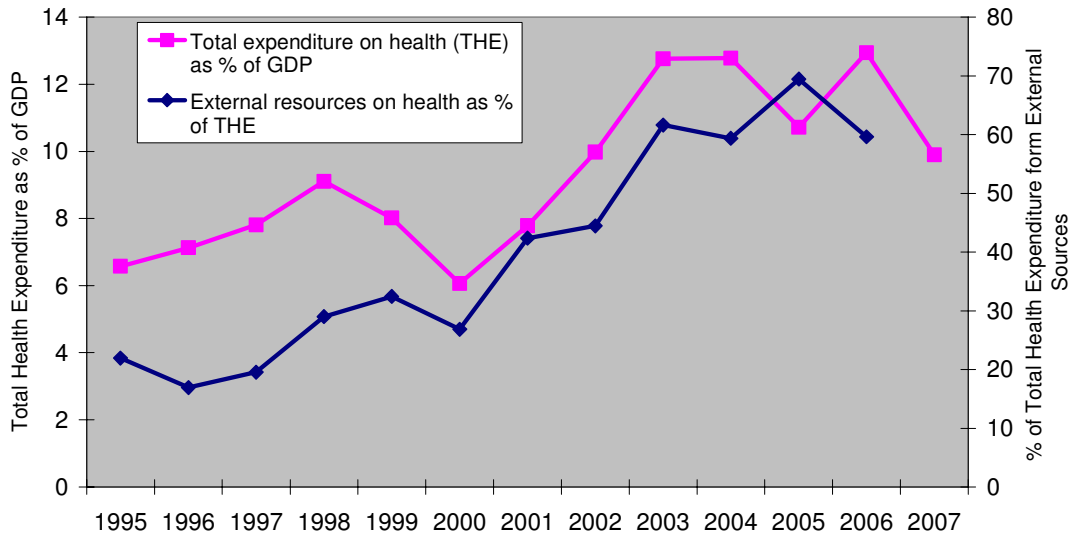
Aid for Health and Population: Real Commitments and Disbursements




Aid Disbursements for Health and Population by Source
% of total
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2002
2003
2004
2005
2006
2007
2008
Other
IDA
Sweden
Germany
GAVI
Norway
United States
United Kingdom
Global Fund


Per Capita Expenditure
$ per head - offcial exchange rate
25
20
15
10
5
0
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
Private
Public

More Spending on Health ... but Greater Aid Dependency



Annex 4: Comparative Health Outcome Data

Mortality rate, infant (per 1,000 live births)												
	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2006	2007
Malawi	221	210	199	169	151	143	124	120	103	80	..	71
Ethiopia	162	152	142	134	126	123	122	107	92	80	..	75
Kenya	122	108	96	87	73	65	64	72	77	79	79	80
Mozambique	..	..	185	170	157	145	135	128	125	119	117	115
Rwanda	135	133	132	130	124	113	117	115	113	110	..	109
Tanzania	142	135	129	118	104	98	96	94	89	78	..	73
Zambia	126	116	108	101	95	93	99	107	108	105	..	103
Uganda	132	124	117	110	105	104	106	100	92	85	..	82
LLDCs	..	..	151	139	129	119	112	104	95	86	86	84

Mortality rate, under-5 (per 1,000)												
	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2006	2007
Malawi	368	350	334	285	255	241	209	202	170	127	..	110
Ethiopia	273	256	241	226	212	206	204	178	151	127	..	119
Kenya	205	180	156	139	115	100	97	111	117	120	121	121
Mozambique	..	..	277	255	235	216	201	190	184	174	171	168
Rwanda	227	225	223	220	209	188	195	192	189	183	..	181
Tanzania	240	228	217	197	172	160	157	154	143	124	..	116

Zambia	212	195	179	164	155	151	163	178	178	174	..	170
Uganda	222	208	195	184	172	172	175	164	149	136	..	130
LLDCs	..	..	241	223	205	189	179	166	149	134	129	130

Prevalence of HIV, total (% of population ages 15-49)																		
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Malawi	2	4	6	8	10	12	13	14	14	14	14	13	13	13	12	12	12	12
Ethiopia	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Kenya	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mozambique	1	2	2	3	4	4	6	6	8	9	10	10	11	12	12	12	12	12
Rwanda	9	9	8	8	8	7	6	6	6	5	5	4	4	4	3	3	3	3
Tanzania	5	6	6	7	7	7	8	8	7	7	7	7	7	7	6	6	6	6
Zambia	9	12	14	15	16	16	16	16	16	16	16	15	15	15	15	15	15	15
Uganda	14	14	14	13	12	12	11	10	10	9	8	8	7	7	6	6	6	5
LLDCs	2	2	2	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2

Annex 5: Key Coverage Rates

Source: World Development Indicators 2010

Immunization, DPT (% of children ages 12-23 months)												
	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007
Malawi	58	55	87	89	75	90	64	84	89	93	99	87
Ethiopia	..	6	49	57	56	59	61	64	66	69	72	73
Kenya	..	70	84	94	75	74	72	73	73	76	80	81
Mozambique	..	29	46	57	68	70	72	72	72	72	72	72
Rwanda	..	50	84	83	90	77	88	96	89	95	99	97
Tanzania	59	67	78	81	79	85	89	95	95	90	90	83
Zambia	..	66	91	86	78	80	80	80	80	80	80	80
Uganda	..	14	45	59	56	57	59	61	62	64	64	64
LLDCs	..	19	57	55	61	63	64	67	72	75	77	79

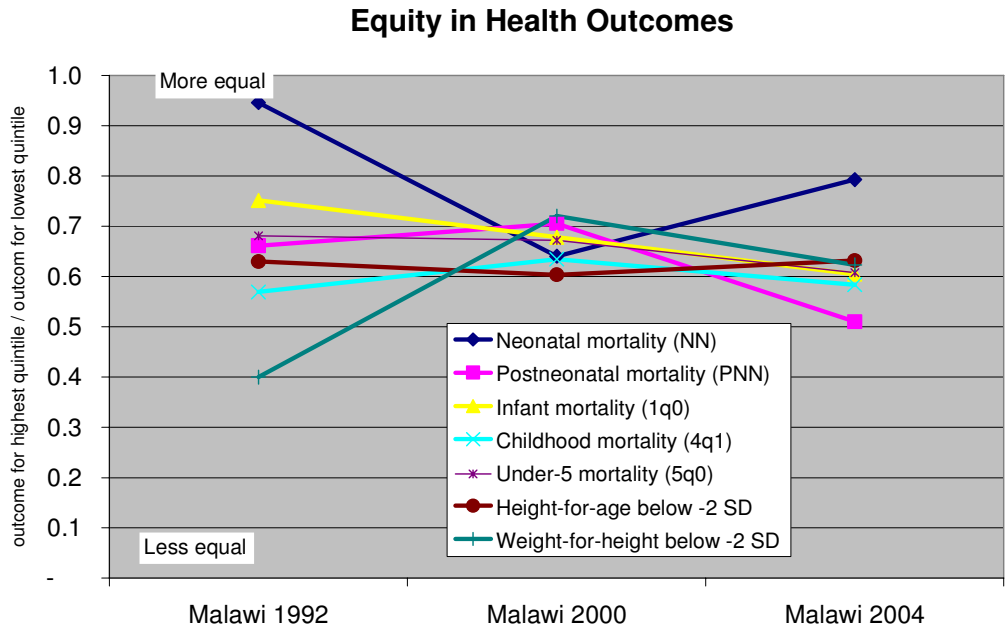
Immunization, measles (% of children ages 12-23 months)												
	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007
Malawi	49	49	81	90	73	82	69	77	80	82	85	83
Ethiopia	4	12	38	38	52	53	54	55	56	59	63	65
Kenya	..	63	78	83	75	73	72	72	73	69	77	80
Mozambique	..	39	59	71	71	74	77	77	77	77	77	77
Rwanda	..	52	83	84	74	69	69	90	84	89	95	99
Tanzania	46	66	80	78	78	83	89	97	94	91	93	90

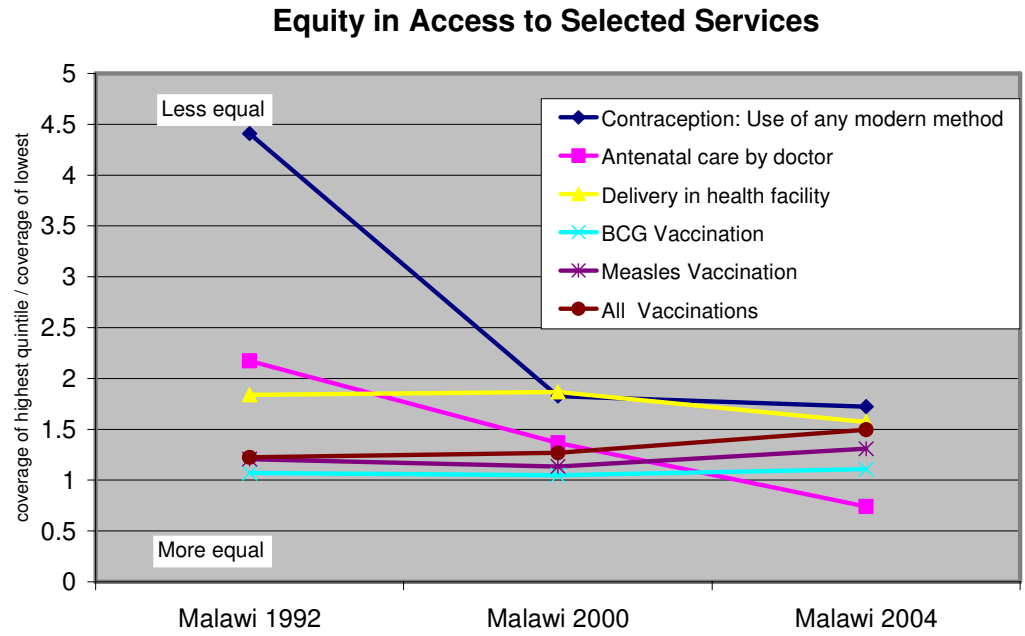
Zambia	..	58	90	86	85	84	84	84	85	85	85	85
Uganda	..	17	52	57	59	61	63	64	66	68	68	68
LLDCs	..	23	55	58	61	62	63	66	69	72	74	76

Use of insecticide-treated bed nets (% of under-5 population)									
	1999	2000	2001	2002	2003	2004	2005	2006	2007
Malawi	..	3	..	..	..	15	..	25	..
Ethiopia	..	..	..	..	..	..	..	..	33
Kenya	..	3	..	..	6	..	..	..	..
Mozambique	..	..	..	..	..	..	..	..	..
Rwanda	..	5	..	..	..	..	13	..	..
Tanzania	2	..	..	..	..	10	16	..	..
Zambia	1	..	..	7	..	..	..	23	28
Uganda	..	..	0	..	..	..	..	10	..
LLDCs	..	..	..	..	..	..	..	..	..

Vitamin A supplementation coverage rate (% of children ages 6-59 months)									
	1999	2000	2001	2002	2003	2004	2005	2006	2007
Malawi	..	..	63	86	92	57	94	..	90
Ethiopia	86	..	16	16	65	52	59	..	88
Kenya	80	..	90	91	33	63	69	..	22
Mozambique	100	..	71	71	50	26	95	..	48
Rwanda	93	..	94	36	86	95	100	..	89
Tanzania	21	..	93	94	91	94	95	..	93
Zambia	75	..	83	80	73	50	66	..	95
Uganda	79	..	37	46	..	68	78	..	64
LLDCs	80	..	78	71	76	75	82	..	84

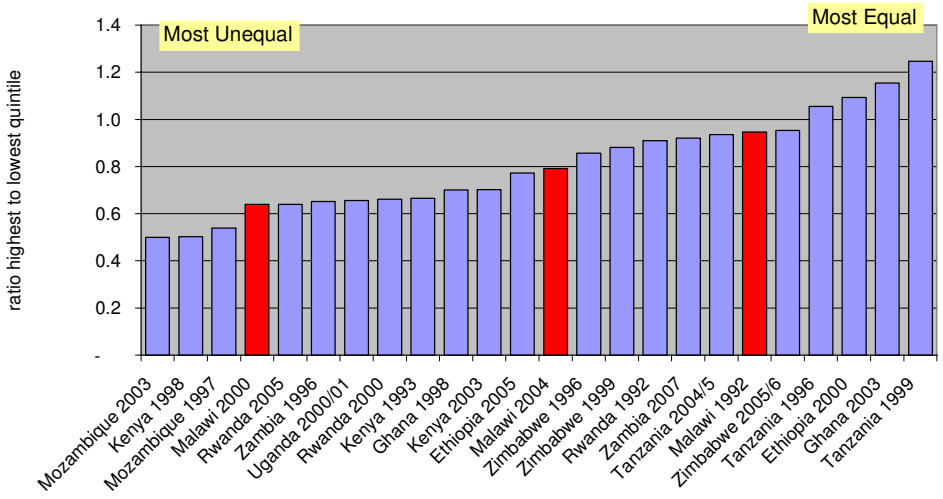
Annex 6: Equity in Access and Health Outcomes



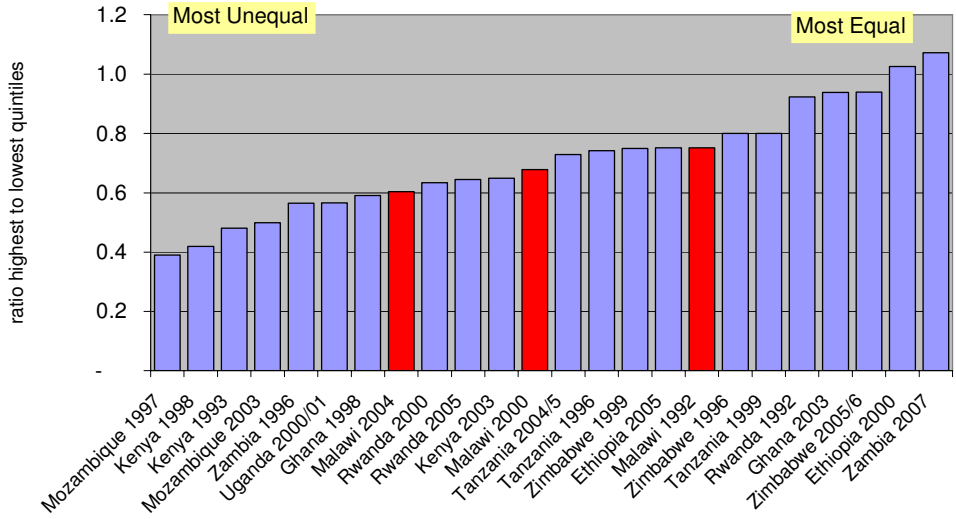


Ratio between utilization of highest and low quintiles

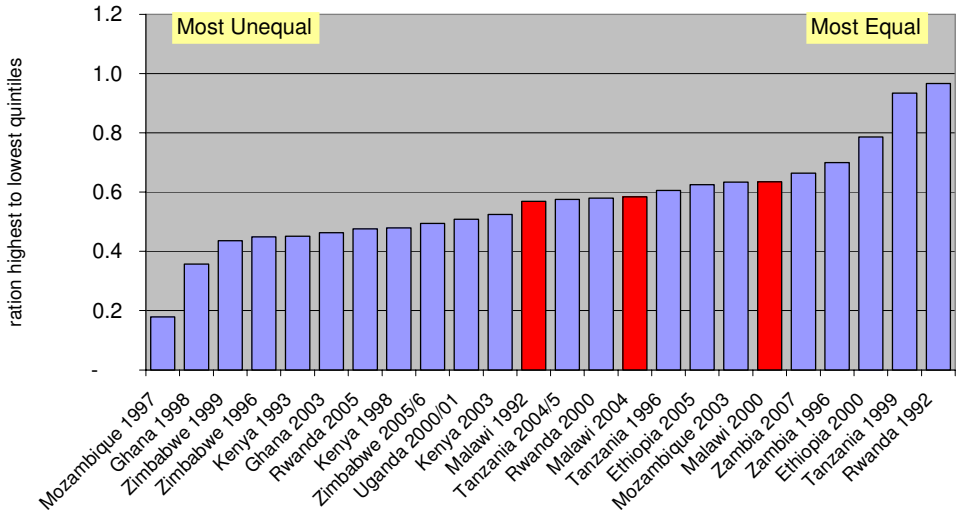
Equity in Outcomes: Neonatal mortality



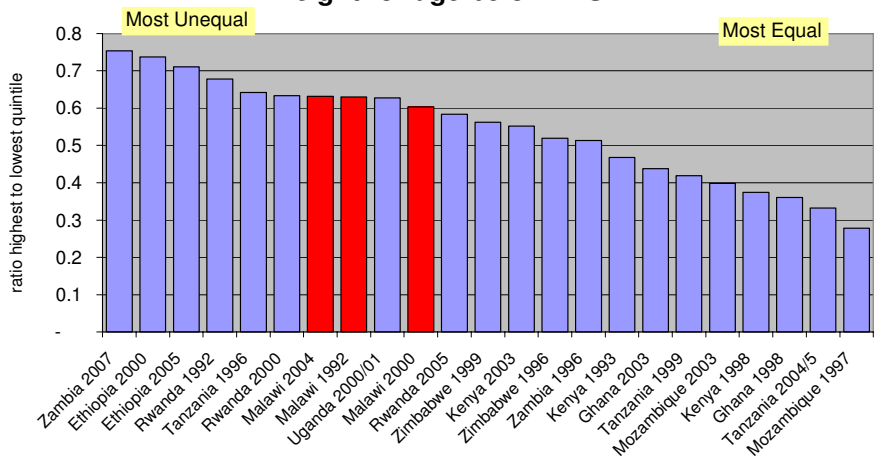
Equity in Outcomes: Infant mortality



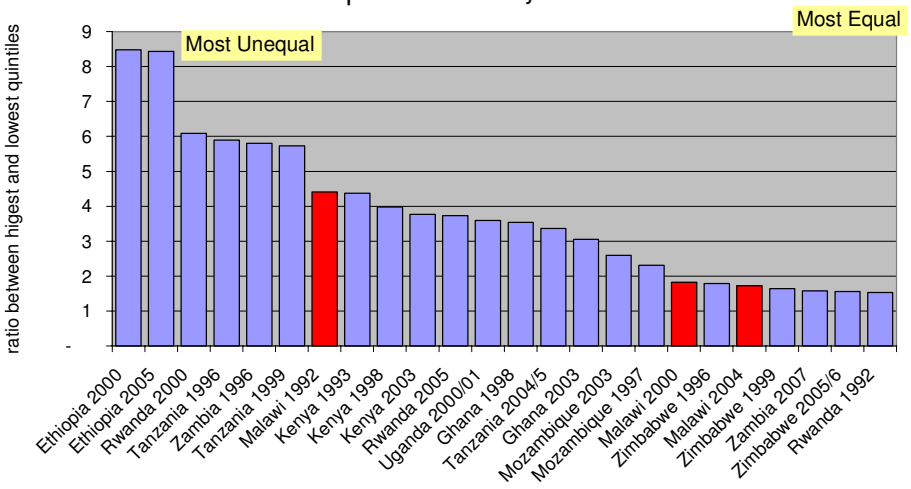
Equity in Outcomes: Childhood mortality



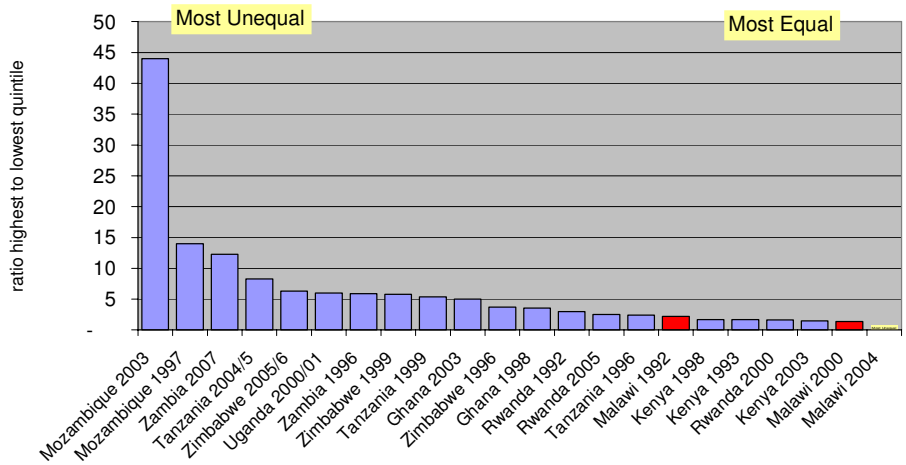
Equity in Health Outcomes:
Height-for-age below -2 SD



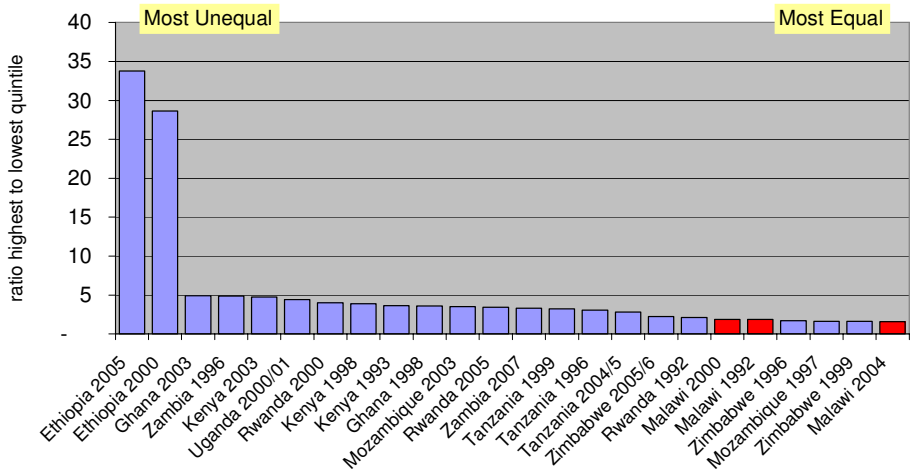
Equity in Access to Services:
Contraception: Use of any modern method



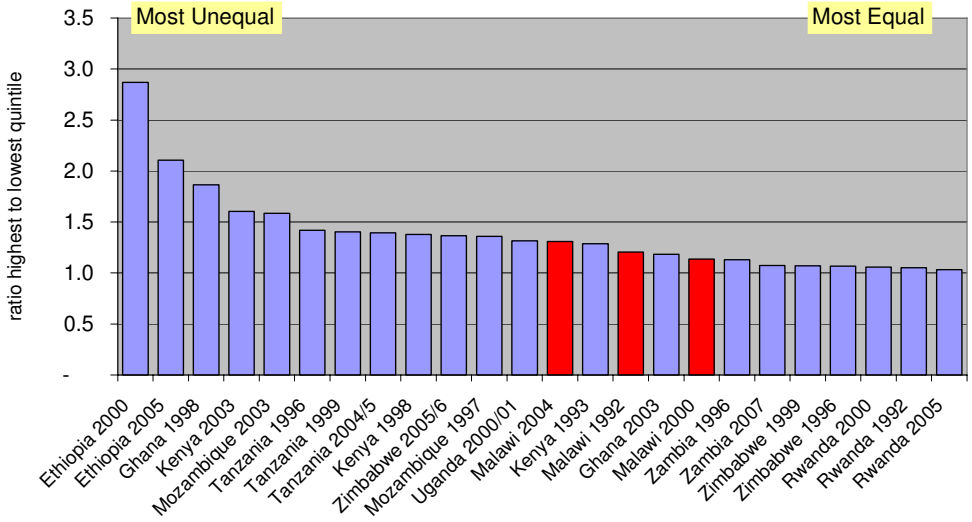
Equity in Access to Services:
Doctor Provided ANC



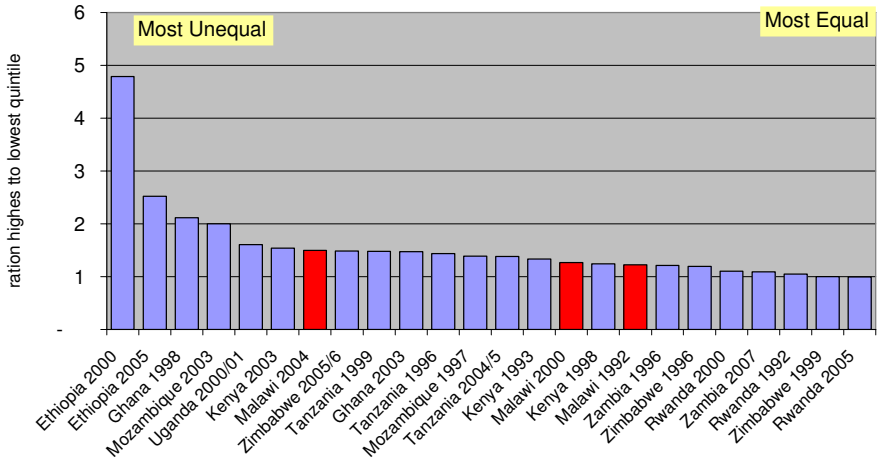
Equity in Access to Services: Delivery at Health Facility



Equity in Access to Services: Measles Vaccine



Equity in Access to Services: All Standard Vaccinations



Annex 7: Coverage in Complementary Sectors

Water and Sanitation

Improved sanitation facilities (% of population with access)				
	1990	1995	2000	2006
Malawi	46	51	55	60
Ethiopia	4	5	7	11
Kenya	39	40	41	42
Mozambique	20	22	27	31
Rwanda	29	26	25	23
Tanzania	35	35	34	33
Zambia	42	45	49	52
Uganda	29	31	32	33
LLDCs	22	24	29	33

Improved sanitation facilities, rural (% of rural population with access)				
	1990	1995	2000	2006
Malawi	46	51	56	62
Ethiopia	2	2	4	8
Kenya	44	45	46	48
Mozambique	12	12	16	19
Rwanda	29	26	24	20
Tanzania	36	36	35	34
Zambia	38	42	47	51
Uganda	29	31	32	34
LLDCs	15	18	22	27

Improved sanitation facilities, urban (% of urban population with access)				
	1990	1995	2000	2006
Malawi	50	51	51	51
Ethiopia	19	21	24	27
Kenya	18	18	19	19
Mozambique	..	49	51	53
Rwanda	31	32	33	34
Tanzania	29	30	31	31
Zambia	49	51	53	55
Uganda	27	27	28	29
LLDCs	45	46	47	49

Improved water source (% of population with access)				
	1990	1995	2000	2006
Malawi	41	52	63	76
Ethiopia	13	20	29	42
Kenya	41	46	51	57
Mozambique	36	39	41	42
Rwanda	65	64	65	65
Tanzania	49	50	53	55
Zambia	50	53	54	58
Uganda	43	49	56	64
LLDCs	53	54	58	62

Improved water source, rural (% of rural population with access)				
	1990	1995	2000	2006
Malawi	34	46	58	72
Ethiopia	4	10	19	31
Kenya	30	36	42	49
Mozambique	24	24	25	26
Rwanda	63	62	62	61
Tanzania	39	41	44	46
Zambia	27	32	36	41
Uganda	39	45	52	60
LLDCs	45	47	51	55

Improved water source, urban (% of urban population with access)				
	1990	1995	2000	2006
Malawi	92	93	94	96
Ethiopia	74	79	87	96
Kenya	90	88	87	85
Mozambique	83	83	77	71
Rwanda	94	90	86	82
Tanzania	90	87	84	81
Zambia	86	88	89	90
Uganda	78	81	85	90
LLDCs	81	78	79	81

Education

Primary completion rate, total (% of relevant age group)													
	1975	1980	1985	1991	1995	2001	2002	2003	2004	2005	2006	2007	2008
Malawi	20	28	33	29	48	66	68	..	57	56	55	55	..
Ethiopia	..	..	..	..	14	27	30	33	36	41	45	46	..
Kenya	54	73	..	..	..	..	..	..	90	93	..	..	..
Mozambique	..	..	33	26	26	19	22	..	30	42	42	46	..
Rwanda	28	..	35	35	..	22	27	35	35	..	..	..	..
Tanzania	35	..	80	62	..	55	59	..	59	56	74	85	112
Zambia	77	81	..	..	..	..	60	..	71	83	84	88	..
Uganda	40	..	..	..	..	57	59	59	56	54	..	..	..
LLDCs	..	..	..	39	..	..	..	..	..	..	..	..	..

Group Disclaimer

The DFID Human Development Resource Centre (HDRC) provides technical assistance and information to the British Government's Department for International Development (DFID) and its partners in support of pro-poor programmes in education and health including nutrition and AIDS. The HDRC services are provided by three organisations: HLSP, Cambridge Education (both part of Mott MacDonald Group) and the Institute of Development Studies.

This document has been prepared by the HDRC on behalf of DFID for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Mott MacDonald being obtained. Mott MacDonald accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person using or relying on the document for such other purpose agrees, and will by such use or reliance be taken to confirm his agreement, to indemnify Mott MacDonald for all loss or damage resulting there from. Mott MacDonald accepts no responsibility or liability for this document to any party other than the person by whom it was commissioned.

To the extent that this report is based on information supplied by other parties, Mott MacDonald accepts no liability for any loss or damage suffered by the client, whether contractual or tortious, stemming from any conclusions based on data supplied by parties other than Mott MacDonald and used by Mott MacDonald in preparing this report.