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Financing Social Protection in the Light of International Spending Targets:

A Public Sector Spending Review

Final report

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* Disclaimer: The views presented in this paper are those of the authors and do not necessarily represent the views of DFID.

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Acronyms and Abbreviations

AIMS	Aid Information Management Systems
AICD	Africa Infrastructure Country Diagnostic
AISP	Agriculture Input Support Programme (Malawi)
AMP	Aid Management Platform
AU	African Union
COFOG	Classification of Functions of Government
CRS	Creditor Reporting System
EFA	Education for All
DAC	Development Assistance Committee (of the OECD)
DFID	Department for International Development (UK)
GBS	General Budget Support
GDP	Gross Domestic Product
ICT	Information and Communication Technology
ILO	International Labour Organisation
MDG	Millennium Development Goal
ODA	Official Development Assistance
OECD	Organisation for Economic Cooperation and Development
PSNP	Productive Safety Nets Programme (Ethiopia)
SSA	Sub-Saharan Africa
SPF	Social protection framework
WB	World Bank
WDI	World Development Indicators

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Executive summary

This study explores the 'affordability' of development targets in six key sectors (health, education, water and sanitation, agriculture and infrastructure), by means of an empirical study examining sectoral expenditure in five low income case study countries in sub-Saharan Africa (Ethiopia, Kenya, Malawi, Mozambique and Uganda) and comparing them with target levels of expenditure set out in recent international agreements to which sub-Saharan governments are signatories. The study has a particular focus on social protection in response to growing government and donor interest in the affordability of provision in this sector. This approach is taken in order to assess the limitations of the current 'silo' approach to sector financing which characterises much of the development financing discourse, and which results in the abstraction of one sector from the broader fiscal whole, to the detriment of overall fiscal coherence and realism. While this study looks at total expenditure per sector, it does not look at efficiency or outcomes of this spending.

The report examines expenditure in 2006/ 2007 in relation to sector-specific international targets, assesses the shortfall, and then explores the fiscal feasibility of financing all six sectoral targets. The paper finds that meeting all the six targets simultaneously would require more than 100% of total government expenditure in four of the five case study countries, and 98% in the fifth, and that to meet these targets while retaining current levels of expenditure in other sectors would imply doubling current levels of government expenditure. Often it is claimed that developing country governments lack the political will to allocate resources to some sectors. However, this study suggests that the inadequacy of public expenditure in key sectors is also informed by the inherent impossibility of simultaneously meeting the range of international commitments to which developing counties are signatories.

Current funding for basic social protection provision is between 0.1% and 0.7% of GDP in the case study countries, compared to target expenditure levels of 4.5% to achieve the goals of the basic social protection component of the AU Social Policy Framework. This study concludes that the social protection sector is in competition with the five other key development sectors and that not all goals can be met from available resources. While there may be potential to increase financing to this sector through the conventional range of instruments (efficiency savings, reallocation, increased borrowing, increased revenue generation, increased ODA or private sector financing) the social protection sector is in effect in competition with each of the other key development sectors in pursuit of any additional resources, and when considered in aggregate as part of the wider fiscal context, it is clear that meeting all targets is not realistic, and consequently that the development vision which underlies them, is challenged, even compromised by the fiscal reality.

Input targets have a role to play in i) motivating greater effort in revenue generation (within the boundaries of sound macroeconomic policy) and ii) encourage governments and donors to prioritise spending by reallocating from low to high-priority sectors within existing budgets. While such targets can serve as useful lobbying mechanisms, spending targets should be taken 'seriously but not literally' (Wood, 2004): that is primarily as a guide and motivation for raising and spending public finance. This report does not conclude that such targets should be dropped, but it does caution against the argument that particular sectoral targets are 'affordable' in any objective sense.

The report highlights the tension faced by governments between the need for good public financial management on the one hand, and the challenge of meeting international commitments on the other, raising the impossibility of meeting the key development spending targets simultaneously. Given the unavoidable overall financing shortfall, the key question becomes prioritisation of the use of existing resources, the opportunity cost of programming outside these sectors and non priority or ineffective use of resources within the sectors.

1. Introduction

This study aims to explore the 'affordability' of social protection provision by means of an empirical study into actual social protection expenditure in five low income case study countries in sub-Saharan Africa, in response to growing government and donor interest in the expansion of social protection provision in low income countries. In order to assess the silo approach to sector financing which characterises much of the development financing discourse, and which results in the abstraction of one sector from the broader fiscal whole, this report examines social protection expenditure in a broader fiscal context by i) placing social protection expenditure within the broader context of expenditure on the key 'development' sectors (health, education, water and sanitation, agriculture and infrastructure), ii) examining social development sector expenditure in relation to total government expenditure, and iii) examining expenditure in these six sectors in relation to sector-specific international targets to which governments are signatories. The report concludes by examining the role of input targets and drawing conclusions regarding the fiscal space for increased social protection provision.

The study also examines the role of 'on' and 'off' budget official development assistance. In this way the study illuminates both the social protection affordability debate, as well as broader issues relating to sector targets and affordability and also questions the role of the current fragmented and target oriented donor approach to development financing with developing country governments. The implications for international donor practices are discussed in section 7.

This study analyses the budgets of five sub-Saharan African countries; Ethiopia, Kenya, Malawi, Mozambique and Uganda. Detailed budgeted and actual expenditure data was collected for the key social and economic sectors; social protection, health, education, water and sanitation, agriculture and infrastructure sector for the year 2006/ 2007. The research builds on a number of previous studies carried out by ODI[1].

This study addresses the following research questions:

1. What are current government allocations to social protection and other key sectors?

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[1] The study builds on an unpublished study prepared for DFID in 2008 '*Analysis of Public Expenditure in Key Sectors'* (Rohit et al, 2008)

2. How do these sectoral allocations relate to international targets and commitments?
3. How does expenditure on these sectors relate to total government expenditure and what is the role of international aid?
4. What are the implications for social protection affordability?
5. What are the broader policy implications?

1.1 Structure of the report

Section two of the report outlines the broad economic and developmental characteristics of the case study countries. Section three provides a description of the methodology adopted, while section four gives details on the targets and international commitments used in the study, and discusses the range of costings that refer to specific sectors. The results of the analysis are presented in sections five to seven. Section five presents current government allocations to social protection and other key sectors in relation to total government expenditure, in section six these levels of expenditure are compared to the targets for each sector and the fiscal implications of meeting these targets are discussed in relation to total government expenditure. Section seven analyses donor expenditure in relation to these sectors and targets and the findings are discussed in section eight including the implications for donor financing and for international donor practices. Section nine draws out the key conclusions.

2. Country case study profiles

The five countries covered in this study are Low Income Countries (LICs) in the east and south of sub-Saharan Africa: Ethiopia, Kenya, Malawi, Mozambique and Uganda. A brief overview of these countries is presented below, in the form of summary economic, development and aid data.

These countries vary significantly in terms of their socio-economic profiles. Basic economic data on each country are provided in Table 1 below. Data is provided for the year 2006/7 which is the year examined in this study.

Table 1: GDP and government expenditure (2006/7)

	Ethiopia	Kenya	Malawi	Mozambique	Uganda
GDP US$ million (2007)	20,232	24,725	3,456	7,011	12,077
GDP per capita US$	264	672	246	328	407
GDP per capita, PPP (constant 2005 international $)	683	1386	660	708	966
Total government expenditure US$ (% GDP)	4,192 (20.7%)	6,017 (24.3%)	923 (26.7%)	1,669 (23.8%)	2,454 (20.3%)

Source: Country budgets, World Development Indicators

Kenya is the richest country, both in terms of absolute GDP and also on a per capita basis, followed by Uganda, with Malawi and Ethiopia having the lowest GDP per capita. Government expenditure as a share of GDP is between 20 and 27%, with Uganda and Ethiopia being the lowest and Malawi the highest. Table 2 gives an overview of basic development indicators for each country.

Table 2: Basic development indicators in 2006

	Ethiopia	Kenya	Malawi	Mozambique	Uganda
Human Development Index (HDI) (rank)[1]	0.367 (170)	0.474 (152)	0.404 (166)	0.379 (168)	0.508 (145)
Poverty headcount ratio at $1.25 per day (% of population)[3]	39.0%[2]	19.7%[2]	67.8%[3]	74.7%[3]	51.5%[2]
Literacy rate (% of people ages 15 and above)	36%[4]	74%	64%	44%[3]	67%
School enrolment, primary (% gross)[5]	87.4%	104.6%	116.3%	103.9%	117.9%
Mortality rate, infant (per 1,000 live births)	74.3	79.8	73	98.3	87.7
Mortality rate, maternal (per 100,000 live births)[6]	720	560	1100	520	550

Source: World Development Indicators (WDI), World Bank for year 2006, except if otherwise stated

Notes: [1] Source: World Development Report (WDR) 2006; [2] WDI, 2005 [3] For Malawi & Mozambique: WDR 2010 (data refers to most recent available year in time period 2002-2005); [4] UNICEF (2010): data refers to most recent available year in time period 2003–2008; [5]Gross school enrolment exceeds 100% for some countries due to older children repeating grades or starting school late [6]World Health Organization (2007): data refers to 2005

The basic development indicators for all five countries are poor, with the exception of primary school enrolment, where all countries but Ethiopia have achieved universal gross primary school enrolment rates.[2] All five countries have low human development index (HDI) scores, being ranked between 145 (Uganda) and 170 (Ethiopia) out of 177 countries in the index (UNDP, 2006).[3] In terms of literacy, Malawi, Uganda and Kenya have attained literacy rates of between 64% at 74%, but for Ethiopia and Mozambique levels are only 36% and 44% respectively. The infant mortality rates are lowest in Malawi and Ethiopia (73 and 74 per 1,000 live births) rising to between 80 and 98 in the other case study countries, with Mozambique being the highest, while maternal mortality ranges

[2] The MDGs on primary school enrolment refer to net enrolment rates. By this measure none of the countries have achieved universal enrolment rates, but Uganda is very close at 97% (United Nations Statistics Division, 2010)

[3] The HDI is a weighted composite index incorporating maternal mortality, literacy, and GDP per capita.

from 520 to 1100 per 100,000 live births, with Malawi having rates double those of Kenya, Mozambique and Uganda.

All five countries are Official Development Assistance (ODA) recipients. While in Kenya ODA does not account for a significant share of government expenditure (3%), it represents between 28% and 48% of official government expenditure in the other case study countries, and reaching 48% in Uganda (see Table 3 below).

Table 3: Official Development Assistance (ODA) (2006/7)

	Ethiopia	Kenya	Malawi	Mozambique	Uganda
Total government-recorded ODA US$ million	1,460	188	256[1]	485	1,172
Share ODA/ government expenditure	35%	3%	28%	29%	48%
Total GBS US$ million	465	0	68	297	619
Share GBS/ ODA	11%[2]	0%	7%	18%	25%
Off-budget aid/ share total aid	>26%		46%	56%	50%

Source: Country budgets, Christiansen et al. 2007, Warren-Rodriguez (2007)
Note: ODA=Official Development Assistance; GBS=General Budget Support; [1]Excludes debt relief; [2]GBS is provided though the Protection of Basic Services programme, which is a multi-sector budget support programme.

The majority of ODA is allocated to specific sectors or projects in all the case study countries. Some aid (up to 25%) is given in the form of General Budget Support (GBS) rather than for specific purposes, although in the year under review Kenya however received no GBS due to donor concerns over governance.

In addition to ODA, governments also receive 'off-budget' donor allocations which are not reported in the national budget or voted on by parliament. The consolidated information that a recipient country has regarding off-budget aid is often poor and most countries can only provide rough estimate off-budget expenditures, due to the nature of this form of expenditure (which, by definition, is not recorded in government budgets). Off-budget data by sector are not available in most countries, and this means that governments are likely to underestimate total expenditures in areas where off-budget resources are being spent. The implication of this potential underestimation is that total government spending against targets may also be underestimated in this study. Given

the data constraints relating to off-budget aid and the limitations associated with monitoring these flows in the current global aid management system, it is not possible to assess the magnitude of this underestimation.

3. Methodology

This section outlines the approach adopted to assess government allocations to the key sectors, the international targets associated with each sector, and the relationship between the two, in the context of total government expenditure.

This study examines expenditure in six key development sectors (social protection, health, education, water and sanitation, agriculture and infrastructure) in relation to international sector-specific commitments and targets to which sub-Saharan African governments are signatories. This study analyses the sector definitions set out or implied in the international targets relating to each sector, defines sectors according to international sectoral definitions, and applies the resulting definition to government expenditure and these targets, recoding budget allocations in line with these external criteria. These adjusted sector definitions are used to calculate sector specific government expenditure (see section 5), donor funded sector expenditures (see section 7) and the relationship between budget allocations and sectoral targets (see section 6).

3.1 Targets

The expenditure targets used in this study for each of the six key sectors are derived from regional or international sectoral commitments and targets to which the case study governments are signatories. Table 4 below summarises the target values that are used in this study: the rationale for this set of values is elaborated in Section 4 below.

Table 4: Target spending levels used in this study

Sector	Target
Social protection	4.5% GDP (and 2.9% / 5.2% for sensitivity analysis)
Health	15% Government Expenditure
Education	20% Government Expenditure
Water & sanitation	1.5% GDP
Agriculture	10% Government Expenditure
Infrastructure	9.6% GDP

These targets were selected on the basis of a review of all the major international agreements that articulate a commitment to the allocation of given financial resources for the sectors in question, or the provision of a basic package of services. These agreements are expressed either as percentages of government expenditure or GDP (as is the case for education, health and agriculture); or they are not associated with explicit targets, but state a commitment to increase spending for a specific sector, without an agreed specific expenditure level. This is the case for social protection, infrastructure and water. For those declarations which do not give a specific expenditure target, the wording in the declaration was matched with an appropriate costing study, which has an identical or similar sector specification (see section 4).

3.2 International sector classifications

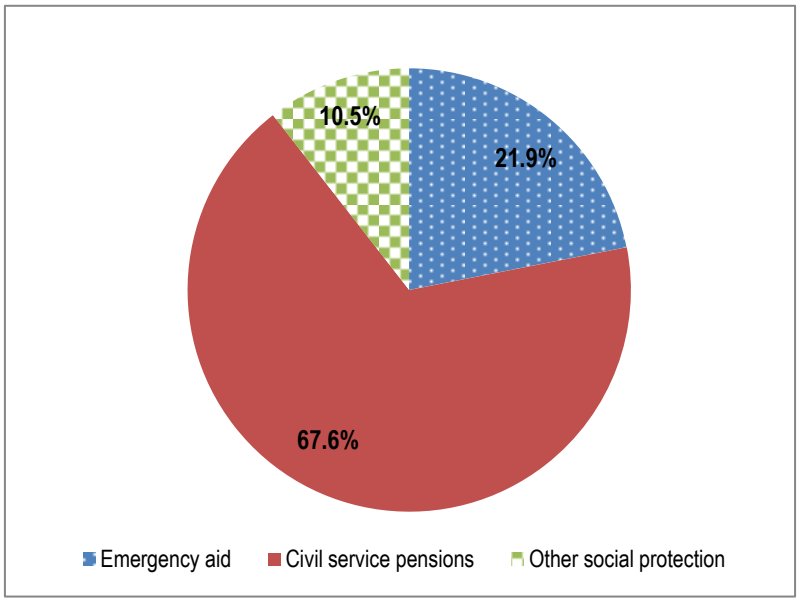
The sectoral definitions used within the budgetary process are not consistent across countries. Widely disparate and idiosyncratic classifications reflect national administrative structures that arise from specific historical legacies and processes of political and structural development. In many countries, budget-holding institutions are grouped together in broad 'sectors', at which level policies and funding are coordinated (for example the education sector would include the Ministry of Education, universities etc). As a result, a sector in any given country is usually defined by the pre-existing institutions (ministries and agencies) of which the sector is comprised, rather than being directly associated with any international standard definitions.

In order to create consistent sector classifications allowing the calculation of sectoral allocations which are comparable across countries, this study aligns government budget data for each of the case study countries with international standards. This was done using two widely adopted international standards for classifying aid expenditures and government expenditure: the DAC Creditor Reporting System (CRS) for aid allocations and the UN Classification of the Functions of Government (COFOG) for government expenditure. A detailed description of COFOG and DAC/CRS definitions and a comparison is provided in Annex 4. Sector definitions in this study were informed by COFOG definitions to allow for international comparison. Differences between COFOG and the target sector definitions are also outlined in Annex 4. In the case of i) social protection and ii) water and sanitation it was necessary to slightly adjust COFOG's sector definition, while a new infrastructure category was created, as COFOG does not include infrastructure as a separate sector.

The definition of social protection and the types of programmes included in this sector is not consistent across countries. Social protection encompasses a range of publicly mandated actions that seek to address risk and vulnerability among poor and near-poor households, as well as those programmes to maintain income standards (social insurance). Social protection is generally agreed

to include both social insurance (such as contributory pensions, unemployment benefits etc), in which benefits are dependent on previous contributions, and social assistance (such as social pensions or child support grants), in which benefits are non-contributory. However, definitions of social protection vary considerably by country and institution; and policies which are 'socially protecting' but do not employ conventional social protection instruments are likely to be included in other sectors, for example in rural development or agriculture (as with the Agricultural Input Support Programme (AISP) in Malawi). Civil service pensions and associated benefits which comprise a significant proportion of government expenditure on social protection in many low and middle income countries are excluded from the definition of social protection adopted in this report and the associated target. For example in Uganda in 2006/7, civil service pensions and benefits accounted for two thirds of total social protection expenditure and emergency aid one fifth, leaving only 10% of what the government described as 'social protection' conforming to the definition of social protection in this study (see figure 1).

Figure 1: Composition of social protection in Uganda



Source: Own calculations based on government budget

Hence, in this study estimates of social protection expenditure are likely to be lower than in other analyses, which include other categories of spending – such as emergency aid and contributory state pensions - as part of social protection expenditure.

This study excludes private and civil service pensions (i.e. includes social insurance) and only non-contributory transfers, in line with the basic social protection definition associated with the target examined in this paper (drawn from an ILO basic social protection costing study and multi-agency

Social Protection Framework (SPF) definition of social protection provision). The SPF definition closely matches that of COFOG, although the SPF only includes a basic set of interventions, excluding housing, sickness and survivor's benefits, and refers to public works rather than unemployment benefits. Health benefits are excluded from measures of social protection in order to avoid overlap with the health sector.

Health and education are consistent across the targets and COFOG – both definitions including all health and education expenditures as included in government budgets (see Annex 4 for more details). The COFOG definition of water is quite narrow, only focusing on water supply. COFOG excludes sanitation expenditures, such as latrines, irrigation projects and collection and treatment of waste water. The target sector definition used in this study includes water and sanitation, as defined by various agreements, see section 4.4.

The agriculture sector target consists of agriculture, including livestock, fishing, hunting and forestry and includes public expenditure on irrigation projects, agrarian reforms, regulation of fishing etc. The infrastructure target sector definition is informed by the agreement of African governments on the need for growth in infrastructure provision at the 2009 AU assembly.

In this study expenditures are classified according to sector definitions and then compared to the applicable sector target. However, in practice some expenditure may contribute towards more than one target. For example the construction of a rural road is counted as infrastructure, but may also contribute to the agriculture sector or even promote better health by improving access to health facilities. The methodology adopted here does not accommodate expenditure contributing to more than one target in this way, and so may result in an understatement of expenditure against the targets.

3.3 Government sector specific expenditures

In this study government expenditure is defined as total expenditure, as set out in a country's finance law. This expenditure is funded from both domestic sources (tax revenue, treasury bills etc) and on-budget official donor assistance (aid, including programme and project financing, which is reported in the budget documentation). Off-budget donor expenditure is not reported in the national budget and consequently is excluded from total government expenditure.

A range of data sources for government sector spending were used in this study. In each country data were gathered from a number of official sources, primarily with Ministries of Finance, ranging from published budgets to unpublished audited actual expenditures[4]. Detailed government data from the Ministry of Finance was investigated further with line ministries to ensure the correct allocation of budget items according to the sectoral definitions adopted in this study. The DFID country offices in Ethiopia, Kenya and Uganda also provided data on government expenditure. The study focuses on the year 2006/ 2007, in order to be able to include both budgeted and actual government expenditure. The specific budget lines included by sector for each country are listed in Annex 1. Finally, a comparison is made between expenditure and the sectoral targets for each country, taking into account ODA flows as well as domestic allocations, using consistent sector definitions.

3.4 Donor Allocations

In the countries included in this study Official Development Assistance (ODA) ranges from 3% of government expenditure (Kenya) to 48% of government expenditure (Uganda). Ideally governments should have access to data on the volume and composition of donor aid flows in order to assess actual levels of expenditure by sector and to plan domestic resource allocations accordingly. However, this is often not the case, which may undermine an efficient budget setting process.

This study attempts to quantify aid flows to the six sectors using three main ODA data sources. These are i) recipient government data, ii) the Development Assistance Committee Creditor Reporting System (DAC/CRS) run by the OECD and iii) the Aid Information Management Systems (AIMS) provided by third party commercial partners on a country level. These three instruments all capture information on aid flows, but use different formats. Although the pictures provided by these three sources overlap significantly, both in the information they collect, and the planning and analytical purposes they intend to achieve, they are not directly comparable. Only in two of the case study countries (Malawi and Uganda) is there ODA data from all three sources. This is analysed in Section 7.1 to assess the comparability of the three sources.

[4] Ghana was originally included in this study, but had to be taken out at a later stage as readily available government expenditure data was not of a sufficiently high quality.

3.5 Caveats

Two key caveats should be noted in relation to the analysis and findings presented in this study.

For three of the five countries (Ethiopia, Kenya and Mozambique) data on sector-specific off-budget aid could not be obtained. As this is likely to represent a significant share of overall aid, it can be assumed that the report will underestimate total expenditures, sectoral expenditures (an underestimate that will be greatest in sectors receiving the greatest amount of off-budget ODA) and hence performance against targets. Since the information available to the study team is the same information available to governments, this limitation highlights the difficulties experienced by governments in terms of their ability to accurately assess total sectoral financing flows and performance against targets.

The 'targets' adopted in the study are taken as *indicators* of the level of resources required to achieve some agreed level of provision in each of the sectors, as identified by the international community and agreed to by national governments. However, some of the 'targets' post-date the data under review, having been agreed after 2006/7. For these sectors (namely social protection, water and sanitation, and infrastructure), it is important that the review is not read as a retrospective assessment of country performance against targets, but rather an assessment of the adequacy of sectoral financing levels, compared to the levels specified by the international community and to which the case study governments are signatories.

4. International Spending Targets

In this section a range of international agreements relating to each of the six sectors (social protection, health, education, water and sanitation, agriculture and infrastructure) are discussed, and the specific commitments to which African governments are signatories identified. For each of the sectors there are one or more targets and a range of costings, associated with a diversity of estimation methods and recommended service provision levels. One international agreement with associated costings is selected for each sector, and discussed as a 'target' in the following text. Targets in five of the six sectors are drawn from AU commitments, while the education target is drawn from the international Education For All (EFA) accords. Where no specific expenditure targets are available for a sector, the definitions adopted in the various declarations are reviewed and other declarations or costing studies that relate to a similar sector specification are used to create a proxy 'costing' for that target. Having reviewed the composition and costing of each of the various targets for each sector, the most appropriate is selected as the basis for further analysis in this study. As a general principle, the most conservative cost estimates are selected, wherever choices had to be made.

Specific expenditure targets are associated with four of the sectoral targets (health, education, agriculture and the sanitation component of water and sanitation). The water cost implied by the AU commitment is approximated using UNDP estimates, while for social protection the cost of the provision target agreed by the AU is based on estimates for identical provision levels by the ILO, and for infrastructure the cost of the output target is derived from AICD/ World Bank estimates. These issues are discussed in detail below.

4.1 Social protection target

The main Social Protection sector target to which African governments are signatories is enshrined within the Windhoek Declaration of 2008, and this is the target which has been adopted for this study. The Windhoek Declaration outlined a Social Policy Framework (SPF) for Africa, on the basis of which AU ministers agreed to the provision of a minimum package of social protection provision, comprising grants for children, informal workers, the unemployed, older persons and the disabled, together with broader social policy provision, including basic health care, and an implied commitment to ongoing contributory pension schemes for civil servants (see table 5).

No specific expenditure goal was associated with the social protection component of the SPF. However, the ILO calculated the costs of a *basic* social protection package[5], which is almost identical with the provision set out in the SPF, consisting of universal old age pension and disability pensions, child benefits, and assistance for the unemployed, based on demographic data from seven African countries (ILO, 2008). The ILO costed package includes the basic social protection provision anticipated in the AU SPF framework, but excludes contributory civil servant pension schemes and health provision which are also included in the SPF, representing a lower estimate for the cost of the target than if such pension schemes and health provision were included. The cost of the Windhoek target is approximated using the estimated average cost of the basic ILO package, based on data from seven sub-Saharan African countries. For these seven countries, the costs of the basic social protection package ranged from 2.9%-5.2% of GDP in 2008, with an average cost of 4.5%. As this is an average figure, a sensitivity analysis will be performed based upon a lower bound at 2.9% and upper bound at 5.2%, following the range of costings found in the ILO study (see table 5 below).

Table 5: Social protection target and costings

Target	Specific goal	Source
Provide minimum package	"a minimum package of essential social protection should cover: essential health care, and benefits for children, informal workers, the unemployed, older persons and persons with disabilities."	AU Windhoek Conference, 2008
Cost estimate for basic social protection provision as set out in SPF; Mean 4.5% of GDP based on 7 country ILO study 2.9% GDP (Lower bound) 5.2% GDP (Upper bound)	Grants for the disabled, children, the elderly and provision of support for the unemployed (100 day public works)	ILO (2008) Average calculated by taking average estimated costs for 7 SSA countries

Note: Target is shaded grey.

[5] Note that the basic social protection package is not identical with the UN social protection floor concept, which includes a package of social services, together with a package of basic social transfer (as included in SPF). The ILO estimates costed grants for the disabled, children, the elderly and provision of support for the unemployed (100 day public works).

4.2 Health target

Developing country governments are signatories to a costed commitment on health provision made at the Special Summit on HIV/ AIDS, Tuberculosis and Other Infectious Diseases held in Abuja, Nigeria in 2002, AU governments committed themselves to improving the health sector and agreed to a minimum health sector spending target of 15% of government expenditure. This equates to an average per capita expenditure of $13 per capita on health provision in the case study countries reviewed in this study.

This figure may be compared to costings put forward by the WHO Commission on Macroeconomics and Health and the ILO, see table 6 below. The WHO Commission estimated that the cost of essential interventions against infectious diseases etc (i.e. preventable deaths) to be $30-40 per capita in 2004, on the basis of maximum health expenditure in low-income countries that have good health outcomes (Sachs et al, 2004b). The ILO's calculation of the cost of the provision of basic universal health services[6] is 3% of GDP in sub-Saharan African countries, which at approximately $15 per capita for the five countries in this study, is broadly consistent with the Abuja figure, but considerably lower than the WHO Commission's global estimate (ILO, 2008).

Table 6: Health targets and costings

Target	Specific goal	Source
15% Government Expenditure	"improvement of health sector"	AU Abuja Commitment, 2002
$30-40 per capita	Cost of essential interventions against infectious diseases and nutritional deficiencies	WHO Commission on Macroeconomics & Health (2004) - Calculations based on frontier analysis
3% GDP	Basic essential health system	ILO (2008) - Calculations based on average estimated costs of social protection provision for 7 SSA countries in 2009

Note: Target is shaded grey.

[6] The ILO calculation is based on staffing/ population ratios and non-staff overhead costs for Namibia and Thailand, countries which are considered relatively successful in implementing universal and successful health schemes (ILO, 2008).

4.3 Education target

In the education sector a specific costed target has been signed by 43 governments (including 25 in SSA) in the form of the Education For All (EFA) Fast Track Initiative (FTI).[7] The FTI is a global partnership between developing and donor countries, developed as a result of the World Education Forum in Dakar, Senegal, in 2000, to accelerate progress towards the education Millennium Development Goals (MDGs). On the basis of the FTI, donors increased their aid commitments to the education sector, while recipient governments agreed to increase education spending to at least 20% of government expenditure, allocating 50% of education expenditure (10% of government expenditure) to primary education. The EFA target will be adopted as the basis of our analysis in this study, on the grounds that all the case study countries, with the exception of Uganda, have joined the EFA partnership. Academic estimates of the cost of EFA provision are set alongside the EFA target in table 7 below.

Table 7: Education targets and costings

Target	Specific goal	Source
20% Government Expenditure	Committing 20% government expenditure to education, 50% should be spent on primary education	EFA FTI (EFA Initiative, 2010)
11% per capita GDP/ child of primary school age	Costs of every child attending primary school	Bruns et al (2003) Simulation of costs of meeting education targets in 47 low-income countries
13% per capita GDP/child of primary school age	Sustaining the cost of children already in primary school	Devarajan et al (2002) (World Bank)

Note: Target is shaded grey.

Bruns et al (2003) calculate that the average cost of universal primary school enrolment in 47 low-income countries is 11% of per capita GDP multiplied by the absolute number of primary age children. The World Bank (2002) estimates a similar figure, as the cost of sustaining children already in primary school.

[7] Uganda was not a signatory to this initiative, but for the purposes of this study, has been treated as though it were, for the sake of completeness.

The absolute value of the EFA target may be compared with the other estimates by looking at a specific example. In Ethiopia in 2006 the EFA target would have cost governments US$ 419 million (primary education only), whereas the Bruns target estimates a cost of US$ 543 million, about 30% more than the EFA target. While the share of government expenditure as a percentage of GDP and the demographic composition vary across countries, rendering any direct comparison problematic, it is possible to conclude that the two targets are broadly consistent.

4.4 Water and sanitation target

A specific spending target for sanitation in Africa was agreed in the eThekwini Declaration produced at the second African Conference on Sanitation and Hygiene in Durban, South Africa in February 2008. On the basis of this declaration the African Ministers' Council on Water agreed to spend a minimum of 0.5% of GDP on sanitation and hygiene. However, no similar spending target was agreed for water, and while in 2008 AU governments pledged to 'significantly increase domestic financial resources allocated for implementing national and regional water and sanitation development activities' at the AU summit in Sharm el Sheikh, no spending target was associated with this commitment. There are however, a range of estimates of the cost of adequate water and sanitation provision, implied in the AU target, as indicated in Table 8.

Table 8: Water and sanitation targets and costings

Target	Specific goal	Source
Significantly increase resources for water and sanitation	"significantly increase domestic financial resources allocated for implementing national and regional water and sanitation development activities"	11th AU Assembly, Sharm el Sheikh, 2008
0.5% GDP for sanitation	"Our aspiration is that these allocations should be a minimum of 0.5% of GDP for sanitation and hygiene"	eThekwini Declaration, Feb 2002
$58 per capita	$43 – sanitation; $15 – water	UN (2008) MDG task force for Africa
1.1%-2.8% GDP	Estimated cost of Water supply and sanitation to Meet MDGs	Sachs et al (2004) Estimates for Ghana, Tanzania & Uganda
1% GDP for water and sanitation	"An entitlement to a secure, accessible and affordable supply of water ... at a minimum it implies a target of at least 20 litres of clean water a day for every citizen."	UNDP (2006)
5% GDP	Cost to build & maintain new infrastructure, upgrade & maintain old infrastructure; water & sanitation only	AICD/ World Bank (2010) SSA country-level microeconomic modelling

Note: Target is shaded grey.

The UN MDG task force for Africa (2008) estimates that $58 per capita per annum should be spent on water and sanitation ($43 on sanitation and $15 on water) in order to meet the MDGs[8]. The calculations and assumptions on which these figures were based is not known. This represents approximately 4.3% of average SSA GDP in total. The water target by itself represents 1.1% of SSA GDP. Other estimates put the required expenditures to meet the water MDGs at between 1.1 and 2.8% GDP, depending on the country (Sachs et al, 2004). The AICD/ World Bank study discussed below in the context of infrastructure estimates a cost of 5% of GDP to achieve targets for access to water, while in the 2006 Human Development Report the UNDP suggest a minimum spend of 1% of GDP to provide access to at least 20 litres of clean water a day for every citizen.

For sanitation, the agreed spending target of 0.5% of GDP will be used for this analysis, since it is a specific target to which AU governments are signatories. Since governments signed the Millennium

[8] MDG 7 specifically refers to water: Target 10: Reduce by half the proportion of people without sustainable access to safe drinking water.

Declaration at the 2000 UN Millennium Summit, the water target we will use is the $15 per capita per annum water target required to meet the MDGs (1% GDP). This is consistent with the 1% UNDP target and the lower estimate by Sachs et al. In this study the commitments of African governments to water and sanitation will be approximated by a total spending target of 1.5% GDP.

4.5 Agriculture target

In Maputo, Mozambique, in July 2003 AU Ministers of Agriculture agreed to direct 10% of government expenditure to agriculture and rural development. This includes expenditures on irrigation projects, agrarian reforms, regulation of fishing and other activities (but not road investments). The World Bank gives a similar estimate for the investment needs of the agricultural sector in the 2008 *World Development Report: Agriculture for Development*, see table 9 below.

Table 9: Agriculture targets and costings

Target	Specific goal	Source
10% Government Expenditure	"We agree to adopt sound policies for agricultural and rural development, and commit ourselves to allocating at least 10% of national budgetary resources for their implementation within five years"	AU Conference in Maputo, 2003
10% Government Expenditure	10% Government Expenditure	(WB, World Development Report 2008: Agriculture for Development) Based on expenditure levels in agriculturally transforming countries

Note: Target is shaded grey.

4.6 Infrastructure target

The infrastructure sector was addressed at the 12th AU Assembly in February 2009. Heads of states and governments acknowledged the importance of improving infrastructure in Africa and agreed to 'increase public financing for infrastructure' in general and 'to speed up the development of transport and energy infrastructure' in particular, but did not set a specific spending target.

There are a range of estimates of the spending requirements associated with the provision of infrastructure, which are contingent on the level of provision desired (see table 10).

Table 10: Infrastructure targets

Target	Specific goal	Source
Increase public financing for infrastructure	"increase public financing for infrastructure ... to speed up the development of transport and energy infrastructure"	Declaration of 12th Assembly of African Union, Feb 2009
9% GDP	5% GDP investment plus 4% GDP operations to achieve 7% growth level	Commission for Africa (2005) Estimates based on World Bank calculations
11.9% GDP	6.6% GDP capital expenditure plus 5.3% GDP operating expenditure	Africa Infrastructure Country Diagnostic AICD (2008) Analysis based on 22 SSA case studies
9.6%-15% GDP	To fix the infrastructure efficiency gap within one decade; cost to build & maintain new infrastructure, upgrade & maintain old infrastructure	AICD/ World Bank (2010) SSA country-level microeconomic modelling (lower figure is for power & transport only, higher figure includes all infrastructure)

Note: Target is shaded grey.

The estimates set out above range from 9-15% of GDP. The most recent estimates (2010) come from the Africa Infrastructure Country Diagnostic (AICD), a joint AU and World Bank initiative. The calculations are based on country-level microeconomic modelling and are estimated separately for the different infrastructure sub-sectors (ICT, power, transport, and water and sanitation). The target estimates in the table are the average for all sub-Saharan African countries, with 9.6% representing the cost for just the energy and transport sectors, and 15% referring to the infrastructure cost of all sectors, including water and sanitation.

AU governments did not specify an expenditure target when agreeing to increase public expenditures for infrastructure in 2009. They did, however, emphasize the importance of developing

transport and energy infrastructure. On this basis we will use the conservative, lower estimates, for just energy and transportation (9.6%), from the AICD as the implicit target for infrastructure.

4.7 Targets for inclusion in this study

Based upon the discussion above, the actual or implicit targets that will form the basis of analysis for the remainder of this report are summarised in table 11 below.

Table 11: Targets used for the analysis

Sector	Target
Social protection	4.5% GDP (and 2.9%/ 5.2%)
Health	15% Government Expenditure
Education	20% Government Expenditure
Water & sanitation	1.5% GDP
Agriculture	10% Government Expenditure
Infrastructure	9.6% GDP

It should be noted that the analysis in this report examines the targets set out above in relation to current government expenditure and fiscal space, rather than assessing their achievements against these targets, given the fact that some targets were signed after the financial year 2006/ 7 (which forms the basis of this analysis).

5. Public sector spending

This section provides measures of actual expenditure in each of the six key sectors. Sector spending totals are identified from national public expenditure data by using the UN COFOG (Classification of Functions of Government) standards to construct aggregates consistent with the sectoral definitions identified above (see section 3.3 and Annex 4 for details.) This analysis takes into account expenditure financed through government funds and also on-budget donor allocations. Off-budget ODA is analysed separately in section 7.1.

5.1 Size of the public sector

Measured as a percentage of GDP, total government spending (budgeted and actual) varies significantly amongst the case study countries, from a low of 20% of GDP (Uganda) to a high of 30% (Kenya). In four cases, actual spending was lower than budgeted (significantly so in Ethiopia and Kenya); in the remaining two (Malawi and Uganda), spending was slightly higher than budgeted. Budgeted and actual expenditure in millions US$ is set out in table 12 below.

Table 12: Budgeted and actual expenditures in 2006/7 (US$ millions)

	Ethiopia		Kenya		Malawi		Mozambique*		Uganda	
	Budget	Actual	Budget[1]	Actual	Budget	Actual	Budget	Actual	Budget	Actual
					US$ million					
Social Protection	177	176	389	485	63	42	47	54	50	52
Social Protection (excl. civil service pensions)	147	147	101	85	28	14	10	8	8	7
Health	537	416	215	220	158	143	84	70	83	85
Education	503	729	981	745	88	66	264	247	265	210
Water & sanitation		80	128	118	7	7	60	41	57	37
Agriculture	336	277	521	381	167	151	291	228	218	178
Infrastructure	961	990	1,511	1,449	158	133	367	336	411	397
Total govt. exp.	4,926	4,192	8,274	7,297	1,047	923	1,970	1,669	2,341	2,454
Total govt. exp. as % GDP	24.5%	20.7%	33.5%[1]	29.5%	25.9%	26.7%	24.1%	23.8%	19.4%1	20.3%
GDP		20,232		24,725		3,456		7,011		12,077

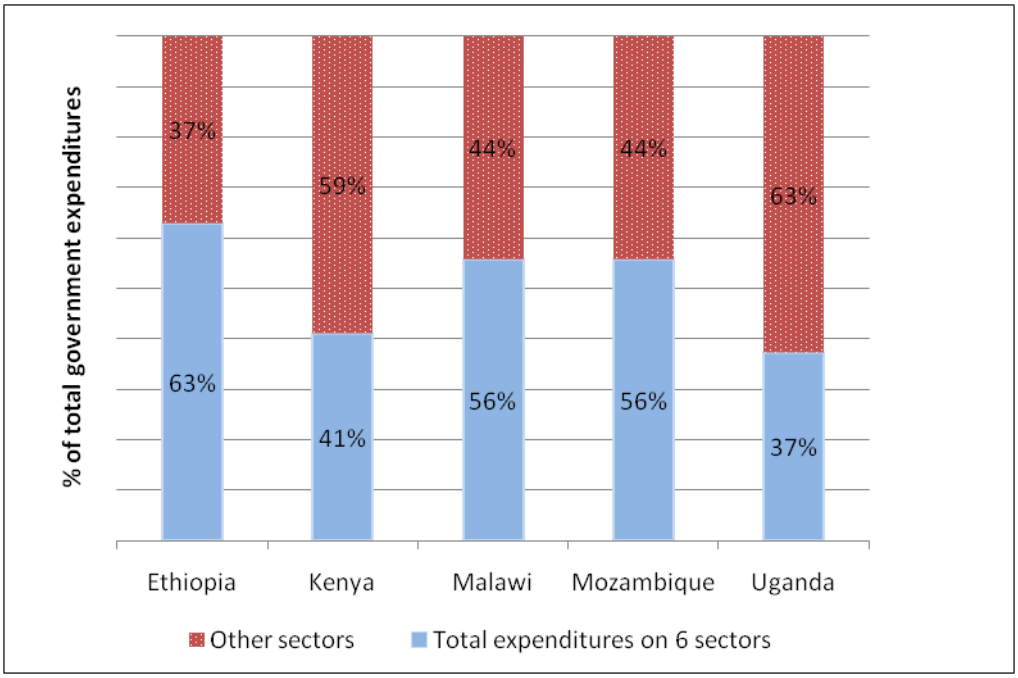
Source: Own calculations based on government budgets and market exchanges rates
Note: B=Budgeted expenditures; A=Actual expenditures
1 Actual GDP used as predicted GDP not available
* Mozambique's financial year is based on calendar years. For the purpose of this analysis, the 2006 budget has been used for 2006/ 7.

This variation in government spending as a percentage of GDP, together with variation in the value of GDP, results in significant variation in the value of targets in real terms. For example the health

target, which is 15% of government expenditures, would cost $1095 in Kenya, a country with relatively high government expenditure and $138 in Malawi, a country with low government expenditure, compared to Kenya.

How governments choose to allocate total public sector spending can vary significantly. Figure 2 shows the range that exists amongst the five countries in the proportion of total government expenditure that they allocate to the six sectors in aggregate. Total spending on these six 'developmental' sectors ranges from a low of 37% of total government spending (Uganda) to a high of 63% (Ethiopia).

Figure 2: Share of government expenditure on 6 sectors in 2006/7



Source: Own calculations based on government budgets

5.2 Budgeted and actual government expenditure

Actual expenditure can differ quite markedly from budgeted expenditure at the sector level as well as the level of total government spending, as illustrated in table 13 below. In all countries except Uganda, actual government expenditure fell short of budgeted expenditure by more than 10%. This may in part be an indication of external donor funds included in the budget which are delayed or no longer available during the course of the financial year. Governments may overestimate the flow of donor resources which will be coming through the budget. Other explanations are lack of absorptive capacity of sector institutions, or problems with disbursement.

Table 13: Actual expenditure as a percentage of budgeted expenditures for the year 2006/7

	Ethiopia	Kenya	Malawi	Mozambique	Uganda
Social protection	98.9%	124.7%	66.9%	115.4%	102.5%
Social protection (w/out civil service pensions & benefits)	99.7%	84.0%	50.1%	74.3%	92.5%
Health	77.4%	102.5%	90.5%	83.3%	102.9%
Education	145.0%	75.9%	75.6%	93.5%	79.2%
Water and sanitation		92.7%	101.5%	67.5%	65.7%
Agriculture	82.4%	73.2%	90.3%	78.2%	81.6%
Infrastructure	103.0%	95.9%	84.1%	91.7%	96.7%
Other	63.3%	86.1%	93.7%	80.9%	119.0%
Total government expenditure	85.1%	88.2%	88.2%	84.7%	104.9%

Source: Own calculations based on government budgets

Across all five countries the most underspent sectors are social protection (excluding civil service pensions), agriculture and water and sanitation. In Ethiopia the agriculture and health sectors suffered particularly from significant underspending. This is related to delays in submitting monthly and quarterly reports (due to lack of capacity and high staff turnover) to the Ministry of Finance, which in turn delay the release of funds[9]. In Malawi, social protection, being a smaller sector and relying heavily on donor expenditures, shows a variance of 50% between budgeted and actual expenditure. Agriculture in Kenya is similarly affected: delayed disbursements, donor conditionality and lack of records on received aid explain lower-than-budgeted actual expenditures (Republic of Kenya, 2010). In Mozambique the water and sanitation and health sectors have lower expenditures than budgeted.

Uganda alone overspent compared to its budget. Factors leading to this outcome may include poor budgeting and / or emergencies[10] (or the receipt of more on-budget donor funding than expected. The infrastructure and water and sanitation sectors in Uganda underspent, due to absorptive capacity in these sectors is low, largely due to project management problems such as procurement (ibid).

[9] D. Zerfu pers. comm.. 2010.
[10] Okudi, pers. comm. 2010.

Differences in size of the economy, the share of public sector spending within this, and the relative allocations to sectors in budgeted and actual spending result in large differences in absolute levels of public spending as expressed as US$ per capita (Table 14).

Table 14: Actual government expenditure by sectors (US$ per capita, 2006/7)

	Ethiopia	Kenya	Malawi	Mozambique	Uganda
	US$ per capita				
Social protection	2	13	3	3	2
Social protection (w/out civil service pensions & benefits)	2	2	1	0	0
Health	4	11	11	11	6
Education	13	39	9	16	13
Water and sanitation	1	3	1	2	1
Agriculture	5	5	10	3	3
Infrastructure	10	20	5	12	7
Total government expenditure	**55**	**164**	**66**	**78**	**83**

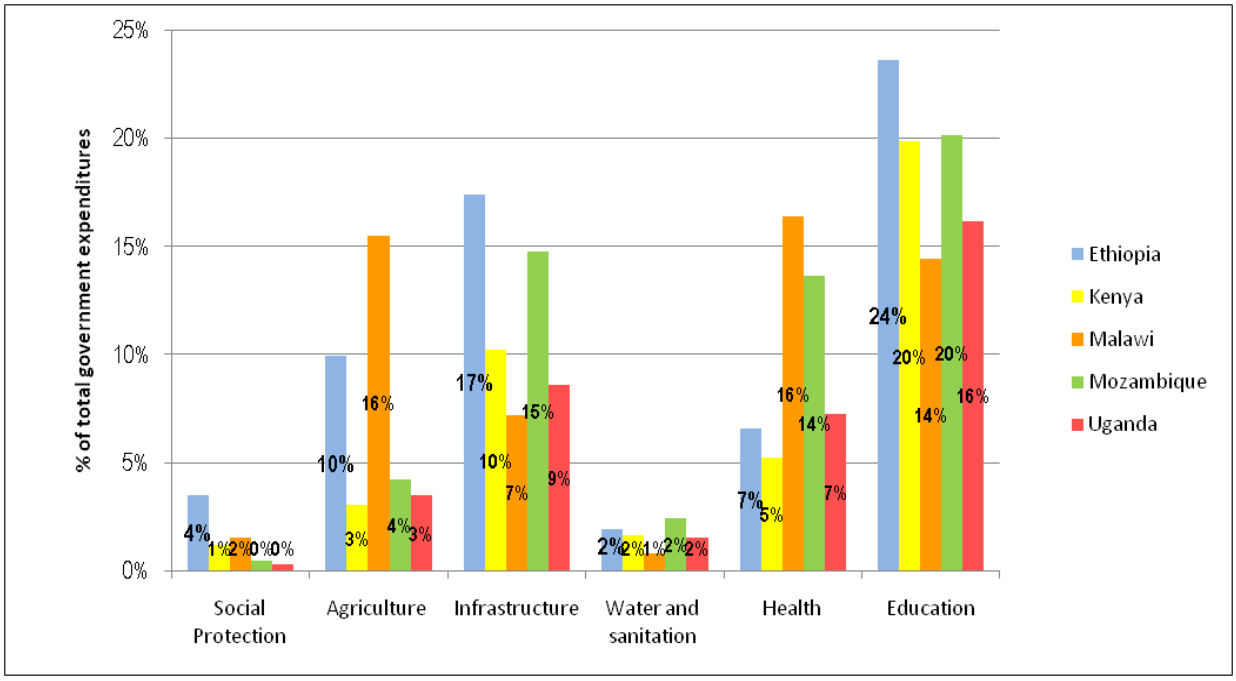
Source: Own calculations based on government budgets and market exchange rates

This table indicates that Kenya is the biggest spender in dollar per capita terms across all sectors, reflecting a larger GDP as well as government preferences, whereas Ethiopia spends the least per citizen. The sector receiving the largest per capita budget is education in all countries but Malawi, receiving between US $13 and US $39 per capita, followed by infrastructure (US $7-20 per capita). Malawi spends the highest per capita amounts on health and agriculture. Water and sanitation and social protection receive the least funding (only US $1-2 on average). With the exception of Ethiopia, contributory civil service pensions and benefits make up the largest share of total social protection expenditure, although this provision is not included in the definition of basic social protection provision used in the analysis in this paper[11].

[11] For example, Kenya spent US $400 million on civil service pensions and benefits and only US $85 million on other forms of social protection.

Figure 3 shows the share of individual sector expenditures as a percentage of total government expenditure in each of the case study countries.

Figure 3: Composition of government expenditure in 2006/7 (by sector)



Source: Own calculations based on government budgets

This figure indicates that out of the six sectors under discussion, education has the highest share of government expenditure, at around 20%, in all countries except Malawi, where health and agriculture receive higher shares and education is only 14%. Infrastructure has the second highest share of government expenditure, at around 15%, in all countries with the exception once again of Malawi. Health generally comes in third place, and water and sanitation and social protection have the lowest share at less than 2% of government expenditure.

In Malawi, agriculture and health have the largest shares, each accounting for around 16% of government expenditure. Agriculture has a major share due to a large food security programme, the Agricultural Input Support Program (AISP), which distributes subsidised fertilizer and seeds. It is interesting to note that this reflects government preferences for agriculturally based social protection programming in Malawi, rather than alternative investment in formal social protection provision in the form of conventional cash transfer based assistance. While according to the sectoral allocations adopted, this is categorised as an agricultural programme, domestically, it may also be perceived as a form of social protection.

Social protection expenditure ranges from 0.5% of total expenditures in Uganda to 4% in Ethiopia. These figures exclude civil service benefits and pensions: contributory pensions are not included in

the social protection sector as defined in this analysis. Including these items would result in different rankings as in some countries (e.g. Kenya) civil service pensions make up largest share of more broadly defined social protection. In Ethiopia, by contrast there are large-scale social protection programmes for the poor, provided under the Productive Safety Net Programme (PSNP), a large cash and food for work programme, which is included in the definition of social protection in this report.

These findings may be compared with an analysis by Weigand & Grosh in 2008 which assesses social assistance expenditure based on Public Expenditure Reviews. Their definition of social assistance extends beyond the basic definition of social protection adopted in this study, also including food aid and some health insurance payments. On this basis, the authors calculate significantly higher shares allocated to social protection than in the current study, with 4.5% of GDP for Ethiopia and 4.4% for Malawi in 2004, compared to 0.7% and 4% of GDP respectively in the current study[12].

The majority of social protection expenditure in Ethiopia is the PSNP. The World Bank estimates that the PSNP accounted for 1.5% GDP for the year 2006, based on IMF GDP data (World Bank 2007). This differs substantially from the 0.7% figure presented here, due to the fact that the sizeable food purchase component of PSNP is off-budget and hence not accounted for in the government budget[13]. We can expect similar underestimates of social protection expenditure in other countries where significant off-budget aid is directed to this sector.

[12] See Annex 3 for a complete data overview on all the countries, including % of GDP.
[13] Wiseman, pers. comm. 2010

6. Expenditure and Targets

This section compares sector specific expenditure to the international expenditure targets and analyses the fiscal implications of meeting targets in each of the six sectors, adopting a range of sensitivity analyses that test different costing scenarios.

6.1 Expenditure Performance Against Targets

Sector-specific expenditure as a percentage of total expenditures and as a percentage of GDP was calculated for all countries and compared with the target levels of expenditure for each sector. The results are set out in Table 15 below.

Table 15: Sector expenditure as a share of total government expenditure/GDP in 2006/7

Sector	Target	Ethiopia	Kenya	Malawi	Mozambique	Uganda
		% government expenditure/ % GDP				
Social Protection	4.5% GDP	0.7%	0.3%	0.4%	0.1%	0.1%
Health	15% Govt. expend.	6.6%	5.2%	16.4%	13.6%	7.2%
Education	20% Govt. expend.	23.6%	19.9%	14.4%	20.1%	16.2%
Water and sanitation	1.5% GDP	0.4%	0.5%	0.2%	0.6%	0.3%
Agriculture	10% Govt. expend.	9.9%	3.0%	15.5%	4.2%	3.5%
Infrastructure	9.6% GDP	3.6%	3.0%	1.9%	3.5%	1.7%

Source: Own calculations based on government budgets
Note: Shading indicates that target has been met

Shading indicates that the target has been met. A similar analysis for 2007/8 indicates that there is no significant variation across the two years in sectoral performance (see Annex 5). The discrepancies between expenditure compared to targets in each of the six sectors are now discussed.

None of the countries approach the social protection target of 4.5% of GDP, with the range being between 0.1 and 0.7% (Ethiopia), indicating that even if the lower bound of the ILO costing is considered (2.9%), there are still significant shortfalls in each country. As noted above, if off-budget

data on PSNP food transfers is included, Ethiopia is closer to the target, but would still only allocate 1.5% of GDP, half the lower bound target of 2.9%.

The health target (15%) is exceeded in Malawi and Mozambique is close to achieving it at almost 14% of government expenditure. However, in the other case study countries less than 50% of the target for health expenditure is met according to official government estimates. Off-budget financing may place a key role in addressing this deficit, although data is not available to confirm the extent of such aid flows in most countries. In Uganda for example it is recognised that some health sector expenditure is financed using off-budget resources, although data is not available to quantify the extent of off-budget financing.[14]

The Education For All (EFA) initiative is a high profile joint donor and recipient country partnership. This target of 20% of government expenditure features prominently in the national policy discourse, and was met in all countries except Malawi and Uganda who allocated 14 and 16% respectively.

The water and sanitation target of 1.5% of GDP was not attained by any of the countries, with countries spending only about a third of the target, or less.

The agriculture target of 10% of government expenditure was almost met by Ethiopia, and exceeded in Malawi by 50%, largely due to the large scale and politically significant agricultural input subsidy programme outlined above, which is known as the 'President's Policy'[15] (). As suggested above this programme could potentially also be classified a social protection programme, and has been selected as a major plank of anti-poverty policy in preference to investment in alternative forms of social protection. If expenditure on the AISP (conservatively estimated at 1.9% of GDP in 2006/7[16]) were classified in this way, Malawi would be closer to meeting its social protection target, while still meeting its agriculture target. The other countries spend around one third of the agriculture target (between 3% and 4.2% of government expenditure).

The infrastructure target of 9.6% of GDP was not met by any country, with spending being at a third of the target or less. The governments of Ethiopia, Kenya and Uganda have significantly increased

[14] Significant expenditure by the Global Fund to Fight AIDS, Tuberculosis and Malaria came on-budget in Uganda in 2010, changing the situation from the 2006/7 scenario.
[15] Miller, pers. comm. 2010
[16] The Logistics Unit estimate a final figure of Kwacha 8,696 million for 2006/ 2007.

infrastructure expenditures since 2006/7[17], although not sufficiently to meet the target. In Malawi this sector features highly in political discourse, but spending has not followed proportionally due to investment bottlenecks, seasonal weather interruptions and the fact that capital allocations are the easiest to cut or delay at times of budget shortages or reallocations (Miller, 2010). This is also illustrated in the previous section, which shows that in Malawi the ratio of actual/budgeted expenditures is low at 84%.

On the basis of this analysis it seems that government expenditure (including on-budget ODA) is not consistent with meeting target levels in any country for social protection, water and sanitation, and infrastructure. The target for health is met in only one country, agriculture in two and education in three. Overall, only 7 of the 30 different country targets are met, and the shortfalls in terms of expenditure are significant in most cases.

It is important to note however, that this analysis includes on-budget donor spending only. As discussed previously, off-budget spending is not included because it is not possible to obtain reliable or consistent estimates of its value or composition. Thus depending on the scale of off-budget spending by country and sector (which may be of a significant scale as in the PSNP example), the foregoing analysis may significantly understate the extent to which overall expenditure (inclusive of off-budget spending) is actually meeting, or even exceeding, the targets. This is particularly a concern in sectors dependant on aid, in which off-budget allocations can make a significant difference in terms of performance against targets. However, since off-budget aid is by definition not considered by national governments in the budgetary process, national governments are not able to assess expenditure performance against targets. The extent to which off-budget aid affects performance is calculated for Malawi and Uganda in section 7.1, as detailed and consistent data is available for these two countries.

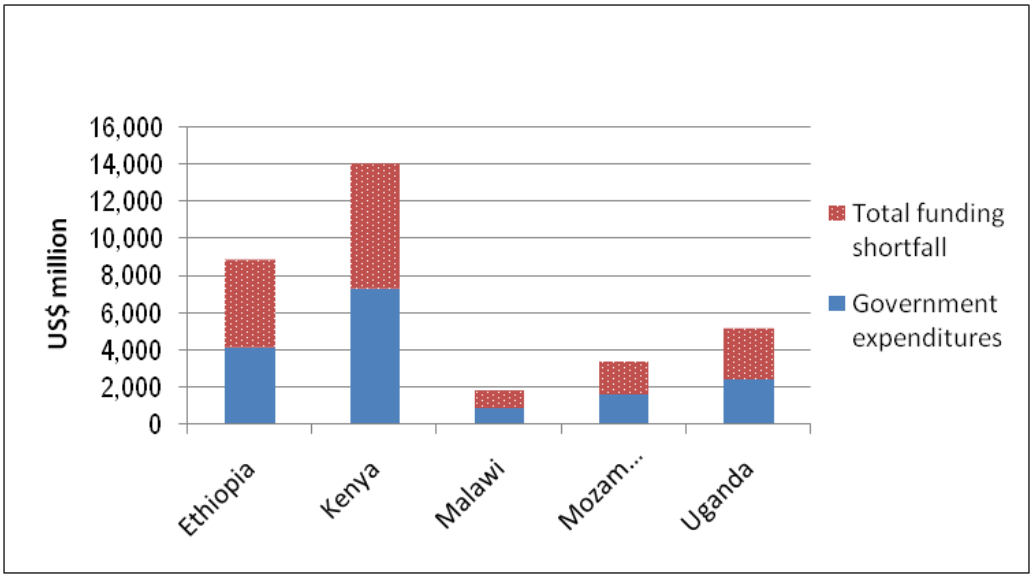
6.2 The Affordability of Targets

In this section the affordability of the development targets is assessed, both collectively and individually. This is assessed by i) calculating the real cost of the targets in US$ by extrapolating from the percentage of GDP or government expenditure, and ii) comparing these target figures with actual government expenditure. Based on these calculations figure 4 below depicts the total funding

[17] For example in Kenya the budget increased from Kshs. 22.8 billion in 2006/07 to Kshs. 32.3 billion in 2007/08, an increase of 42% in just one financial year.

required to meet all 6 sector targets by country, and compares it to total expenditure in the six sectors.

Figure 4: Aggregate funding required to meet all 6 sectoral targets and total actual expenditure in these sectors (2006/7)

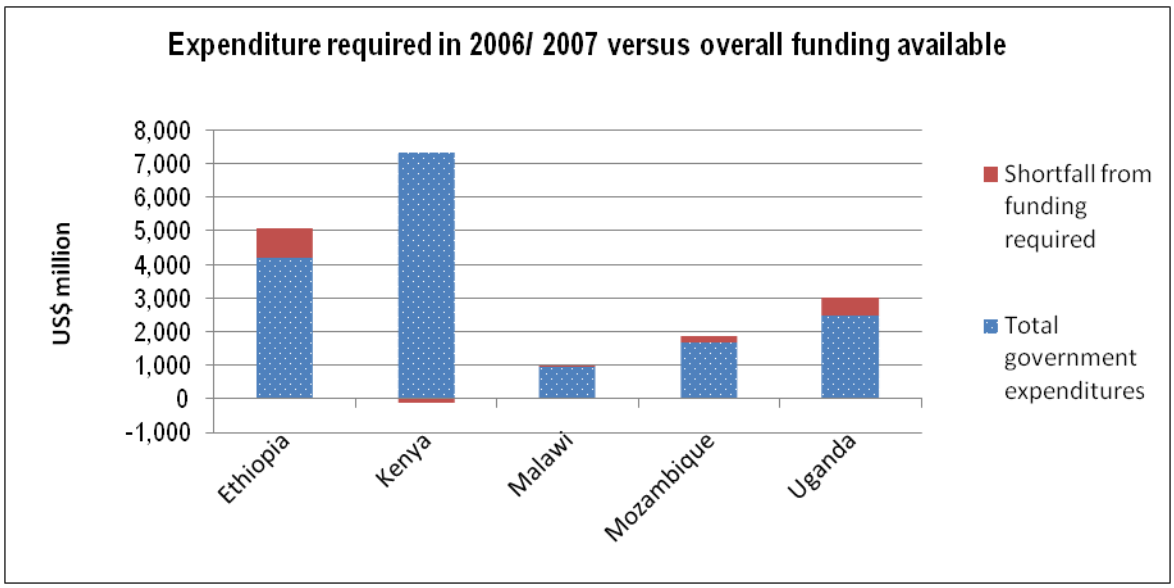


Source: Own calculations based on government budgets
Note: The targets are set as a % of GDP or government expenditure. This means that the gap looks smaller in extremely poor countries (Malawi) and bigger in those which are already spending more per capita (Kenya)

Figure 4 shows that all the case study countries have a funding shortfall if total current expenditure on the six sectors is compared to that required to meet all of the six targets, indicating that with current expenditure levels in these sectors, the targets in aggregate are not achievable in any of the countries. This shortfall ranges from US $924 million in Malawi to more than US $6 billion in Kenya. The large Kenyan shortfall is in part due to the fact that it has a high GDP and hence the targets are commensurately higher than in the other case study countries.

Figure 5 below indicates that even if *all* government expenditure (domestic revenue plus on-budget ODA) were reallocated towards the six sectors, this would not be adequate to meet the six sectoral targets in any country except Kenya.

Figure 5: Aggregate funding required to meet all 6 sectoral targets and total government expenditure in 2006/7



Source: Own calculations based on government budgets

This implies that it would not be possible to fully finance the sectoral targets simultaneously from existing expenditure, even if all government resources were dedicated to their attainment, in any country except Kenya, in which case almost all government resources would be used up in this endeavour, leaving no resources for the other functions of government, clearly not a feasible option. This figure indicates that reallocation is not an option if the range of targets are to be met simultaneously since the total resource envelope does not contain a margin for reallocation, but rather a shortfall in terms of the implied resource demands of the six sectors. The only way to meet all the targets would either to increase government expenditure (though increased revenue or on-budget aid) or through the utilisation of off-budget aid. However, it is important to note that since three targets are linked to government expenditure, the total cost of meeting the targets is itself a moving target: as government expenditure increases, so too do the costs of the targets. Alternatively, if the resource envelope were to be kept constant and any of the targets were to be met, it would be necessary to prioritise the attainment of one or two sectoral targets at the expense of the others – they are not realistically attainable simultaneously.

6.2.1 Sector analysis

Table 16 summarises findings on sector specific costs by country, illustrating i) the cost in real terms of meeting the different sector targets, ii) the estimated cost of financing all six targets in (referred to as 'total commitment cost'), iii) total commitment cost as a percentage of total government

expenditure and iv) a calculation of how much government expenditure would need to increase to meet all the targets simultaneously, while keeping expenditure in other sectors constant.

Table 16: Costs of reaching targets in US$ millions in 2006/7

	Ethiopia	Kenya	Malawi	Mozambique	Uganda
	US$ million				
Social protection	910	1,113	156	316	543
Agriculture	419	602	92	167	185
Infrastructure	1,942	2,374	332	673	1,159
Water & sanitation	303	371	52	105	181
Health	629	902	138	250	278
Education	838	1203	185	334	371
Total commitment cost	5,023	6,540	951	1,838	2,707
Total government expenditure US$ million	4,192	7,297	923	1,669	2,454
Total commitment cost as % gov. exp.	120.28%	97.86%	103.42%	110.54%	121.76%
% increase in govt. exp. required to meet targets, if retaining constant expenditure in other sectors	104.27%	103.22%	86.63%	99.79%	153.63%

Source: Own calculations based on government budgets
Note: Referring to the 4.5% Social Protection target
Note: The % increase in government expenditure required to meet targets assumes that expenditure on other sectors stays constant, so there is no reallocation towards the six sectors discussed here.

Even if all government expenditure were spent on these six sectors, none except Kenya would be able to meet the total target cost. Even in Kenya, meeting the targets would require allocating 98% of total government expenditure to the six sectors. This implies that there is no fiscal space for reallocation of spending in favour of the six targets simultaneously; and if preference were given to realising a target in a particular sector, reallocation would be at the expense of the realisation of other sectoral targets or the other core functions of the state.[18]

[18] A more consistent relationship between i) total commitment cost as a percentage of government expenditure and ii) how much government expenditure would need to increase to meet all targets simultaneously might have been anticipated, given that Ethiopia and Uganda both have similar shortfalls

Given that targets cannot be met through reallocation within existing resource envelopes, reaching the targets will only be possible by a combination of increasing total government funds (achieved by raising more revenue, borrowing, securing more donor funds and / or putting more donor funds on-budget) and reallocation, although the potential for year on year reallocations is limited. Schiavo-Campo and Tommasi (1999) note that the annual 'margin of manoeuvre' is typically no more than 5% of total budgeted expenditure, and committed expenditures to most activities cannot easily be discontinued in the short term. Typically, only a very small percentage of the budget is reallocated on a year-on-year basis. Considering that increasing government funding would increase the targets and the funding required to meet them, government expenditure would need to increase by between 87% (Malawi) and 154% (Uganda) in order to meet the targets, if this approach alone were adopted, whilst retaining expenditure on other functions of government.

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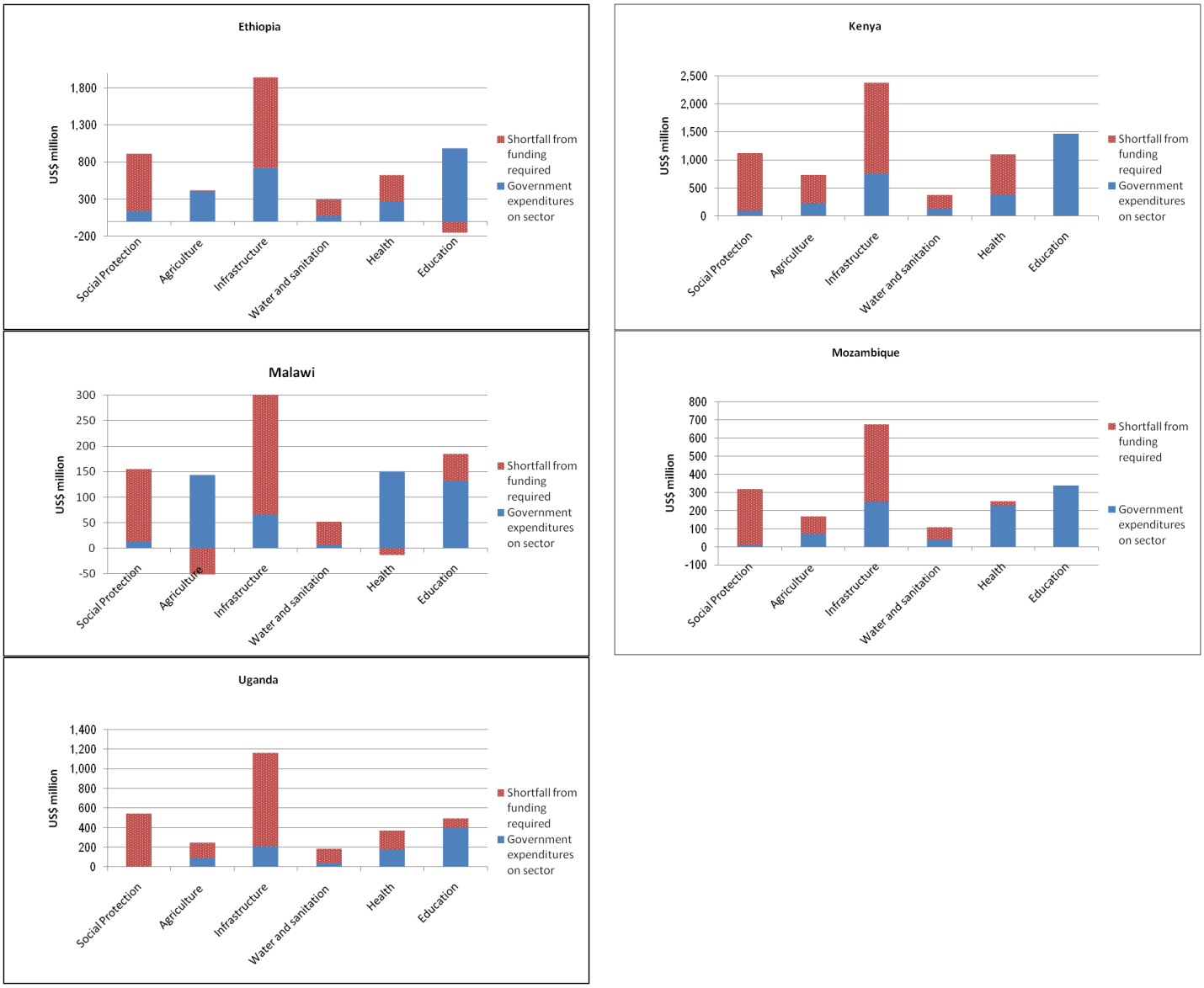
between existing current total expenditure and total commitment (the total commitment cost is 120% of government expenditure in Ethiopia, and 122% in Uganda. However, the percentage increase needed to meet the targets is much bigger in Uganda (154%) than Ethiopia (104%). This is due to the endogeneity loop described above, whereby 3 targets are expressed as a percentage of total spending, and thus increase as the other (GDP-based) targets rise.

6.2.2 Country Level Analysis

This aggregate picture is broken down by country in Figure 6.

Figure 6: Country-specific funding required versus actual expenditure by sector (2006/7)



Source: Own calculations based on government budgets
Note: Y-axis varies between charts

The figure shows that in Ethiopia and Mozambique there is relative 'over-funding' (in relation to the target) of education, while agriculture is 'over-funded' in Malawi, where it is a priority sector, and in Ethiopia there is only a small funding shortfall. The funding shortfall for health is relatively limited compared to the other targets, with Malawi even spending higher expenditures than required by the target. The gap in the required funding level for the social protection sector however is high in all countries, as is the gap relating to the infrastructure sector. Water and sanitation is significantly 'under-funded' in all countries.

6.3 The Social Sector Targets

In order to focus exclusively on the cost of social targets (social protection, health, education and water and sanitation) an analysis was performed comparing the cost of these four targets to actual government expenditure, excluding the agriculture sector, infrastructure sector and both in turn. The results are shown in Table 17 and Annex 6.

Table 17: Cost of reaching social targets, excluding infrastructure and agriculture as % of government expenditure (2006/ 7)

	Ethiopia	Kenya	Malawi	Mozambique	Uganda
Including social protection, health, education, water & sanitation, agriculture, excluding infrastructure					
Total commitment cost as % gov. exp.	73.95%	65.33%	67.47%	70.21%	74.52%
% govt. exp. increase to meet targets, retaining expenditure in other sectors	51.66%	62.64%	34.35%	53.33%	83.33%
Including social protection, health, education, water & sanitation, infrastructure, excluding agriculture					
Total commitment cost as % gov. exp.	110.28%	87.86%	93.42%	100.54%	111.76%
% govt. exp. increase to meet targets, retaining expenditure in other sectors	88.10%	76.60%	81.78%	75.50%	119.95%
Including social protection, health, education, water & sanitation, excluding agriculture& infrastructure					
Total commitment cost as % gov. exp.	63.95%	55.33%	57.47%	60.21%	64.52%
% govt. exp. increase to meet targets, retaining expenditure in other sectors	43.59%	42.26%	37.54%	36.20%	60.46%

Source: Own calculations based on government budgets
Note: The % increase in government expenditure required to meet targets assumes that expenditure on other sectors remains constant, so there is no reallocation towards the six sectors discussed here.

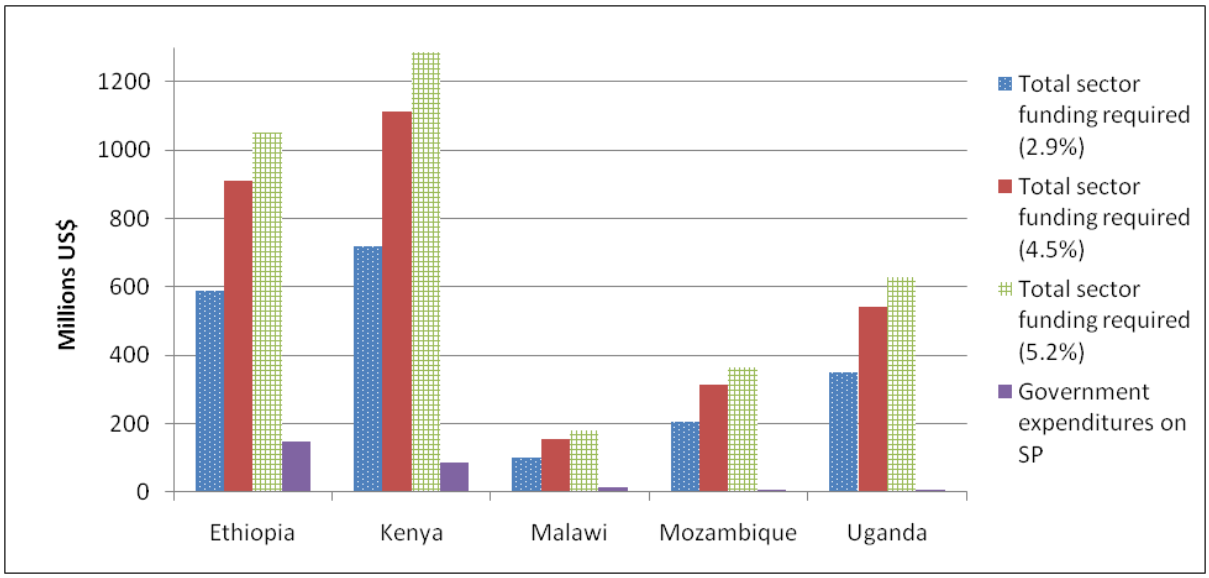
If just the four social sectors are examined, and infrastructure and agriculture are excluded, total commitment costs are less than total government expenditure in all countries, ranging from 55% to 64% of total expenditure, although if spending were kept constant in other sectors, meeting these targets simultaneously would still require significant increase in government expenditure of between 36% and 60%. If agriculture is retained, the total commitment cost is similarly less than total

expenditure, but the increase in government expenditure required if existing spending levels were kept constant in other sectors would be between 34% and 83%.

6.3.1 Social protection

In section 4.1 it was explained that the social protection target is based on an average calculation for all the SSA countries included in the ILO study. For two of the countries, Ethiopia and Kenya, the ILO has estimated the country-specific cost of the provision of a basic social protection package, coincidentally 5.2% in both countries. This is also the upper bound of the ILO's estimates. The lower bound of the ILO's estimates is 2.9%. A sensitivity analysis was performed using all three targets. Figure 7 compares the variance between the funding required for the three social protection targets and actual social protection expenditure, by country.

Figure 7: Total social protection funding required (3 different targets) and actual government expenditure in 2006/ 2007



Source: Own calculations based on government budgets
Note: The % increase in government expenditure required to meet targets assumes that expenditure on other sectors stay constant, so there is no reallocation towards the six sectors discussed here.

For all three bounds of the social protection target, there is a significant shortfall between the total funding required to meet the target and actual expenditure. Even for the lower bound (2.9% GDP), governments are far from meeting the target. The shortfall for the lower bound is obviously smaller than for the higher targets, but still sizeable. The ILO has estimated that the costs of providing a basic social protection package in Kenya and Ethiopia are 5.2%, but these two countries are far from meeting this requirement. Table 18 shows the share of current funding as a share of required expenditure in this sector and how much social protection expenditures would need to increase to meet the target.

Table 18: Social protection expenditure in 2006/7, as compared to target expenditure

	Ethiopia	Kenya	Malawi	Mozambique	Uganda
Current expenditure as share of target expenditure					
Social Protection (2.9%)	25%	12%	14%	4%	2%
Social Protection (4.5%)	16%	8%	9%	2%	1%
Social Protection (5.2%)	14%	7%	8%	2%	1%
% by which social protection expenditure must be increased to meet target					
Social Protection (2.9%)	300%	747%	622%	2527%	4923%
Social Protection (4.5%)	520%	1214%	1021%	3976%	7695%
Social Protection (5.2%)	617%	1419%	1195%	4610%	8907%

Source: Own calculations based on government budgets

The above table shows that current social protection expenditure is a small fraction of targeted expenditure. It ranges from 1% in Uganda for the higher social protection targets to 25% in Ethiopia for the lower target. Expenditure on social protection alone would need to be increased by 300% (Ethiopia) to 4923% (Uganda) for the 2.9% target and 617% and 9907% respectively for the 5.2% target.

Table 19 shows the costs of reaching all six targets, when considering the three different social protection targets.

Table 19: Cost of reaching all targets in 2006/ 2007 as % of government expenditure for different social protection targets

	Ethiopia	Kenya	Malawi	Mozambique	Uganda
2.9% social protection target					
Total commitment cost as % total gov. exp.	112.56%	92.44%	97.43%	103.82%	113.89%
% govt. exp. increase to meet targets, retaining expenditure in other sectors	90.23%	93.37%	75.74%	87.56%	139.32%
4.5% social protection target					
Total commitment cost as % total gov. exp.	120.28%	97.86%	103.42%	110.54%	121.76%
% govt. exp. increase to meet targets, retaining expenditure in other sectors	104.27%	103.22%	86.63%	99.79%	153.63%
5.2% social protection target					
Total commitment cost as % total gov. exp.	123.66%	100.23%	106.04%	113.48%	125.20%
% govt. exp. increase to meet targets, retaining expenditure in other sectors	110.41%	107.54%	91.40%	105.13%	159.89%

Source: Own calculations based on government budgets
Note: The % increase in government expenditure required to meet targets assumes that expenditure on other sectors stay constant, so there is no reallocation towards the six sectors discussed here.

Even when the lower bound social protection target value is adopted, the combined cost of all six targets still exceeds total government expenditure in Uganda, Mozambique and Ethiopia. Government expenditure has to more than double in all countries to meet social protection and the other targets, while keeping expenditure in the other sectors constant.

7. Donor sector allocations

An analysis of the contribution made by donors to the financing of these key sectors and the implications for government resource allocation choices is critical but problematic, and sheds light on the negative financial management consequences at country level of current donor practice. As discussed in the methodology section and in more detail in Annex 4, DAC/CRS data recording donor allocations and government expenditure data are not readily comparable across sectors. It is also not possible to combine DAC/CRS and government budget data, as sector definitions are inconsistent, DAC/CRS data refers to calendar years, as opposed to financial years, and DAC/CRS collects data on on- and off- budget aid without adequate distinction between the two. For these reasons, DAC/CRS data was used in a separate analysis. Since DAC/CRS data cannot be used to show what share of sector financing is donor financed or how much donors are contributing off-budget towards meeting the shortfall between targets and actual expenditures, a separate analysis of how much donors are spending per sector in all countries was carried out, based on DAC/CRS data, and also using government and AIMS inputs.

At the country level, governments capture information about a number of aid-funded projects that will be undertaken in the upcoming year and budget support inputs in their annual budgets. A government's inclusion of aid flows in its national budget is usually limited to aid that is programmed through government systems for the following year or the medium term. This record of on-budget ODA data is more reliable, but less extensive than aid flows documented by DAC/CRS or AIMS, as off-budget aid is not captured. This can be substantial; around 50% of total ODA (see for example Tavakoli and Hedger (mimeo)). Not captured by any of these sources are expenditures by International Non-Governmental Organizations, which can be substantial in some countries.

The DAC/CRS is a 'Creditor Reporting System' database developed and hosted by the OECD that captures information about ODA from the 24 members of the OECD Development Assistance Committee (DAC), the European Commission and a number of other multilateral institutions.[19] The DAC/CRS is designed to provide a comparable database for public analysis on the volumes, purpose

[19] Members are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Korea, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States, and Commission of the European Communities. The World Bank, the IMF and UNDP also participate as observers.

and direction of aid flows. The DAC/CRS intends to capture a broad set of aid data, including some off-budget data, but it does not offer detailed information on aid activity and often aggregates many smaller activities.

In recent years a number of Aid Information Management Systems (AIMS) have been developed at the country level by donors. The most prolific of these provided by third party commercial partners are the Aid Management Platform of Development Gateway, and the Debt and Aid Database of the private company Synergy International systems. A number of similar nationally developed tools have also been implemented in countries such as Mozambique. By presenting detailed information about all aid that is spent in the country - both that which is captured in the government budget and other, 'off-budget' flows - AIMS are designed to provide a comprehensive picture of aid within the national economy, using other tools than governments and OECD. The AIMS focus primarily on current and future projects and are designed to provide transparent and comprehensive information about aid to donors, government and civil society.

For two of the countries in this study, Malawi and Uganda, ODA data is available from all three sources. In the other three countries it was not possible to compare the domestic sector specific expenditures to government-recorded aid, due to lack of specific government-recorded aid data.

7.1 Analysis based on donor and government funds for Malawi and Uganda

Uganda and Malawi are currently aid dependent countries: in both, over 40% of the national budget in 2007/8 was accounted for by aid, including off-budget aid[20]. Both countries receive significant amounts of budget support (7% of budget aid in Malawi and 25% in Uganda) and donor funded projects, all of which is included in the national budget documentation. Despite this, it is estimated that as much as 50% of total donor development financing is delivered 'off-budget' in Uganda (Christiansen et al. 2007).

For both countries, aid data is available from three sources: i) the national budget law and budget documentation; ii) the DAC/CRS database; and iii) country level AIMS. These three types of database record aid from different perspectives, and measure aid using different definitions, but some insights may be gained from examining them in more detail. The first source describes in detail aid that is appropriated by the recipient government for activities that are implemented by a

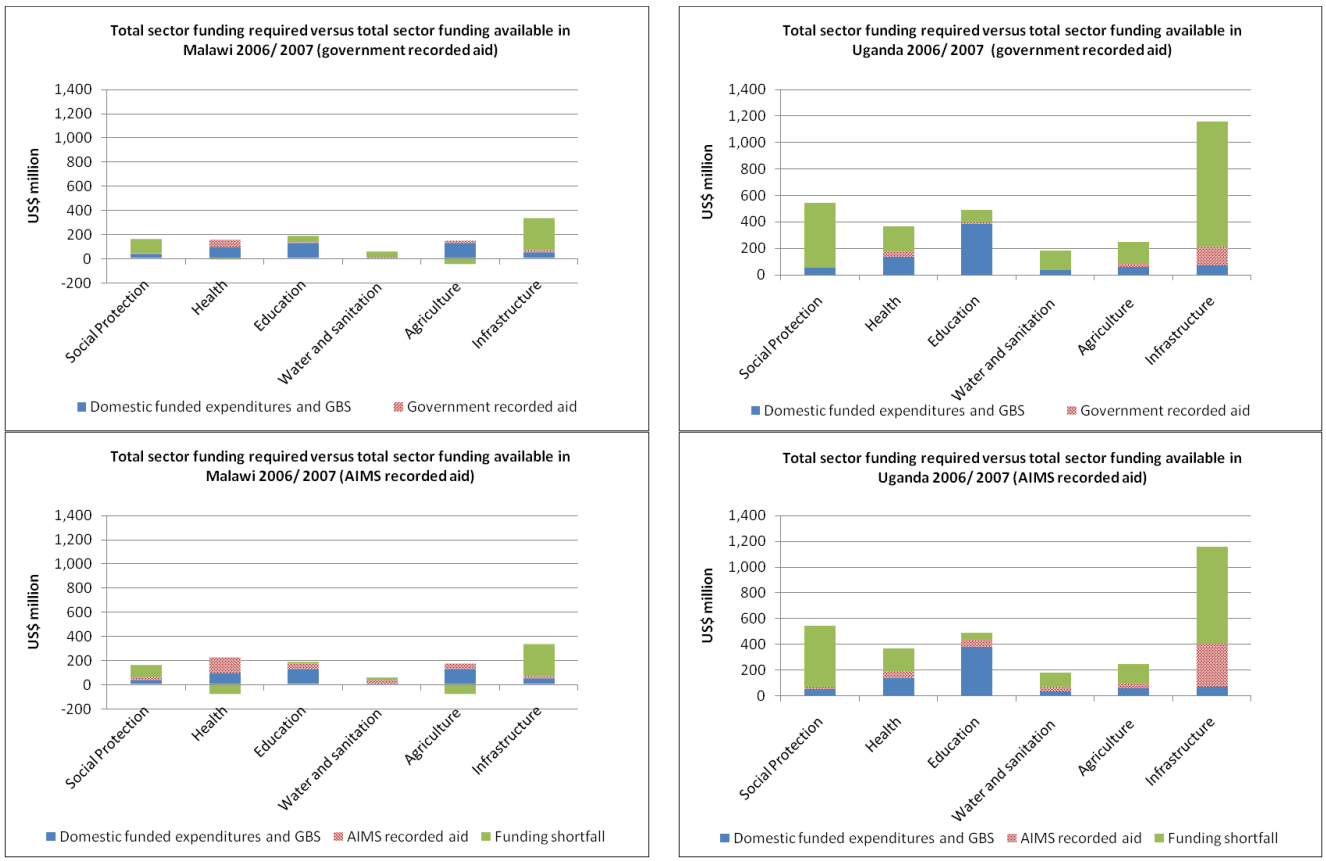
[20] Malawi: Tavakoli and Hedger (mimeo); and Uganda: Ministry of Finance Planning and Economic Development (2008)

government body or implementation unit. The DAC/CRS aid database records all aid expenditures derived from donor sources, not just those that are appropriated by recipient governments. Finally, AIMS includes all aid allocations, but is customised for country use, sourcing data through requests to donors and the government.

The differences between the three approaches mean that significant differences between the aid volumes captured in each are inevitable. For example, government-recorded aid will be lower, as it does not include 'off-budget' aid that is not appropriated by the government. Overall, it is critical for efficient and transparent planning, budgeting and accountability that the full amount of aid that has been spent and is planned for the future, either described in the budget or 'off-budget', is clear to all parties (government, donors and civil society). An examination of data from two of these sources for two countries – Malawi and Uganda - is summarised below, and is presented in more detail in Annex 7.

Figure 8 illustrates the significant discrepancies between the two sets of data, and the implications of using these different sets of data for an assessment of the target financing gap This figure breaks down government expenditure for these two countries into domestically financed and donor financed components, using both government- and AIMS-recorded aid.

Figure 8: Sector funding required versus funding available – sensitivity analysis, Malawi and Uganda



Source: Own calculations based on government budgets/ AIMS

As would be anticipated the financing gap for all targets except agriculture in Malawi is greater when government-recorded data on on-budget aid is used, and less when AIMS data (which includes off-budget aid) is used. In the cases of health and agriculture in Malawi, the available funding including ODA is significantly greater than the required target (for agriculture even without off-budget aid).

However, even when considering off-budget aid, expenditure still falls below target in all sectors in Uganda and for social protection, education, water and sanitation and infrastructure in Malawi. For health and agriculture in Malawi, off-budget aid contributes significantly to spending levels which exceed the targets. In both Malawi and Uganda, off-budget aid reduces the shortfall in spending on infrastructure, but does not enable the target to be met.

7.2 Analysis based on DAC data for all countries

This section shows donor expenditures for all five countries using the DAC/CRS database, which collects data on ODA disbursed by bilateral and multilateral donors, both on- and off-budget. Table 20 shows ODA by sector in 2006.

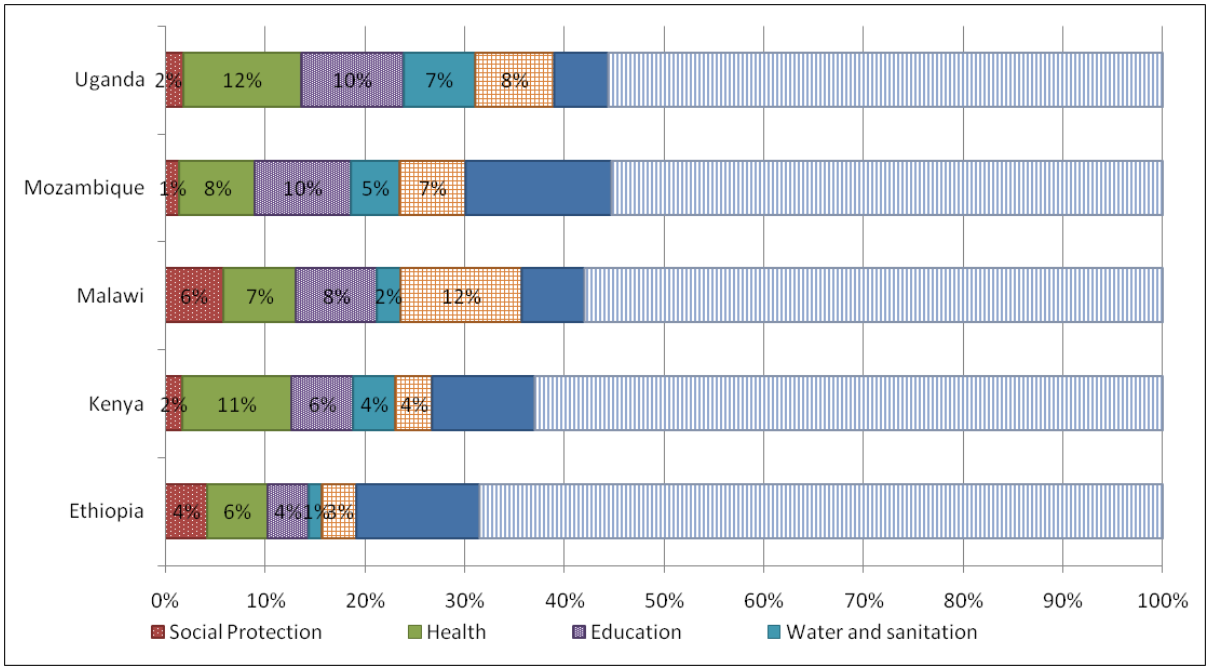
Table 20: DAC/CRS ODA by sector in 2006 (US$ million)

2006/ 2007	Ethiopia	Kenya	Malawi	Mozambique	Uganda
	US$ million				
Social protection	80	13	33	18	22
Health	117	82	42	99	140
Education	235	77	36	191	65
Water and sanitation	26	32	14	63	85
Agriculture	65	28	70	85	94
Infrastructure	78	47	46	124	123
Total aid to all sectors (per capita)	1,910 ($25)	752 ($20)	573 ($41)	1,297 ($61)	1,191 ($40)

Source: OECD, DAC

According to DAC/CRS data, Mozambique receives the most aid per capita and Kenya and Ethiopia receive the least (possibly reflecting the reductions of aid flows to Kenya in 2006/7 discussed above). In absolute terms, the health and education sectors receive significantly greater total aid allocations than social protection and water and sanitation. The actual share of the health sector is even greater, if the health ODA distributed through vertical funds is taken into account. For example aid going through the *Global Fund to Fight AIDS, Tuberculosis and Malaria* may not always be directly counted towards the health sector. Table 9 presents the relative shares of overall ODA by sector.

Figure 9: Share of sector specific aid as share of total aid disbursed in 2006/7



Source: Own calculations based on OECD, DAC
Note: Other sectors include governance, emergency aid, GBS etc.

These six social and economic sectors receive less than 50% of ODA in each of the five countries. Despite the importance placed internationally on agreements and targets to raise expenditure in the key development sectors, and encouragement to developing country governments to do likewise with their own domestic resources, in 2006/7 donors gave more than 50% of aid to other sectors, including general budget support (GBS) (some of which may have been used to finance these sectors), governance and emergency aid. Amongst the six sectors examined, infrastructure receives the highest share of aid in Ethiopia[21] and Mozambique. Health receives the largest sectoral share of aid in Uganda and Kenya, while in Malawi the agriculture sector receives the greatest share of aid, in part due to the large donor-supported fertilizer support programme.

Comparing the shares of DAC aid going to specific sectors, to shares of government expenditure going to the same sectors (see for example in figure 9[22,] or Annex 3) we can see that the priorities of governments and donors are similar. Health and education are receive the most aid and are also amongst the top three sectors in terms of government expenditure. Infrastructure seems to be prioritised slightly more by governments (an average of 12% of total government expenditure and an

[21] For Ethiopia this could be the result of donors classifying PSNP expenditures as infrastructure.
[22] Keeping in mind that this is an imperfect comparison as DAC and government expenditure data are not directly comparable, and that government expenditure already include on-budget donor expenditures.

average of 10% of ODA) and on average social protection receives a higher share in terms of aid (3% of total ODA) than in terms of government expenditure (on average 1.4% in terms of government expenditure).

In 2006/ 2007 total on-budget ODA represented between 3% (Kenya) and 39% (Uganda) of the total costs of the targets (see Annex 3). In section 6.2 it was shown that governments need to increase their expenditure by more than 100% on average if they were to meet the six targets whilst retaining spending on other functions of government. On average on-budget ODA, as captured by DAC data, is around 28% of total government expenditure. If governments wanted to meet its targets (i.e. 100% increase in total expenditure) and the current ODA/ domestic financing division were retained, ODA would need to increase by around 30% and government expenditure by around 70%. It is unrealistic for governments to increase domestic expenditures by 70%, so ODA would need to at least double for the countries to meet the six development targets.

8. Discussion

This study has shown that spending in six key development sectors falls considerably short of the levels set out in internationally agreed targets. In all the SSA countries reviewed, aggregate government allocations to the six sectors fall significantly below the targets set out in international conventions. Analysed by sector, education targets are achieved in three countries (Ethiopia, Kenya and Mozambique), agriculture targets in two (Ethiopia and Malawi) and the health target in one (Malawi). The remaining sectoral targets are not met. The analysis presented above indicates that it is not possible for governments to meet all six targets simultaneously with existing resources, challenging the notion of the absolute 'affordability' of attaining these targets. Even if all government expenditure were re-allocated exclusively to these six sectors, the targets could only be met in one country (Kenya), as the cost of these commitments represents more than 100% of total government expenditure in the other four case study countries. The analysis suggests that this would be the case for most targets even if off-budget ODA were included.

While affordability is a subjective rather than objective term, and is inherently informed by political choices, this analysis makes it clear that political choices are significantly limited by very real fiscal constraints which limit the simultaneous realisation of development targets in the key sectors. In the absence of massive increases in government expenditure and/or donor support, neither of which is foreseeable, these sectoral targets are effectively in competition for extremely limited resources, and could only realistically be achieved at the expense of each other, being mutually exclusive in terms of the fiscal reality in the case study countries.

8.1 Implications for Social Protection Affordability

The implication for the 'affordability' of social protection provision is that although the indicative cost of a basic package of support would cost between 2.9% and 5.2% of GDP, the realisation of this goal is in competition with the realisation of the five other key development sectors in each of the case study countries, and not all goals can be met from available resources. Current expenditure on basic provision in line with SPF objectives is between 0.1% and 0.7% of GDP, see Table 21 below.

Table 21: Current allocations to basic social protection provision

Sector	Target	% GDP				
		Ethiopia	Kenya	Malawi	Mozambique	Uganda
Social Protection	4.5% GDP	0.7%	0.3%	0.4%	0.1%	0.1%

Source: Own calculations based on government budget data

While there is some potential for reallocation from civil service pensions which dominate current expenditure in this sector, and which are often regressive, this approach is not likely for a range of political reasons. While there may be potential to increase financing to this sector through the conventional range of instruments (efficiency savings, reallocation, increased borrowing, increased revenue generation, increased ODA or private sector financing) the social protection sector is in effect in competition with each of the other key development sectors in pursuit of any additional resources, and when considered in aggregate as part of a wider development paradigm, it is clear that meeting all targets is not realistic, and the development vision which underlies them, is challenged, even compromised by the fiscal reality.

8.2 Problematising Current Targets

In addition to absolute affordability, this study raises a number of fundamental questions relating to the current set of sectoral targets. These relate to i) the input nature of targets; ii) how targets should most usefully be quantified (in terms of absolute values, percentage of GDP, or percentage of expenditure); iii) sectoral definition inconsistencies between government and ODA data; and iv) the non-exclusivity of sectoral expenditure. Each of these issues is discussed below.

8.2.1 Input Targets

Of the six international agreements examined in this study, four had targets articulated in terms of financial targets associated with explicit sectoral objectives (health, education, sanitation and agriculture), one (social protection) had an implicit financial target (derived from the ILO costings on the basis of matching provision) and one was not associated with any financing target, and this had to be derived to match the objectives. The extent to which governments or donors should emphasise input, rather than output or outcome targets is debatable. While input targets have a role, since it is impossible to achieve results without allocating adequate resources to their realisation, there are however risks entailed if they are made the focus of monitoring and de-linked from simultaneous monitoring of outputs and outcomes. Over recent decades financial targets have been used as part of the development process to stimulate debate, and concentrate available donor

and national resources on priority sectors, (Fukuda-Parr, 2010). It can be argued that the role of such targets is not to be taken literally, but rather to stimulate progressive reallocation in favour of the provision of key services, with the explicit target figures serving an essentially symbolic or aspirational function.

However when considered collectively, such input targets can easily represent competing demands on a fiscus, and the danger is where silo-oriented activists lobby successfully for the attainment of a particular target, this may be at the expense of the needs of other sectors with a less successful lobby, with allocations to one sector becoming dissociated from the needs of other sectors, and the overall needs of the state, given the inadequacy of the fiscus to simultaneously meet targets in all sectors in many LICs. Similarly, there may be a risk of limiting monitoring to a focus on inputs, rather than outcomes. The critique implied by this paper is that the adoption of input targets could potentially have negative implications for equitable resource allocation and risks promoting a focus on inputs rather than outcomes if such targets are perceived as ends in their own right.

8.2.2 Quantifying Targets

There are different ways that input targets can be quantified. Adopting absolute values for sectoral targets is problematic given the divergence of real costs across different countries. However, setting proportionate targets is also problematic, as targets, which adopt either a percentage of GDP or total government expenditure, result in values which in real terms are much higher in richer countries or countries that have a higher level of government spending. These are typically countries where the level of unmet need, and requirement for large-scale initial capital investments, are both lower – than in very poor countries and countries that collect and spend less money. This results in the perverse conclusion that when proportionate targets are adopted, less money per capita is required to achieve targets in a very poor country than in a richer country, when the reverse is in fact likely to be true, and the real level of investment represented in a poor country may fall far short of the absolute resource levels required to provide a meaningful service.

Some of the input targets examined in this paper are expressed as a percentage of GDP and others as a percentage of government spending. Given significant variation between countries in terms of both revenue collection and government expenditure, differences in the denominator used for proportionate input targets will result in further inter-country variation in terms of how input targets translate into absolute spending levels per capita.

For fiscal targets to have a meaningful role in the allocation and management of limited resources towards public policy ends, nationally determined targets linked to outcomes may be more

appropriate. Such targets would require a calculation of the level of unmet need in relation to target provision, and the derivation of an empirical definition of unit costs specific to the characteristics of the national population. This would be determined by, inter alia, levels of existing provision, levels of historical capital investments and existing institutional capacity, costs for importing capital inputs (higher for a land-locked country), climate (affecting disease factors, potential agricultural productivity, rate of depreciation of infrastructure such as rural roads); landscape (it is much more expensive to provide electricity to sparsely-populated, mountainous populations); and so on.

8.2.3 Sectoral definition inconsistencies

The report highlights the lack of consistency in definition of the components of sector spending between governments, and also between government and ODA databases. This renders the derivation of robust and comparable estimates of aggregate sector spending problematic. This problem is particularly pronounced with regard to social protection, a category of public action and public spending for which definitions still vary considerably. This problem is compounded by the prevalence of 'off-budget ODA' which is not easily analysed in terms of its sectoral composition, but represents significant additional aid flows, often directed at the provision of key development sector activities.

8.2.4 Non-exclusivity of sectoral expenditure

Finally, investment in one sector may result in benefits accruing in another due to the interplay between the targets, with for example, investment in social protection resulting in improvements in health and education outcomes (due to increased take up of services, improved nutrition etc), or investment in water and sanitation improving health and reducing demand for primary health care provision. Similarly there may be other cross-sectoral policies, with for example the Agricultural Input Subsidy programme in Malawi leading to significant 'socially protecting' outcomes, with benefits in terms of improved household nutrition amongst others, although it is not considered conventionally as a social protection programme. Hence the distinctions between sectors may not always be clear, and allocations may contribute to more than one target, resulting in an underestimation of spending towards individual targets in this analysis. Recognising the potential mutuality of sectoral interests, inasmuch as cash transfers can contribute to improved health and education outcomes, and that social protection is a means to achieve a range of developmental outcomes also represents a challenge in relation to a silo, rather than a multi-sectoral approach to development financing.

8.3 Target Financing Options

8.3.1 Reallocation

Some unmet targets could in theory be met from current levels of aggregate spending by a process of reallocation from other sectors. In most cases however, spending outside these six sectors is not sufficient to meet target shortfalls: making up the shortfall in one of the target sectors would render the deficit in the remaining sectors even more pronounced. In addition, the potential for the reallocation of government spending is in practice very limited, with only a 5% margin of manoeuvre considered feasible on a year-on-year basis (Schiavo-Campo & Tommasi, 1999). It is not evident that the large scale budgetary reallocations that meeting one or more additional targets would imply, would be politically feasible, nor desirable in the short term.

Decisions over expenditure allocations are inherently part of the domestic political process and represent policy preferences. Political concerns may thus override developmental policy objectives. Attempts to influence reallocation of expenditure between competing development priorities must contend with the 'reality' of both formal and informal political pressures. Despite the ready identification of potential efficiency gains or the preference for increased emphasis on a particular sector, the influence of domestic political constituencies will often dominate decision-making. The 'politics' of public financial management in many developing countries is such that the formal budget process often bears imperfect relation to the reality of budgetary decision-making and expenditure allocation (Santiso, 2007). For example, strongly client list political systems may distort the profile of expenditure in favour of sectional interests and patronage networks.

Even where prospective fiscal space can be identified through efficiency gains or discontinuation of low-priority / poorly-performing programmes, the executive may lack the political commitment to pursue reallocation. Purely technocratic calculations of fiscal space and fiscal flexibility disregard the political dimension of decision-making around the budget.

8.3.2 Increasing ODA

Given the limitations to reallocation and efficiency gains, if governments aimed to meet the six targets simultaneously, significantly larger budgets would be required. In order to achieve such increases in aggregate spending either domestic revenue collection, ODA volumes or national debt would need to be increased. However, ODA would need to double to achieve the input targets for these six sectors. In the current environment of fiscal consolidation in donor countries, such a significant increase is extremely unlikely in the short to medium term. Even if aid flows were to

increase by this magnitude – and if there were no disbursement or absorptive capacity constraints on donor and government institutions, respectively - a proportionate gain in aggregate (domestic plus external) financing for the target sectors could not be assumed, because of the problem of fungibility.

8.3.3 The Private Sector

An assumption underlying this discussion of government or donor spending targets seems is that services should be provided and paid for exclusively by the state. There may be scope for engaging with non-state actors in provision as a complement to public provision where government budgets are constrained, although the private provision of health and education services is often controversial, primarily in that it makes it more likely that such services are only available to those who are able pay. However, the potential contribution of the private sector to the realisation of some of the sectoral outcomes examined in this report should not be overlooked; for example the private or voluntary sectors may have roles to play in the financing and delivering of services for example, in infrastructure development, if there is a viable market, and facilitative regulatory environment.

8.4 Public finance and ODA management implications

8.4.1 Public finance management

These questions raised by this study relate to basic principles of public financial management, and ODA management. For long-term development, decisions on how much revenue is raised and spent, and how, need to be rooted in processes that emphasise a strategic vision, coherence across sectors, and domestic accountability. By contrast, sector input targets can result in silo-based spending decisions which can undermine effective public financial management. This analysis raises wider questions about the value of international targets for specific development goals. In practice, such targets can represent a form of special pleading by sectoral interests, which may be realised at the expense of investment in other sectors with less efficient advocates. However, more importantly, since the achievement of all the targets simultaneously is not fiscally feasible, striving to reach these targets may not be consistent with realistic and credible public financial management and is likely to create a tension between those in both government and the donor community whose concern is overall fiscal integrity, and those working to attain specific sectoral allocations.

The analysis and management of public finances is often conceptualised at three levels; i) the macroeconomic (considering the level of taxation and public spending in the economy as a whole);

ii) focusing on the allocation between sectors; and iii) considering the efficiency of spending within a given sector or for a given objective. Internationally-agreed or mandated input targets address level two of this analysis, but ignore levels one and three. Thus while internationally-agreed sector spending targets are not the root cause of existing problems with public financial management in developing countries, they both reflect and perpetuate these pathologies. While the intention behind the introduction of such targets reflected a desire to direct limited public resources away from spending on items seen to lack developmental value (e.g. defence and security, general administration, tertiary education), the collective impact of target proliferation is likely to be at best minimally positive, and at worst potentially unhelpful. The report highlights the tension faced by governments between the need for good public financial management on the one hand, and the challenge of meeting international commitments on the other, raising the impossibility of meeting the key development spending targets simultaneously.

8.4.2 Donor Practices

Good practice in public finance management argues strongly for predictable expenditure plans linked to government policy priorities; for a credible budget that ensures consistency between appropriation and execution; and for budget comprehensiveness so that all government revenues and expenditures are included in a single budgeting process and subject to (annual) appropriation by parliament. The fact that such a high proportion of donor spending is off-budget may undermine these objectives.

Another dimension of donor behaviour that bears on public financial management and the expenditure allocation decisions of governments in many developing countries is the unpredictability and volatility of aid flows. Unpredictable aid contributes to unpredictable sector allocations of government expenditure and total expenditure. Unless aid is planned for and delivered in alignment with budgets, it is likely to undermine this cycle of accountability between government and the citizenry.

In most developing countries budget transparency is weak and the cycle of accountability is fragile[23], and the potential of aid to disrupt planning and accountability is considerable, particularly in highly

[23] See the Open Budget Index (2008) for the largest cross country examination of the openness of national budgets and the impact on accountability. www.openbudgetindex.org/

aid dependent countries. Part of the problem relates to the short term nature and/or unpredictability of aid flows, which may be subject to disruption depending on shifts in donor aid preferences. ‘Off budget’ aid represents a significant further challenge. While some aid is programmed in partnership with the recipient government and in line with the national development plan, a significant proportion is often delivered ‘off budget’, without government partnership or a clear links to development plans. Poor information on aid programming means that recipient governments must make budgetary decisions based on partial, inaccurate, and sometimes unreliable information, and this risk undermining the integrity of the budget cycle. International agreements set out principles and practical actions towards better alignment of aid to recipient country requirements, but the implementation of these actions is currently imperfect and still in its infancy. In addition, where much government revenue is derived from aid rather than taxes, governments can be under pressure to direct expenditure in line with donor programming preferences rather than domestic priorities.

Given the unavoidable overall financing shortfall, the key question becomes prioritisation of the use of existing resources and the opportunity cost of programming outside these sectors. For donors, all of whom too face resource constraints, the critical discussion is the choice of whether funds should be allocated to social protection or one of the other sectors, while for governments the question is, given there will never be 'enough' funds, what are they going to achieve with what they have, and how can they use efficiency gains or new approaches to achieve more with the inadequate resources available. Shorter and long-term objectives are also going to vary between donors and governments and funding and priorities should be aligned to achieve maximum results with given spending.

9. Conclusion

Largely at the behest of the international community, developing country governments have signed up to a growing number of targets. While input targets can serve as lobbying mechanisms which sectoral interest groups (domestic and external) can use to influence donor and government financial commitments to their sector, it is clearly not possible for all such lobbies to be satisfied simultaneously given that total current government expenditures are well below the level necessary for a country to meet all of the targets. To meet one target through sectoral re-allocation is possible only at the expense of other competing sectors, which are also regarded as priorities and which have their own, internationally agreed spending targets.

In this study, none of the case study countries (Ethiopia, Kenya, Malawi, Mozambique and Uganda) are close to meeting the full set of targets to which their governments have subscribed. In most of the case study countries, most of the targets are in effect unachievable. Education and agriculture are the best funded sectors and social protection the worst in proportional terms, with spending on social protection representing on average only 9% of the target value. Even if all government resources were diverted to these six sectors in the case study countries, the targets could only be met in Kenya. In other countries, increases of up to 22% in government expenditure would be required to finance just the six sectoral targets (assuming that nothing was spent on budget items outside these six priorities). Governments would therefore need significantly larger budgets if they were to simultaneously meet these targets. The absolute resource constraint remains an open question in the case study countries, given the lack of transparency regarding 'off-budget' ODA, which represents a major challenge to good public financial management, and is a major area for potential improvements in donor practice.

If the targets cannot be met through reallocation within current levels of public spending, the alternative is to increase the total resource envelope available to government through increased revenue collection and / or increased flows of external assistance. However, increased revenue generation is not easily achieved in countries with a small domestic tax base, especially when economic growth is slow. How to increase government revenues in developing countries is a major research area in its own right. At the same time, there are limited prospects for a major increase in aid flows as donor nations seek to reduce public spending in the aftermath of the global economic crisis which have resulted in large fiscal deficits within OECD economies.

This study has not focused on outcomes of government or donor expenditure, but instead government expenditure targets and actual spending. An input target can help to alert policy makers

in developing countries and donor partners that additional funds need to be committed to make it possible to achieve development targets. Expenditure targets can be inspiring and can help to improve accountability. However, focussing on expenditure, whether expressed in absolute or relative terms, is not without its pitfalls. There is a fundamental, philosophical problem with all spending-based targets which measure inputs (expenditure) on the implicit assumption that outputs and outcomes rise in a predictable relationship to inputs. In reality, while the input of finance is clearly necessary to achieve results, the relationship is far from predictable. Progress towards ultimate outcomes (such as poverty reduction) depends not only on the commitment of funds to a given sector but also on context (for example, the breadth and depth of poverty and causes underlying it) and the quality of institutions in translating budgets into tangible service delivery outputs.

Input targets have a role to play in i) motivating greater effort in revenue generation (within the boundaries of sound macroeconomic policy) and ii) encourage governments and donors to prioritise spending by reallocating from low to high-priority sectors within existing budgets. While such targets can serve as useful lobbying mechanisms, spending targets should be taken 'seriously but not literally' (Wood, 2004): that is primarily as a guide and motivation for raising and spending public finance. This report does not conclude that such targets should be dropped, but it does caution against the argument that particular sectoral targets are inherently 'affordable' in any objective sense.

Often it is claimed that developing country governments lack the political will to allocate resources to some sectors. However, this study suggests that the inadequacy of public expenditure in key sectors is also informed by the inherent impossibility of simultaneously meeting the range of international commitments to which developing counties are signatories. One conclusion which could be drawn is that while outcome targets and agreements can serve as useful lobbying mechanisms for sector specific allocations, development priorities and appropriate funding allocations should be set at the national level, and without the pressure of generic sectoral expenditure targets defined at the international level. While activity is taking place in each of the sectors, on the basis of progressive realisation, is it important to reflect that the costs associated with achieving these sectoral targets are not, under current global conditions, likely to be met, and the sectoral outcomes anticipated targets will remain aspirational.

When an overview of the financing requirements of the six sectors is made, as in this paper, it becomes clear that there are no grounds for a realistic expectation that the six development targets agreed across these sectors can be realised in the medium term, due to binding fiscal constraints

Not all international targets are affordable simultaneously, and affordability remains essentially a question of political choice over the allocation of scarce and ultimately inadequate resources. Given the unavoidable overall financing shortfall, the key question becomes prioritisation of the use of existing resources, the opportunity cost of programming outside these sectors and non priority or ineffective use of resources within the sectors.

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Annex 1: Data sources and sector definitions by country

Ethiopia

Sector	Sector description
Social protection	Productive Safety Net Programme (PSNP). We have included PSNP because it is implemented as a social protection instrument, not an emergency instrument. Pensions excluded from main analysis
Health	Health
Education	Education/ Education & training
Water and sanitation	Water and sanitation
Agriculture	Agriculture & natural resources Less PSNP
Infrastructure	Road construction Transport & Communication Urban devt & housing (urban roads) Energy

Data source: Audited budgets Ministry of Finance/ DFID country office

Kenya

Sector	Sector description
Social protection	Special Programmes (part of Manpower & Special programmes) Orphan and Vulnerable Children (OVC) programme Pensions excluded from main analysis
Health	Ministry of Health Service providers of Kenyatta National Hospital, Kenya Medical Research Institute (KEMRI), Kenya Medical Training College, Kenya Medical Supplies Agency, Moi Teaching and Referral Hospital National Hospital Insurance Fund.
Education	Ministries of Education, Science & Technology Science & technology could not be excluded
Water and sanitation	Water and sanitation is part of the Physical Infrastructure sector provision of water and sanitation may also be part of the integrated programmes of basic social service promotional activities of other ministries
Agriculture	Agriculture, Livestock and Fisheries Development is part of the Productive Sector
Infrastructure	Roads and Public Works ICT, Energy development Transport

Data source: Audited budgets Ministry of Finance/ DFID country office

Malawi

Sector	Sector description
Social protection	Pensions and Gratuities excluded from main analysis A number of projects administered by the Ministry of Local Government including 'Income Generating Public Works' and 'Poverty Reduction and Institutional Support'. The Ministry of Persons with Disability and the Elderly. Malawi Council for the Handicapped – a Parastatal organization that government provides a grant to. The Ministry of Gender, Child Welfare and Community Services The 'Malawi Social Action Fund' (MASAF) – an AfDB and World Bank Project which government makes a counterpart contribution to. The project 'Combat Child Labour' at Ministry of Labour
Health	Nutrition, HIV/AIDS and National AIDS Commission. The Ministry of Health. Support that is allocated to the Health Sector at Local Authorities. A number of Parastatal organizations including: Pharmacy, Medicine and Poisons Board Kachere Rehabilitation Centre (Physio-therapy) Nurses and Midwife Council and Medical Council of Malawi (which were merged into the Health Service Regulatory Authority in 2007/08) grants to local assemblies for health
Education	The Ministry of Education, Science and Technology (with Department of Science and Technology) excluded. Allocations to the education sector at Local Assembly level. All tertiary Education Institutions The Scholarship Fund and Student Trust Fund which subsidize Tertiary Education for Malawians. The Malawi National Examination Board and Malawi Institute of Education Projects relating to Vocational Education at the Ministry of Labour
Water and sanitation	The development projects that relate to Water and Sanitation at the Ministry of Irrigation and Water Development. Recurrent expenditure on programmes related to Water were also included. Allocations to the development of water supply at Local Assembly level.
Agriculture	The Ministry of Agriculture and Food Security (Input Subsidy Program and also purchases of crops aimed at alleviating hunger should there be a food shortage. The development projects that relate to Irrigation at the Ministry of Irrigation and Water Development. Recurrent expenditure on programmes related to Irrigation were also included. Projects that related to agri-business at the Ministry of Local Government. Projects relating to the development of Fish-Farms which were administered by the Ministry of Natural Resources in 2006/07. Allocations to the Agricultural Sector at Local Assembly level. Forestry
Infrastructure	A number of projects at the Ministry of Local Government including construction of Primary School teacher's Houses, localized road projects, and construction of markets. The Ministry of Transport, Public Works and Housing Road Fund Administration and Roads Authority Development Projects related to Energy at the Ministry of Natural Resources, Energy and Mines. Allocations made to Local Authorities for the rehabilitation of Roads World Bank infrastructure project administered by the Ministry of Planning (Infrastructure Services Project, ISP) which cuts across sectors (e.g. Roads, Water, Irrigation) but is mostly infrastructure.

Source: Ministry of Finance

Mozambique

Sector	Sector description
Social protection	Ministry of Women and Social Action National Institute for Social Action National Commission for Social Reintegration Provincial Directorate of Women and Social Action Provincial Delegation of National Institute for Social Action Provincial Commission for Social Reintegration Transfer to Families (Central and Provincial Level), these are mainly pensions and excluded from main analysis There is no reliable data on the Social Security Institute, which consequently had to be excluded from the analysis
Health	Ministry of Health HIV AIDS Council Provincial Directorate of Health Provincial Hospital General Hospital Maputo City Hospital Central Hospitals Maputo Central Hospital Psychiatric Hospital General Hospital Health Sciences Institute
Education	Ministry of Education National Commission for UNESCO Distance Learning Institute Scholarship Institute Provincial Directorate of Education University - Delegação da Universidade Pedagógica University - Instituto Superior Politécnico University - Universidade de Lúrio University - Universidade Zambeze University - Universidade Eduardo Mondlane University - Universidade Pedagógica University - Instituto Superior de Relações Internacionais University - Instituto Superior de Contabilidade e Auditoria University - Escola Superior de Jornalismo National Investigation Fund Ministry of Science and Technology and Regional Centre for Science and Technology could not be excluded
Water and sanitation	Water Administration Authority – South and Centre Water Investment and Asset Fund Water Council The share of water expenditures from the Ministry of Public Works could not be calculated and is excluded from the analysis
Agriculture	Ministry of Agriculture Provincial Directorate of Agriculture Cotton Institute Cashew nut Institute Sugar Institute Agrarian Investigation Institute Agriculture Promotion Center Training Institute on Land Mapping and Management National Mapping Center Agrarian Development Fund Fishery

Infrastructure	Ministry of Public Works & Housing Provincial Directorate of Public Works State Real-estate Agency - Provincial and central level Road Fund Engineering Laboratory Ministry of Energy Ministry of Transports and Communications Provincial Directorate of Transports and Communications

Source: Mariam Umarji

Uganda

Sector	Sector description
Social protection	018 Ministry of Gender, Labour and Social Development 501-850 District Women, Youth and Disability Councils Grants Public pensions excluded from main analysis
Health	H014 Ministry of Health 107 Uganda Aids Commission(Statutory) 114 Uganda Cancer Institute 115 Uganda Heart Institute 116 National Medical Stores 134 Health Service Commission 151 Uganda Blood Transfusion Service (UBTS) 161 Mulago Hospital Complex 162 Butabika Hospital 163-175 Regional Referral Hospitals 501-850 District NGO Hospitals/Primary Health Care 501-850 District Primary Health Care 501-850 District Hospitals
Education	013 Ministry of Education and Sports 132 Education Service Commission 136 Makerere University 137 Mbarara University 138 Makerere University Business School 139 Kyambogo University 140 Uganda Management Institute 149 Gulu University 111 Busitema University 501-850 District Primary Education including SFG 501-850 District Secondary Education 501-850 District Tertiary Institutions 501-850 District Health Training Schools
Water and sanitation	019 Water Directorate, Ministry of Water and Environment (expenditures for Rural water supply and sanitation, Urban water supply and sanitation, Water for production, Water resources management) 019 Environment Directorate, Ministry of Water and Environment 501-850 District Water Conditional Grant
Agriculture	010 Ministry of Agriculture, Animal Industry and Fisheries 142 National Agricultural Research Organisation (NARO) 152 National Agricultural Advisory Services (Secretariat) 155 Uganda Cotton Development Organisation 160 Uganda Coffee Development Authority 501-850 District Agricultural Extension 501-850 National Agricultural Advisory Services (Districts) 501-850 Non-Sectoral Conditional Grant Forestry

Infrastructure	*Budget items relating to Roads and transport* 016 Ministry of Works and Transport 113 Uganda National Roads Authority (UNRA) 113 Trunk Road Maintenance 118 Road Fund 501-850 District Road Maintenance 501-850 Urban Road Maintenance 113 Transport Corridor Project *Budget items relating to energy* 017 Energy Fund (includes petroleum) 017 Ministry of Energy and Mineral Development (wage and non-wage (operations) component for energy) *Budget items relating to Information & Communications Technology* 020 Ministry of Information and Communication Technology

Source: Ministry of Finance/ DFID country office

DAC budget lines used

Sector	DAC Budget Lines
Social protection	Social welfare services: CRS code 16010 Employment policy and administrative management: CRS code 16020 Social mitigation of HIV/AIDS: CRS code 16064
Health	Health: DAC 5 Codes 120-130
Education	Education: DAC 5 Codes 110-114
Water & sanitation	Water Supply and Sanitation: DAC 5 Code 140
Agriculture	Agriculture: DAC 5 Code 311-313
Infrastructure	Transport and Storage: DAC 5 Code 210 Communications: DAC 5 Code 220 Energy Generation and Supply: DAC 5 Code 230

Annex 2: The targets and declarations

Sector	Statement	Web link
Social protection	Social Policy Framework for Africa (2008) Social protection and social security will be built gradually, based on comprehensive longer term national social protection action plans. [...]There is an emerging consensus that a minimum package of essential social protection should cover: essential health care and benefits for children, informal workers, the unemployed, older persons and persons with disabilities.	http://www.un.org/esa/socdev/egms/docs/2009/Ghana/au2.pdf
Health	Abuja Declaration on HIV/ Aids, Tuberculosis and Other Infectious Diseases (April 2001) In addition, WE PLEDGE to set a target of at least 15% of our annual budget to the improvement of the health sector.	http://www.un.org/ga/aids/pdf/abuja_declaration.pdf
Education	Financing and FTI Trust Funds These goals include: ensuring all children are in school, achieving gender parity, and committing 20% of a government's national budget to education – of which 50% should be allocated to primary education.	http://www.educationfasttrack.org/about-fti/faqs/financing-and-fti-trust-funds/
Water & sanitation	The eThekwini Declaration (February 2008) To establish specific public sector budget allocations for sanitation and hygiene programs. Our aspiration is that these allocations should be a minimum of 0.5% of GDP for sanitation and hygiene	http://www.wsp.org/UserFiles/file/eThekwiniAfricaSan.pdf
	Sharm El-Sheik Commitments for Accelerating the Achievement of Water and Sanitation Goals in Africa (July 2008) Raise the profile of sanitation by addressing the gaps in the context of the 2008 eThekwini Ministerial Declaration on sanitation in Africa adopted by AMCOW [...] prepare national strategies and action plans for achieving the MDG targets for water and sanitation over the next seven (7) years. [...] Significantly increase domestic financial resources allocated for implementing national and regional water and sanitation development activities	http://www.unsgab.org/news/docs/080701_AUDeclarationSeS.pdf
Agriculture	Conference of Ministers of Agriculture of the African Union Report of the Ministers of Agriculture in Maputo (July 2003) To this end, we agree to adopt sound policies for agricultural and rural development, and commit ourselves to allocating at least 10% of national budgetary resources for their implementation within five years	http://www.africa-union.org/News_Events/Calendar_of_%20Events/AGRICULTURE/Report-MinistersofAgri%20july%201-2%20%202003.pdf
Infrastructure	Assembly of the African Union 12th Ordinary Session Decisions, Declarations, Message of Congratulations and Motion Increase public financing of infrastructure and promote public-private partnerships to speed up the development of transport and energy infrastructure	http://www.africa-union.org/root/ua/conferences/2009/jan/summit_jan_2009/doc/conference/assembly%20au%20dec%20%20208-240%20%28xii%29.pdf

Annex 3: Comprehensive budget overview per country

Ethiopia	2006/ 2007 budget	2006/ 2007 actual	% actual/ budget	Actual as % GDP	Actual as % total expenditures	Target	Gap (in %)	Gap (in US$ million)
Sector-specific expenditure in US$ million								
Social protection	177	176	99%	0.9%	4.2%	4.5% GDP	3.6%	735
Social protection (excl. civil service pensions & benefits)	147	147	100%	0.7%	3.5%	4.5% GDP	3.8%	764
Health	336	277	82%	1.4%	6.6%	15% expenditures	8.4%	142
Education	961	990	103%	4.9%	23.6%	20% expenditures	-3.6%	952
Water and sanitation		80		0.4%	1.9%	1.5% GDP	1.1%	224
Agriculture	537	416	77%	2.1%	9.9%	10% expenditures	0.1%	213
Infrastructure	503	729	145%	3.6%	17.4%	9.6% GDP	6.0%	109
Other sectors	2,411	1,525	63%	7.5%	36.4%	na	na	na
Total expenditure in US$ million								
Domestic resources		2,732		14%	65%	na	na	na
External on-budget resources		1,460		7%	35%	na	na	na
Total resources	4,926	4,192	85%	21%	100%	na	na	na
Indicators related to targets								
Total cost of meeting 6 targets (US$ million)		5043		25%	120%	25% GDP	12% GDP	4,371
Total cost of meeting 6 targets/ total expenditure		120%		na	na	na	na	na
Total on-budget aid/ total cost of meeting 6 targets		29%		na	na	na	na	na

Kenya	2006/ 2007 budget	2006/ 2007 actual	% actual/ budget	Actual as % GDP	Actual as % total expenditures	Target	Gap (in %)	Gap (in US$ million)
Sector-specific expenditure in US$ million								
Social protection	389	485	125%	2.0%	6.7%	4.5% GDP	2.5%	627
Social protection (excl. civil service pensions & benefits)	101	85	84%	0.3%	1.2%	4.5% GDP	4.2%	1028
Health	521	381	73%	1.5%	5.2%	15% expenditures	9.8%	348
Education	1,511	1,449	96%	5.9%	19.9%	20% expenditures	0.1%	925
Water and sanitation	128	118	93%	0.5%	1.6%	1.5% GDP	1.0%	253
Agriculture	215	220	102%	0.9%	3.0%	10% expenditures	7.0%	875
Infrastructure	981	745	76%	3.0%	10.2%	9.6% GDP	6.6%	715
Other sectors	4,530	3,898	86%	15.8%	53.4%	na	na	na
Total expenditure in US$ million								
Domestic resources		7,109		29%	97%	na	na	na
External on-budget resources		188		1%	3%	na	na	na
Total resources	8,274	7,297	88%	30%	100%	na	na	na
Indicators related to targets								
Total cost of meeting 6 targets (US$ million)		7141		29%	98%	29% GDP	17% GDP	7,532
Total cost of meeting 6 targets/ total expenditure		98%		na	na	na	na	na
Total on-budget aid/ total cost of meeting 6 targets		3%		na	na	na	na	na

Malawi	2006/ 2007 budget	2006/ 2007 actual	% actual/ budget	Actual as % GDP	Actual as % total expenditures	Target	Gap (in %)	Gap (in US$ million)
Sector-specific expenditure in US$ million								
Social protection	63	42	67%	1.2%	4.6%	4.5% GDP	3.3%	113
Social protection (excl. civil service pensions & benefits)	28	0	0%	0.4%	1.5%	4.5% GDP	4.1%	156
Health	167	151	90%	4.4%	16.4%	15% expenditures	-1.4%	-59
Education	158	133	84%	3.8%	14.4%	20% expenditures	5.6%	199
Water and sanitation	7	7	101%	0.2%	0.8%	1.5% GDP	1.3%	45
Agriculture	158	143	90%	4.1%	15.5%	10% expenditures	-5.5%	-5
Infrastructure	88	66	76%	1.9%	7.2%	9.6% GDP	7.7%	118
Other sectors	405	380	94%	11.0%	41.2%	na	na	na
Total expenditure in US$ million								
Domestic resources		667		19%	72%	na	na	na
External on-budget resources		256		7%	28%	na	na	na
Total resources	1,047	923	88%	27%	100%	na	na	na
Indicators related to targets								
Total cost of meeting 6 targets (US$ million)		954		28%	103%	28% GDP	13% GDP	7,532
Total cost of meeting 6 targets/ total expenditure		103%		na	na	na	na	na
Total on-budget aid/ total cost of meeting 6 targets		27%		na	na	na	na	na

Mozambique	2006/ 2007 budget	2006/ 2007 actual	% actual/ budget	Actual as % GDP	Actual as % total expenditures	Target	Gap (in %)	Gap (in US$ million)
Sector-specific expenditure in US$ million								
Social protection	47	54	115%	0.8%	3.2%	4.5% GDP	3.7%	261
Social protection (excl. civil service pensions & benefits)	10	8	74%	0.1%	0.5%	4.5% GDP	4.4%	308
Health	291	228	78%	3.2%	13.6%	15% expenditures	1.4%	-61
Education	367	336	92%	4.8%	20.1%	20% expenditures	-0.1%	337
Water and sanitation	60	41	68%	0.6%	2.4%	1.5% GDP	0.9%	65
Agriculture	84	70	83%	1.0%	4.2%	10% expenditures	5.8%	180
Infrastructure	264	247	93%	3.5%	14.8%	9.6% GDP	6.1%	87
Other sectors	858	694	81%	9.9%	41.6%	na	na	na
Total expenditure in US$ million								
Domestic resources		1,184		17%	71%	na	na	na
External on-budget resources		485		7%	29%	na	na	na
Total resources	1,970	1,669	85%	24%	100%	na	na	na
Indicators related to targets								
Total cost of meeting 6 targets (US$ million)		1845		26%	111%	27% GDP	13% GDP	800
Total cost of meeting 6 targets/ total expenditure		111%		na	na	na	na	na
Total on-budget aid/ total cost of meeting 6 targets		26%		na	na	na	na	na

Uganda	2006/ 2007 budget	2006/ 2007 actual	% actual/ budget	Actual as % GDP	Actual as % total expenditures	Target	Gap (in %)	Gap (in US$ million)
Sector-specific expenditure in US$ million								
Social protection	50	52	102%	0.4%	2.1%	4.5% GDP	4.1%	492
Social protection (excl. civil service pensions & benefits)	8	7	92%	0.1%	0.3%	4.5% GDP	4.4%	536
Health	218	178	82%	1.5%	7.2%	15% expenditures	7.8%	68
Education	411	397	97%	3.3%	16.2%	20% expenditures	3.8%	762
Water and sanitation	57	37	66%	0.3%	1.5%	1.5% GDP	1.2%	144
Agriculture	83	85	103%	0.7%	3.5%	10% expenditures	6.5%	283
Infrastructure	265	210	79%	1.7%	8.6%	9.6% GDP	7.9%	281
Other sectors	1,257	1,495	119%	12.4%	60.9%	na	na	na
Total expenditure in US$ million								
Domestic resources		1,283		11%	52%	na	na	na
External on-budget resources		1,172		10%	48%	na	na	na
Total resources	2,341	2,454	105%	20%	100%	na	na	na
Indicators related to targets								
Total cost of meeting 6 targets (US$ million)		2988		25%	122%	25% GDP	18% GDP	1,665
Total cost of meeting 6 targets/ total expenditure		122%		na	na	na	na	na
Total on-budget aid/ total cost of meeting 6 targets		39%		na	na	na	na	na

Annex 4: A Comparison between COFOG, DAC/CRS and target sectoral definitions

COFOG and DAC/CRS

In order to ensure consistency across the countries common standards are adopted for each sector, also conforming to the targets outlined in Section 4, and national budgets are reclassified according to a set of international sectoral standards, based on the Classification of Functions of Government (COFOG). COFOG is the UN standard associated with the Government Financial Statistics standards, a family of classifications developed and used by the IMF as guidelines for public financial management. COFOG splits expenditure data into ten "functional" groups or sectors of expenditures; general public services; defence; public order and safety; economic affairs; environmental protection; housing and community amenities; health; recreation, culture and religion; education; and social protection. COFOG does not have an infrastructure sector, so this sector has had to be created outside the COFOG framework. While no countries use COFOG for national budgeting purposes, most report government expenditure to the IMF using the Government Finance Statistics classification system, which adopts the COFOG sector classifications.

The DAC Creditor Reporting System (DAC/CRS) which provides a standard description of aid sectors is adopted for on-budget ODA analysis. The DAC/CRS was developed by the OECD to monitor the composition of ODA flows, and records data on the sectors to which aid is directed using 'purpose codes'. Most (but not all) major donors, including the World Bank, report their ODA to DAC which synthesises the data and reports it on the through CRS.

The COFOG and DAC/CRS categories are not aligned, and the financial year definitions they adopt are not consistent, making comparability of donor and government spending using these two standards problematic. In order to address this problem, this study analyses these two sources of data independently, rather than trying to combine them, since this would generate errors of unknown magnitude.

COFOG and target sector definitions

The differences between COFOG and the target sector definitions are outlined in Table 22 below. In the case of i) infrastructure ii) social protection and iii) water and sanitation it was necessary to slightly adjust the sector definition, while a new infrastructure category was created as COFOG does

not include infrastructure as a separate sector. The specific budget lines included by sector for each country are listed in Annex 1.

Table 22: Comparison between COFOG and Target Sector Definition

Sector	COFOG definition	Target sector definition
Social protection	Disability benefits Old age benefits Family and children Unemployment benefits R&D social protection Social protection not elsewhere classified Sickness benefits Survivors benefits Housing Social exclusion not elsewhere classified	Disability benefits Old age pensions (non-contributory) Child grants Public works programme/income insurance for 100 days[24]
Health	Health care	As in COFOG
Education	Education, excluding science & technology	As in COFOG[25]
Water & sanitation	Water supply	Water and sanitation
Agriculture	Agriculture Fishing and hunting Forestry	As in COFOG
Infrastructure	Sector does not exist	Energy Transportation (including roads) Communications/ ICT Other infrastructure

[24]We have only included those public works programmes specifically labelled as such and did not include road maintenance programmes or the like. Reconstruction after a disaster/ emergency was not included in social protection, as this is often not clearly defined as public works and often included in infrastructure without allowing for disaggregation.

[25] In some countries, namely Kenya, Malawi and Mozambique school feeding is included with education. This is a benefit targeted at children and could also be classified as social protection, but since we were not able to disaggregate this in all countries, we have decided to adhere with COFOG.

COFOG is designed specifically to describe the activities government undertakes, is familiar to most countries, and is used by a majority of countries for reporting annually on government expenditure to the IMF. As a result it is an appropriate starting point to examine government expenditure in a cross-country study. COFOG represents country sector and organisational classifications fairly well at aggregated levels, but at the lower levels of the classification tends not to disaggregate the functions of government in the same ways or to the same degree as many governments do.

The DAC/CRS purpose codes provide sectoral analysis of aid flows, but are not designed to link to sectors used by country governments and the research in Moon (2010) shows limited comparison between the DAC/CRS standard and existing national budget structures. The DAC/CRS has naturally evolved to become more granular in areas where donors are more active. In some sectors this has tended to align with government, such as in education activities, in others it has tended to develop in parallel to government, such as health. The DAC/CRS codes can be a useful resource for aligning with recipient budgets in a sector such as education and defence where the classifications are fairly similar, but in other sectors it is difficult to draw commonalities between the DAC/CRS and country defined sectors giving it limited use for aid and budget analysis or comparison exercises at the country level.

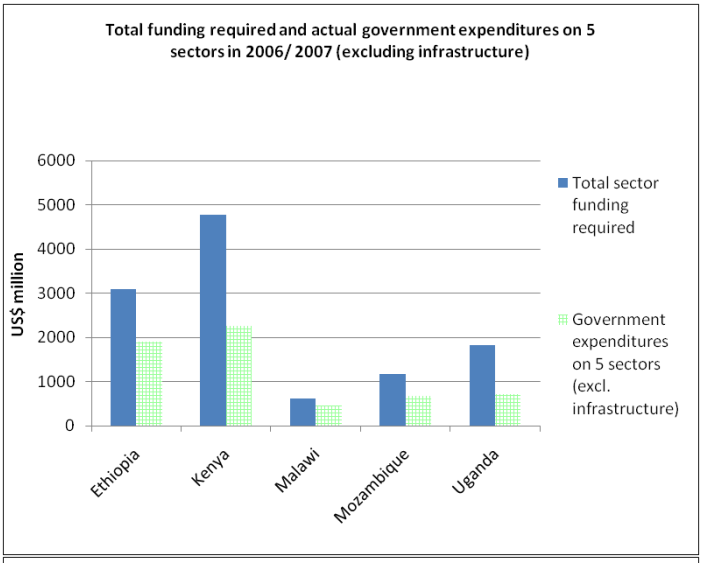
To arrive at a common definition that enables cross country comparison of national budgets, particularly of the sectors that have a less clear and common definition, requires an approach that carefully examines the composition of the sectors at ministry and department level. The social protection sector in particular is approached in very different ways by governments. Pensions and other transfers are particularly significant, and are often quite a politicised expense within the budget. As a result they can often be under the mandate of central ministries such as finance and or the Prime Minister's office, or as a separate pension fund administered outside the national budget. Services for youth, women and other social areas may be grouped together, may be located in unique ministries or may not be explicitly identified depending on the leadership decisions. COFOG is the best starting point for describing government structure in a cross-country analysis generally, and social protection is clearly defined within the classification. However, the evidence shows that neither sector definitions at the national level, nor the various international agreements on social protection have a definition that strictly aligns with COFOG.

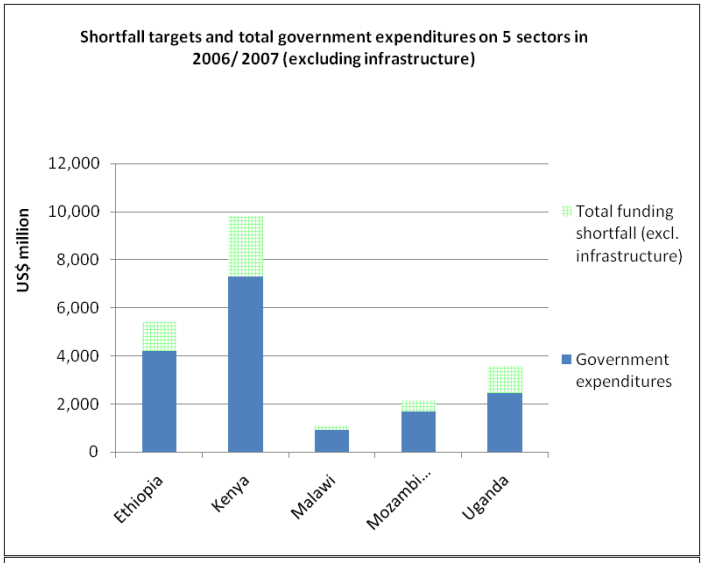
Annex 5: Targets 2007/ 2008

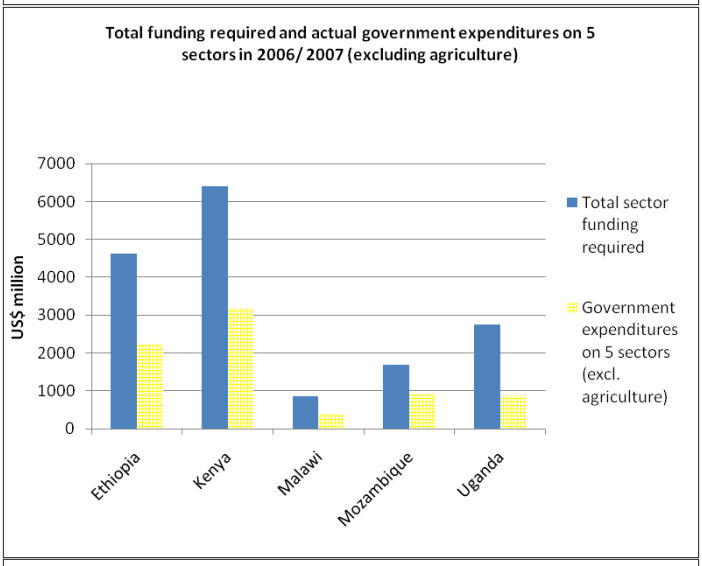
Country	Target	% gov expend/ % GDP				
		Ethiopia	Kenya	Malawi	Mozambique	Uganda
Social Protection	4.5% GDP	n.a.	1.7%	1.3%	0.8%	0.4%
Social Protection (w/out civil service pensions & benefits)	4.5% GDP	n.a.	0.4%	0.4%	0.1%	0.1%
Health	15% Gov. expend.	n.a.	5.5%	19.7%	13.3%	5.6%
Education	20% Gov. expend.	n.a.	19.6%	15.3%	21.6%	15.3%
Water and sanitation	1.5% GDP	n.a.	0.4%	0.2%	0.5%	0.3%
Agriculture	10% Gov. expend.	n.a.	3.7%	16.6%	3.5%	3.6%
Infrastructure	9.6% GDP	n.a.	3.8%	2.4%	3.5%	1.5%

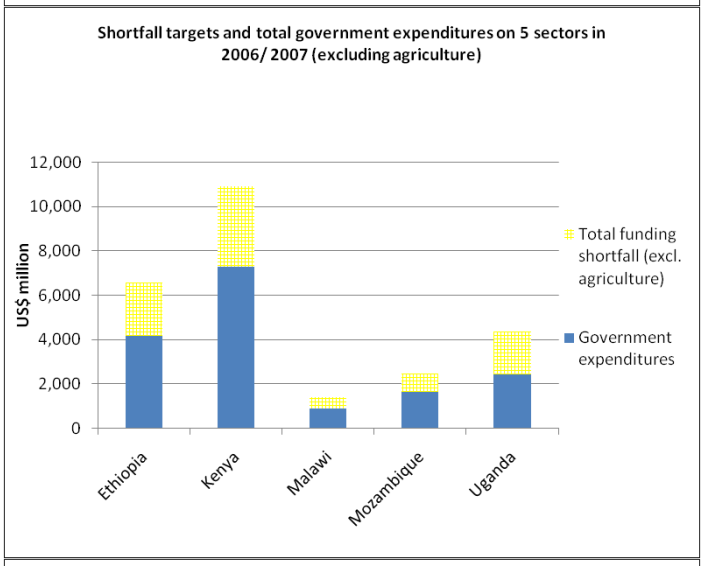
No shading indicates that expenditure is below the target, and shading that the target has been met.

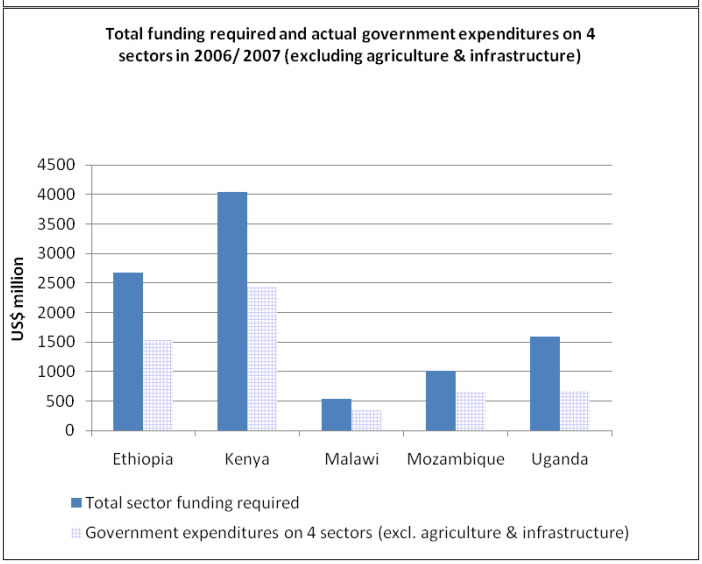
Annex 6: Sensitivity analyses

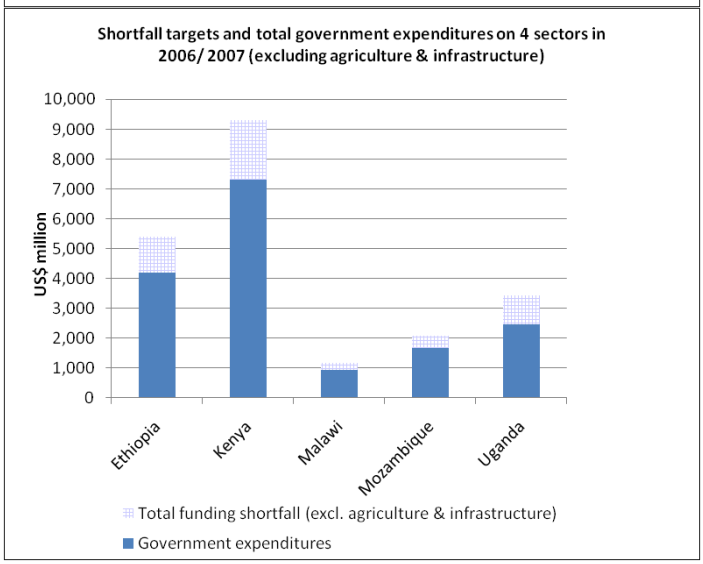








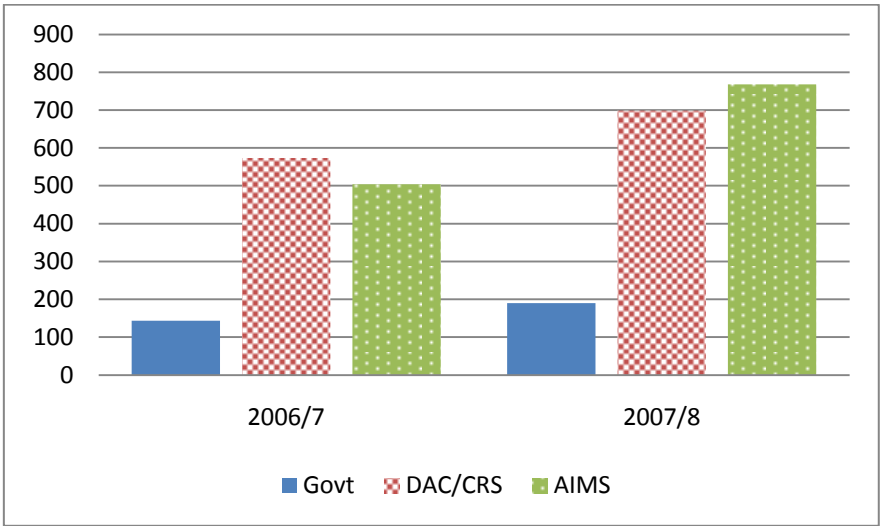




Annex 7: Aid sensitivity analysis

Malawi introduced an AIMS in 2008 using the Aid Management Platform (AMP) software[26] which has collected information on aid from donor country offices and regularly produces data and analysis, some of which is publically available. Uganda currently has no AIMS, although a project examining the donor division of labour in the country in 2007[27] developed an early framework for an AIMS database and populated it with data from donors and government. The collection donor data and population of the database was not continued beyond the timeframe of the project, but the data provides the best country level attempt to comprehensively capture donor development expenditures in the country. Figure 10 and Figure 11show the difference in the total volume of aid captured by the three tools, the national budget, the DAC/CRS and the AIMS in each country. The sources include all project aid and budget support.

Figure 10: National budget DAC/CRS and AMP calculations for total aid volumes in Malawi (US$m)

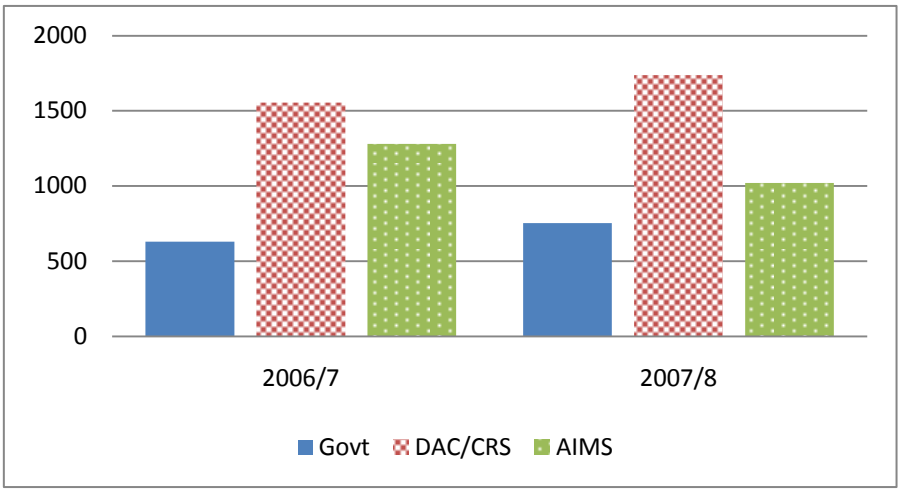


Source: Authors calculations from Malawi National Budget, DAC/CRS database and AMP sources

[26] The AMP is one of the major AIMS products used globally and is developed by Development Gateway. www.developmentgateway.org

[27] Internal ODI documents

Figure 11: National budget DAC/CRS and AMP calculations for total aid volumes in Uganda (US$m)



Source: Authors calculations from Uganda National Budget, DAC/CRS database and Aid Map sources

Total Aid

The DAC/CRS database has a benefit of time to collect and verify data from donors as it is compiled ex-post. However, being ex-post, this information is not available until over a year after the money has been spent. The national budget data is by nature ex-ante of expenditure and is the primary annual planning document in these countries. The AMP and Aid Map also collect ex ante aid information and some during the course of the financial year. The volume of aid that is not captured in the national budget of each country is significant in and the implications of this are discussed to some extent in section 7.1 and in several other studies[28]. However, these graphs expose some more interesting findings relating to the specific nature of the database tools themselves. In Malawi, the AMP was introduced in 2007, and during its second year had developed greater experience and effectiveness in collecting aid information[29]. Either the DAC of the AMP demonstrate a huge percentage of aid is delivered off budget. While the AMP is a government tool, and as such informs the government in real time about the extra-budgetary aid activity, it is only just beginning the process of integrating with government budget systems and classifications. As this process continues, the information available to the governments will become more relevant to the planning process and overall coordination of aid and government expenditure will be better enabled.

[28] For more explicit detail the literature on this issue includes CABRI (2007) Aid on Budget Synthesis Report; Moon and Williamson (2010) Greater Aid Transparency: Crucial for Aid Effectiveness; Moon and Mills (2010) ODI Working Paper 317: Practical Approaches to the Aid Effectiveness Agenda.

[29] This is substantiated by discussions with the AMP and Malawi Ministry of Finance staff.

In Uganda, the Aid Map was compiled as a snapshot, rather than an updated database, in 2007 and carried actual expenditure data for 2004/5-2005/6 and indicative data for the following two years. As a result, the data displayed in this table for 2006/7 and 2007/8 is projected. This fact explains the increasing gap between the Aid Map total and the DAC/CRS total: predictability of aid flows diminishes in the later years of projections as donors have yet to formulate projects and commit money. The Aid Map data was exhaustively reformatted to align with the government sector and administrative classifications, providing a valuable tool for a more comprehensive and inclusive planning process. With such poor aid predictability however, credible medium term planning is significantly undermined. Lack of interest and funding to continue updating the database annually led to the project never moving beyond a snapshot examination.

Sector Specific Project Aid

These tools are measuring some, but not all of the same aid flow data for different reasons and sourced from different actors. Figure 12 and Figure 13 below demonstrate the calculation of sector specific project aid by sector in the government budget, DAC and AIMS databases. To make the analysis comparable, the tables use the papers methodology for defining social protection and the other sectors and apply this definition to the extract the relevant set of aid flows. Applying the definition is in some cases an inexact exercise as the available detail of activities in each database is not always comprehensive enough to make a precise sector definition. Best estimates are taken where there is some uncertainty.

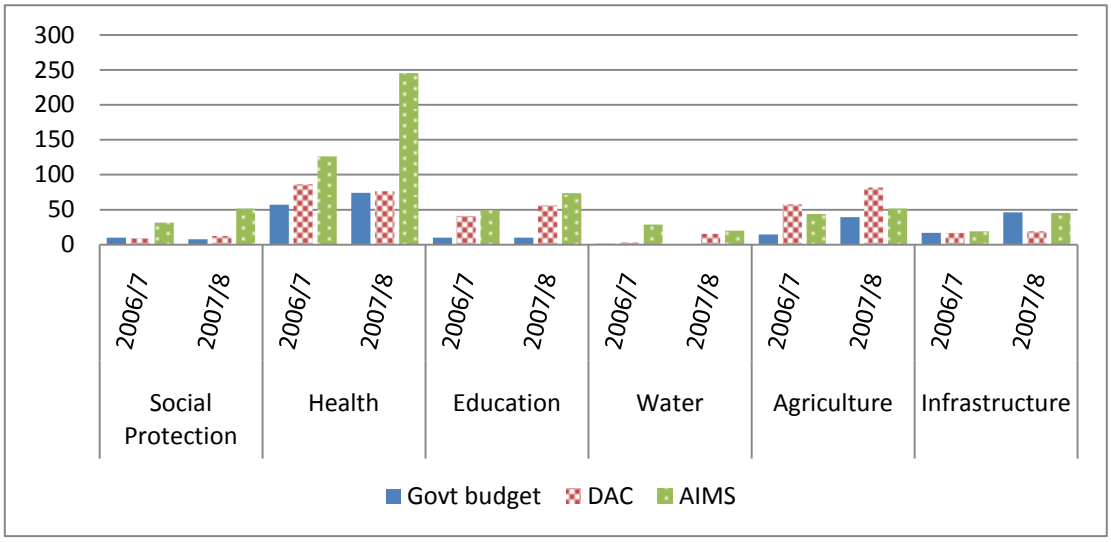
Malawi

The information available in the national budget, DAC/CRS and AIMS in Malawi shows some of the sectors under analysis to have large amounts of 'off budget' expenditure, while others seem to have very little[30]. The three sources of data generally show that the AIMS captures slightly more volume than the DAC/CRS in most sectors. The sectors of infrastructure and education show government and AIMS figures to be remarkably similar, while the DAC/CRS figures are lower. These two facts suggest that large volumes of 'off-budget' spending in these sectors by DAC/CRS donors are unlikely. Agriculture, social protection and water show large percentages of 'off-budget' spending with the AIMS generally capturing higher volumes.

[30] Only the financial years of 2006/7 and 2007/8 have data available in all three systems. All of the data is disbursement data.

The health sector shows that there is a dramatically high 'off budget' component of expenditure in the sector. This is not particularly surprising as the health sector commonly has numerous 'off budget' vertical funds targeting specific diseases. Actors within the health sector, including the Ministry of Health are likely to be aware of and often work with the managers and officers responsible for planning and implementing activities funded by these vertical funds. However, it demonstrates that a large amount of the funding for the sector is beyond the immediate budgeting and planning and budgeting control of the government. Consequently this means that it does not does not have the same monitoring and evaluation as activities under the national development strategy and critically does not benefit from the national oversight bodies including parliament and government audit and accounting offices.

Figure 12: National budget DAC/CRS and AIMS calculations of aid in Malawi



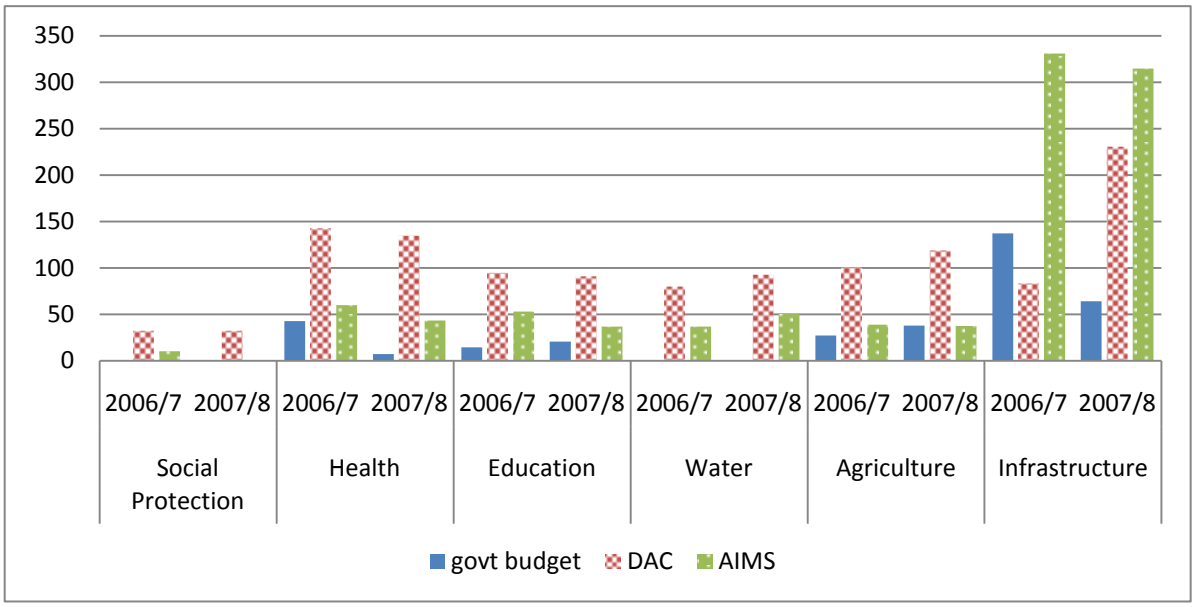
Source: Authors calculations from Malawi National Budget, DAC/CRS database and AMP sources

Uganda

The data from the national budget, DAC/CRS and AIMS in Uganda are somewhat more difficult to analyse as the AIMS is only a snapshot. Clearly, however, the DAC/CRS demonstrates a large amount of 'off budget' aid in all sectors. The AIMS data demonstrates just how unpredictable the aid flows are as the ex-post DAC/CRS is identifying more than double the aid projection of the AIMS. The government data is also weak for this particular analysis, although much of this limitation is likely due to inconsistencies in sector definitions. While international standards for sector definitions such as COFOG for government and DAC/CRS for aid exist, they are largely incompatible with each

other[31], and with the country level sector definitions. Where they exist, that are usually defined around the contry specific political and instututional environment rather than borrowing directly from international classifications.

Figure 13: National budget DAC/CRS and AIMS calculations of aid in Uganda 2005/6 to 2007/8



Source: Authors calculations from Uganda National Budget, DAC/CRS database and Aid Map sources

The most inconsistent sector is infrastructure where projections have very little coherence. Converse to the other sectors, the AIMS projects higher aid volumes than the DAC/CRS identifies. Indeed the national budget actually identified more 'on budget' aid to infrastructure than the DAC/CRS, despite in theory being a sub-category. It should be said however, that the infrastructure sector, based on international definitions, is often problematic for application at the country level. Some countries may have an institutional structure that assigns national public works and general infrastructure delivery activities to a specific institution and/or sector. Conversely, some countries will assign infrastructure investment activities to specific sectors, such as water, roads or agriculture. The latter better represents the institutional structure in Uganda where there is no central public works ministry or sector but a number of ministries that engage in infrastructure projects. As a result, comparison using international standards is bound to raise inconsistencies in the data. However, the DAC/CRS and Aid Map databases are the best tools the Government of Uganda has to track and identify aid activities outside of its budget process. Planning for the allocation of public funds in such

[31] See Moon and Mills (2010) ODI Working Paper 317 Practical Approaches to the Aid Effectiveness Agenda

an environment where the information on volume and timing, let alone specific outputs and activites, of ‘off budget’ projects is so volatile, is clearly not conducive to efficient budgeting.