Tracking agricultural spending when government structures and accounting systems change: The case of Malawi

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Abstract[1]

Tracking agricultural expenditure in developing countries in Sub-Saharan Africa in a consistent and harmonised manner is important, not only in the context of the multilateral spending commitments made under the Comprehensive Africa Agriculture Development Programme, but also in order to gain a better understanding of the impact and efficacy of spending. In this paper, a method for identifying and aggregating spending items from a variety of sources is developed to better understand how agricultural spending has evolved in Malawi. The results show that the central government receives around 90% of agriculture allocations, and this is largely spent on fertiliser subsidies, leaving only limited funding for core strategic functions such as research, extension and irrigation. More generally, lessons learned from the Malawi analysis could potentially be applied in other country contexts with similar experiences in terms of the evolution of accounting systems or government structures.

Key words: government expenditures; public accounting systems; agriculture; Malawi

1. Introduction

Public expenditure is a potentially powerful instrument for the governments of developing countries to promote economic growth and achieve their development objectives. As such, there is a need to understand what levels and types of spending are required to achieve policy goals. In Sub-Saharan Africa (SSA), where a large proportion of poor households are linked to the agricultural sector and where agricultural productivity gaps are believed to be large, public agricultural expenditure has received particular attention. This has ultimately led to heads of state committing in 2003 to allocate at least 10% of their total budgets to the agricultural sector, a commitment known as the Maputo Declaration on the Comprehensive Africa Agriculture Development Programme (CAADP) (World Bank 2013b).[2] The expectation was that this level of investment would be sufficient to attain an agricultural GDP growth target of 6% per annum.

Within this context it is important for SSA countries to develop the skills and tools required to estimate and track agricultural public expenditure consistently over time and in a harmonised manner across countries. This paper contributes to a growing body of knowledge and guidelines for doing so

[1] The views expressed in this paper are our own and do not necessarily reflect those of the respective institutions above.
[2] The Maputo Declaration was replaced by the Malabo Declaration on Accelerated Agriculture Growth and Transformation for Shared Prosperity and Improved Livelihoods in 2014.

(see, for example, Ghins *et al*. 2013; African Union 2017). While focusing specifically on Malawi, many of the challenges highlighted in the paper are common to many other countries.

Malawi is unique among SSA countries when it comes to public agricultural expenditure, because for the past decade the budget allocation to agriculture has consistently exceeded the 10% CAADP target. The economic multiplier effects of agricultural spending are thought to be strong in Malawi (Benin *et al*. 2012). However, the relatively high level of agricultural spending has seemingly not translated into sustained and stable agricultural growth. Prior to the implementation of the Farm Input Subsidy Programme (FISP) in 2006, agricultural growth declined, on average, by 2% per year from 2003 to 2006 (see Figure 1). Growth has strengthened significantly since 2006, with an average annual agricultural growth rate of 4%. However, agricultural growth has been erratic, exceeding the 6% CAADP target growth rate in only three of the nine years. Furthermore, the initial increase in growth, attributed to a sharp rise in maize yields in the early FISP years (see Arndt *et al*. 2016), appears to be trending downwards. The poverty outcomes associated with these growth trends are uncertain: whereas Pauw *et al*. (2017) estimate a substantial 7.5 percentage point *decline* in the rural poverty rate from 2005 to 2010, the official estimate suggests rural poverty *increased* marginally, by 0.7 percentage points, over this period (NSO 2012).

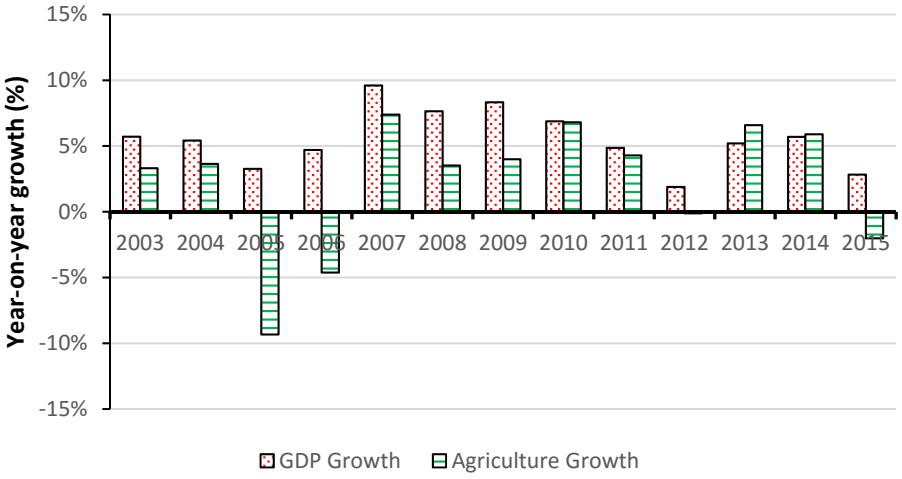

Figure 1: National and agricultural GDP growth rates, 2003 to 2015
Source: World Economic Indicators (World Bank Database 2017).

Further analysis is required to fully unpack the relationship between public agricultural expenditure, the sector-specific or national growth performance and socioeconomic outcomes in Malawi. However, such analysis requires, as a first step, careful identification and itemisation of expenditure statistics in official government budget records in order to obtain an accurate understanding of the levels and composition of expenditures over time. While seemingly straightforward, such a task can become complicated when government structures and accounting systems undergo significant changes. For example, administrative structures in the Malawi government are frequently modified for political or administrative reasons. This may involve the separation or amalgamation of government agencies. In Malawi, government has also introduced significant reforms to its public finance management system in recent years, which has affected the budget structure and the so-called Chart of Accounts (CoA).

While this analysis may appear similar to traditional public expenditure reviews (PERs), such as the one conducted in Malawi by the World Bank (2013b), the objectives and approach are different. PERs are aimed at developing a fairly broad understanding of budget planning, allocations and execution at the national or sector level. Typically, sector-level PERs would draw from budgets of line ministries directly linked to the sector analysed; for example, in the case of agriculture, there would

typically not be any attempt to identify and aggregate a much broader range of agricultural expenditure captured within the myriad of public accounting codes across various ministries, also non-agricultural ones. This means some expenditures that are directly supportive of the agriculture sector may be overlooked because of the nature of public accounting systems or governance structures; likewise, published aggregated agriculture budgets may include expenditure that is more correctly classified as non-agricultural spending.

Of course, when constructing a time series of alternative agricultural expenditure estimates from highly disaggregated data, consistency in the approach is crucial, especially if accounting systems or government administrative structures evolve. For this reason it is important to document the process to allow replicability, but also transparency, since some decisions about what expenditure to include or exclude are subjective.

Our analysis reveals that data on expenditure on agriculture in Malawi are indeed scattered across many government administrative structures at the central and local government level. Central government receives around 90% of the agriculture allocation, which is largely spent on FISP, while very little is spent on core strategic functions such as research, extension and irrigation. The reforms of the public accounting system, which in part involved transforming the budget presentation from a narrative style to one utilising expenditure codes, was a positive step at least as far as budget tracking is concerned. Unfortunately, however, security lapses in 2013 led to the "cashgate" scandal. As a result, continued government support for the reform and modernisation of the accounting system, together with a commitment to root out malpractice and corruption, is crucial for establishing trust in government expenditure statistics and the budget process in general.

The remainder of the paper is structured as follows. Section 2 provides a brief background of key public finance management reforms. We analyse public agricultural expenditure in Malawi in section 3. Section 4 concludes and highlights that future research can utilise the expenditure series constructed here.

2. An overview of public finance management reforms

Various significant reforms to the public finance management system have been implemented in Malawi since the mid-1980s, initially under the auspices of the World Bank structural adjustment programme. Some of the key components of the reforms include the introduction of a Medium-term Expenditure Framework (MTEF) around 1995; the Public Sector Investment Programme (PSIP); a cash budgeting system in 1996; cash management improvements in 2000; the formulation and enactment of new financial laws in 2003; and the Integrated Financial Management Systems (IFMIS) in 2005 (see Durevall & Erlandsson (2005) and Fölscher *et al*. (2012) for details).

The adoption of the MTEF and PSIP, in particular, brought about significant change to the budget framework and manner in which expenditure data were captured and compiled. Among the changes introduced were a more systematic approach towards ensuring that expenditures are allocated to priority activities, a move towards activity-based budgets, and introducing a clearer distinction between the recurrent (operational) and development (capital investment) budgets (Government of Malawi 2000).

The introduction of the cash budgeting system in 1996, followed by the Credit Ceiling Allocation (CCA) system in 2000, overhauled the allocations and funding to government ministries, departments and agencies (MDAs). Under the cash budgeting system, MDAs were provided with funding based on the available resources. However, with the introduction of the CCA, commercial banks were instructed to fund MDAs, and banks, in turn, could then issue claims to government on these CCAs. While, in theory, this should have improved cash flow and the funding available to MDAs, the

changes also affected the consistency of public expenditure data, since the reporting process now involved additional agencies. Moreover, public expenditure data were compiled manually at the time, which contributed further to delays and misreporting.

A study conducted by the Government of Malawi (2000) identified significant weaknesses in the financial system, and led to the formulation and enactment of the new Public Finance Management Act (PFMA), the Public Audit Act (PAA), and the Public Procurement Act (PPA) in 2003. Together, these acts brought about changes in the manner in which public accounts information is reported and disseminated. However, some provisions for public expenditure reporting are still not harmonised. For instance, the PAA provides that the Auditor General shall report the audited accounts to Parliament, while the Malawi Constitution provides that the Minister of Finance shall report the audited public accounts to Parliament. These inconsistencies give rise to delays in finalising and releasing public accounts.

The Integrated Financial Management System (IFMIS) adopted in 2005 was designed to strengthen internal controls and provide reliable accounting information for financial reporting and performance measurement (Fölscher *et al*. 2012). Particular advances included an improved interface between IFMIS and the procurement and payroll system, as well as better integration of the Chart of Accounts (CoA) in the IFMIS system. Although IFMIS as a construct represents a major improvement over earlier accounting systems, public access to data remains limited and transactions recorded under the development budget, especially foreign-financed projects, are still being processed manually using cash controls. In addition, control systems remain a concern, as the system continues to use non-electronic fund transfers and manual bank reconciliation with the Reserve Bank of Malawi (RBM), while the payroll interface is not yet fully developed (World Bank 2013).

The government was further rocked by the so-called "cashgate" scandal in 2013, which entailed the processing of fraudulent transactions through the IFMIS system. A forensic audit report conducted by Baker Tilly Business Services Limited (2014) revealed that public officers were able to transfer funds from government bank accounts to vendor accounts for goods and services that were never supplied or delivered. They subsequently deleted these transactions, rendering the IFMIS expenditure reports unreliable. Currently, the IFMIS system is being upgraded to strengthen its internal controls (World Bank 2013a).

Alongside the more specific reform initiatives discussed above, government has also implemented comprehensive reforms under its Public Financial and Economic Management Reform Programme (see Government of Malawi 2011). Reforms under this programme aim to bring together the different aspects of financial and economic management that cover the planning, financial and reporting cycle of the government budget. One critical reform included the improvement of the budget classification system in compliance with the 2001 government finance statistics (GFS), and a more explicit mapping of expenditure to the activities of the Malawi Growth and Development Strategy (MGDS) (Government of Malawi 2012), with the latter aimed particularly at strengthening policy-based budgeting through ensuring alignment between expenditure planning and resource prioritisation on the one hand, and MGDS priorities on the other.

Since 2013, government also started piloting a programme-based budgeting process. The Ministry of Agriculture, Irrigation and Water Development (MoAIWD) was one of the pilot ministries. As of the 2016/2017 fiscal year, the system was rolled out to all MDAs. The programme-based budgeting system requires that budgets are formulated and appropriated by votes programmes, which are aligned to the strategic objectives of the votes. The purpose of introducing this budget process was to improve the clarity and transparency of resource allocation and performance, thus also making it easier for the end users of budget documents to identify expenses, since they pertain to strategic objectives.

3. Analysis of public agricultural expenditure in Malawi

3.1 Data and methodology

For the analysis we compiled a dataset for fiscal years 2010/2011 to 2014/2015 from the official financial annual reports of the Ministries of Finance, Economic Planning and Development (MoFEPD) and Agriculture Irrigation and Water Development (MoAIWD). Expenditure data were also collected from other ministries and departments that implement agriculture-related projects. We distinguish expenditure by funding source (e.g. own revenue or donor funded) and by administrative district. Additional information was also obtained through semi-structured interviews with senior government officials to gain a better understanding of the accounting system reforms introduced over time, the budgeting process in general, and implementation challenges related to national and sector budget execution.

The UN Classification of the Functions of Government (COFOG) disaggregates the broadly defined "agriculture sector" into crops, livestock, fishing, forestry, water for production, and agriculture land-related activities (Govereh *et al*. 2011). Given such a broad definition, several government agencies at the central, regional and local levels may be mandated to implement or oversee agriculture-related activities. In this study, however, some votes, such as forestry, are not included in our definition of agriculture, since expenditure data for the subsector were particularly difficult to obtain. Expenditure data on agriculture-related projects funded directly by donors – and therefore considered off-budget – were also not easily obtainable. It also was not possible to capture actual expenditures transferred to public entities such as the Agricultural Development and Marketing Corporation (ADMARC) and the National Food Reserve Agency (NFRA), as their financial reports are not included in the public accounts.

Expenditure data under the agriculture vote are organised around various technical, administrative and research departments, both at national and regional/district level. At the national level, unique cost centres are assigned to headquarters as well as to the five technical departments in the head office. Each of the ten agricultural research stations throughout the country, as well as three livestock farms, also have unique cost centres. There furthermore are eight Agricultural Development Divisions (ADDs). These administrative areas are demarcated according to agro-economic zone. ADDs are further split into 28 District Agricultural Development Offices (DADOs). All the ADDs and DADOs are also cost centres in their own right under the MoAIWD vote. Expenditure data under agriculture are also captured under different votes, such as those of the Office of the President and Cabinet and the Ministry of Local Government.

3.2 Structure of the Malawi public accounting system

The introduction of the Integrated Financial Management Information System (IFMIS) in 2005 necessitated changing the presentation of the budget from a narrative style to a format that uses numerical codes associated with expenditure categories. This greatly improved budget analysts' ability to map data across different budget formats. As shown in Table 1, the codes used in the budget presentation and financial reporting have a total of 32 digits, which are divided into four segments. The four segments represent the four budget classification systems utilised in the country's budget. Such a "fusion" of several classification systems is common in many countries; not only is each classification system important in its own right, but it is also important to be able to map expenditure across different classification systems. As emphasised by Jacobs *et al*. (2009), a sound budget expenditure classification system is critical for ensuring that budget information is comprehensively and correctly recorded, as this allows for effective budget execution and performance management.

Table 1: Budget and expenditure classification and chart of accounts

Budget and expenditure classification	Classification objectives	Chart of accounts segment	Category description	Attributed length
Administration classification	Identification of the public entity that is responsible for either the collection, in the case of revenue, or managing the expenditures of the budget – the Malawian scenario identifies the controlling officer as the ultimate overseer of all resources under a vote.	Administration – with 14 digits	Vote	3
			Budget type	1
			Cost centre	3
			Division	2
			Donor	2
			Project	3
Programme classification	Organising budget and expenditures within more focused areas of operation. This also draws on the focused mandates of the implementing entity.	Programme classification – with five digits	Programmes	2
			Sub-programme	2
			Sub-sub-programme	1
Functional (MGDS output) classification	Organising the budget and expenditures along the government's broad goals and objectives. This framework has been linked to the objectives, outputs and activities stipulated in the national development blueprint, MGDS – initially MGDS I and currently MGDS II.	MGDS output classification – with six digits	Objectives (sub-subtheme) Outputs Activities	2 2 2
Economic (GFS) classification	Identification of the type of expenditure incurred, in terms of inputs, as provided through the detailed estimates framework, with an indication of the items and sub-items under which resources are provided and spent.	Economic (GFS) classification – with seven digits	Chapter	1
			Subchapter	2
			Item	2
			Sub-item	2

Source: Author's compilation based on Government of Malawi (2009)
Note: GFS = Government Finance Statistics; MGDS = Malawi Growth and Development Strategy

The categorisation of coding (see fourth column in Table 1) starts at sub-item level and builds up to item level, sub-sub-programme, sub-programme and finally programme level. Programmes are consolidated into votes, and several votes make up the national budget. The vote codes define the administrative structure of government at the ministerial, departmental and local council levels. The vote-level data comprise both recurrent and development expenditure, although allocations to local authorities exclude development expenditure as this function has not yet been decentralised.

In addition to the vote codes, codes are assigned to cost centres, which allow the Ministry of Finance to make funding available to the respective MDAs. There are approximately 1 345 such cost centres in the Chart of Accounts, yet only three-digit codes are assigned to each cost centre. This implies the sharing of codes among some cost centres across the CoA. Fortunately, duplicate numbers are typically for cost centres in different votes, hence codes become unique once combined with their respective vote-level codes. New cost centre codes are created for newly created MDAs as and when needed.

Codes are also assigned to different budget and expenditure classifications following the UN Classification of Functions of Government (COFOG) framework (see Government of Malawi and European Union 2013). Programmes can be selected by ministries and departments as relevant to their respective mandates. The guidelines put forward by the International Monetary Fund (2001) state that programmes may cut across several ministries and departments, but sub-programmes and sub-sub-programmes are expected to be restricted within single MDAs.

At the macro-level, programmes did not change much during the review period (2010/2011 to 2014/2015), at least in terms of their broad descriptions, but the review of the CoA in 2009 led to some changes in the actual codes used. These changes are reflected in Table 2; for instance, until

2008/2009, code 01 was used to denote the Administration and Support Services programme, after which it became the Agriculture and Food Security programme. The programme structure of the agricultural vote has also seen several changes, as many programmes have either been added or removed due to changes in government administrative structures, typically involving moving a functional department from one ministry to another.

Table 2: Changes in budget programmes for the agriculture vote, 2005 to 2013

No.	Programme code and description	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013
1	01 – Administration and Support Services	√	√	√	√				
2	01 – Agriculture and Food Security					√	√	√	√
3	02 – Natural Resources and Environment					√	√	√	√
4	04 – Water Resources Development, Management and Supply						√		
5	05 – Industry and Investment Promotion					√	√		
6	07 – Health Services					√	√		
7	08 – Education					√			
8	09 – Community, Youth and Sports Development					√	√		
9	10 – Transport, Building and Housing					√	√		
10	11 – Information, Communication and Technology					√	√		
11	12 – Research and Development					√	√		
12	14 – Extension Services	√	√	√	√				
13	14 – Economic and Financial Management					√	√		
14	16 – Fisheries and Aquaculture Development			√	√				
15	17 – Public Administration					√	√	√	√
16	18 – Employment and Labour Affairs					√			
17	27 – Manpower Development and Institutional Development			√	√				
18	30 – Nutrition and Food Security	√	√	√	√				
19	31 – Planning Services	√	√	√	√				
20	35 – Research, Technology Generation and Development	√	√	√	√				
	Year total number of programmes	**5**	**5**	**7**	**7**	**12**	**11**	**3**	**3**

Source: Author's compilation based on various budget documents

As Table 2 illustrates, the agriculture vote had five programmes in fiscal years 2005/2006 and 2006/2007, before increasing to seven in the following two years. The most noticeable changes occurred during 2009/2010 and 2010/2011, when the ministry had 12 and 11 programmes under its vote respectively. Activities that correspond to some of these programmes have little relevance to the agricultural sector; for example, programmes on health services and education services were included in the agriculture vote. It is evident that the programmatic structure reflected the organisational structures of departments, rather than their distinctive functionalities. As such, expenditure data on such non-agricultural activities have been excluded from our revised estimates of agricultural expenditure during the review period. The authorities have since largely remedied this problem, such that by 2011/2012 the Ministry of Agriculture vote retained only three programmes.

Starting from the 2011/2012 financial year, the budget has been presented using the Chart of Accounts, along with its codes, which have been aligned with the prevailing budget classification system. Table 3 presents an extract of the budget expenditure report for the MoAIWD, showing all the budget and expenditure classifications in one coding item. For example, salaries for staff at headquarters are represented by the code "19010010000000010120000002011001". This code

identifies the administrative, programme, function and economic classification of the particular expense, which is a notable improvement over the earlier classification system.

Table 3: Example of budget and expenditure classification and codes in the Ministry

Budget and expenditure classifications	Category	Description	Length
Administrative classification	Vote	For example, MoAIWD	190
	Budget type	Recurrent budget	1
	Cost centre	For example, headquarters	001
	Division	Not in use	00
	Donor	Not in this case	00
	Project	Not in this case	000
Programme classification	Programme	Agriculture and food security	01
	Sub-programme	Irrigation services	01
	Sub-sub-programme	Irrigation engineering	2
Functional (MGDS output)	Objective (sub-subtheme)	Not in this case	00
	Outputs	Not in this case	00
	Activities	Not in this case	00
Economic (GFS)	Chapter	General expense	2
	Subchapter	Wages and salaries	01
	Item	Salaries	10
	Sub-item	Established staff	01

Source: Author's compilation based on Government of Malawi (2014b)
Note: GFS = Government Finance Statistics; MGDS = Malawi Growth and Development Strategy; MoAIWD = Ministry of Agriculture, Irrigation and Water Development

It should be noted that the Malawi government is still working on improving the functional classification that would allow a clearer mapping with the appropriate priorities, themes and activities of the Malawi Growth and Development Strategy (MGDS). The sectoral investment plan in the agriculture sector, known as the Agriculture Sector Wide Approach (ASWAp) (MoAFS 2011), is already aligned fairly closely with the MGDS. ASWAp has three focus areas, two support service areas and a crosscutting issue. From Table 4, the mismatch between the current budget structure, which is delineated by programmes and sub-programmes, and the priority areas under ASWAp and MGDS is evident. This makes it particularly difficult to ascertain that government expenditure is aligned with its priorities as identified in the sectoral investment plan. For the purpose of the analysis here, and in an attempt to move somewhat closer to a structure that is aligned with ASWAp priority areas, programme-level data were collected and organised as follows: (1) agricultural extension; (2) crops; (3) irrigation; (4) livestock; (5) fisheries; (6) land resources; (7) research and development; and (8) administration and support services.

Table 4: Agriculture Sector Wide Approach (ASWAp) focus areas vis-à-vis Agriculture Ministry budget programmes

ASWAp focus and support areas	Current budget programmes	Malawi Growth and Development Strategy for the agriculture sector
Key focus areas		
1. Food security and risk management	1. Agriculture and Food Security	Agriculture and food security
2. Commercial agriculture and market development	2. Natural Resources and Environment Management	Agro-processing
3. Sustainable land and water management	3. Public Administration	- Green Belt irrigation water development - Land - Climate change, natural resources, and environmental management
Support service areas		
1. Technology generation and dissemination		
2. Institutional strengthening and capacity building		
Crosscutting		
Gender and HIV/AIDS mainstreaming		

Source: Adapted from various budget and ASWAp programme documents

3.3 Trends in government agricultural spending

Agriculture is vital to Malawi's economic growth and has continued to receive a large share of public resources. As indicated in Table 5, total government expenditure allocations to the MoAIWD reached MWK[3] 156.4 billion in fiscal year 2014/2015. This allocation is 20% of the total budget and also represents a 60% increase from the MWK 97.6 billion in fiscal year 2013/2014. The agriculture Joint Sector Review (JSR) indicates that Malawi is one of the few countries that has surpassed the 10% target at any time since the adoption of CAADP (Government of Malawi 2014a). However, as per Table 6, the allocation of agricultural funds to Agricultural Development Division (ADD) cost centres is minimal, with around 90% flowing to headquarters. Moreover, around 75% of expenditure is allocated to the Farm Input Subsidy Programme (FISP) (Government of Malawi 2014a), mainly for the purchase of fertiliser. Thus, not only is the devolution of agricultural activities to districts still limited, but government funding remains highly concentrated within its flagship programme.

The analysis of expenditure by votes (Table 5) reveals that the central government expends almost 95% of total agricultural expenditure, with the remaining 5% controlled by local councils. More interestingly, spending on agriculture at local council level remains significantly higher than the other major spending sectors, as government has been redirecting funds to boost food production by investing in farm inputs, such as fertiliser and seeds, for maize productivity. Apart from the vote on irrigation and water development, there are many other cost centres at local council level that receive agriculture-related allocations, such as extension, crop production, livestock, land resource, irrigation and fisheries. However, these allocations have remained significantly lower than those for the health and education sectors. For instance, the health sector alone received almost half of the total Central Government Fiscal Transfers to local councils in fiscal year 2012/2013.

[3] Malawian kwacha

Table 5: Some key votes and their expenditure trends, 2010/2011 to 2014/2015

Vote name	Vote	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
Agriculture and Food Security	190	29.19	32.25	60.92	97.57	156.43
Irrigation Water and Development	210	5.72	3.65	2.95	23.5	0.44
Education Science and Technology	250	33.02	38.56	54.03	77.44	102.59
Ministry of Health	310	23.93	23.73	34.9	45.5	64.65
Office of President and Cabinet	90	3.18	3.86	5.15	5.96	9.63
Poverty and Disaster Management	92	—	—	—	—	—
Nutrition HIV/AIDS and NAC	94	9.63	4.35	4.25	19.99	8.13
Science and Technology	95	—	—	—	—	—
Local Government and Rural Development	120	3.17	2.54	4.34	13.79	12.76
National Local Government Finance Committee	121	0.7	2.13	3.91	5.3	11.8
Financial Intelligence Unit	279	0.15	0.15	0.18	0.23	0.32
Poverty and Disaster Management	300	—	—	—	—	—
Local Development Fund	272	—	6.55	—	17.2	13.14
Malawi Revenue Authority	273	4.93	5.33	7.11	11.36	12.05
Road Fund Administration	274	—	4.55	5.33	8.75	23.8
Environment and Climate Change	480	—	—	2.39	3.89	0.84
Science and Technology	570	—	—	—	—	—
Other votes	Various	145.91	141	177.63	294.82	359.79
Transfers to councils (40 votes)	Various	12.36	16.5	22.45	14.11	24.37
Total		**272.83**	**286.09**	**386.43**	**645.7**	**800.74**

Source: Author's own consolidation from the Consolidated Annual Appropriation Accounts (CAAAs)
Note: Fiscal years 2013/2014 and 2014/15 are based on revised figures. Dashes indicate that data were not captured because these votes were either not introduced or were captured under other votes

Table 6: Distribution of cost centre agricultural expenditure (in percentages)

Centre of expenditure	2010/2011 actual	2011/2012 actual	2012/2013 actual
Headquarters	90.09	86.53	91.53
Karonga ADD	0.67	1.00	0.71
Mzuzu ADD	1.36	1.96	1.27
Kasungu ADD	1.34	1.41	0.94
Lilongwe ADD	2.14	2.09	1.59
Salima ADD	1.05	1.70	0.70
Machinga ADD	1.22	2.00	1.14
Blantyre ADD	1.41	2.27	1.40
Shire Valley ADD	0.73	1.04	0.71
Total agriculture	**100.00**	**100.00**	**100.00**

Source: Author compilation from the Consolidated Annual Appropriation Accounts (CAAAs)
Note: ADD = Agricultural Development Division

Notwithstanding the unique nature of the vote category in the CoA, there have been frequent changes to the status of some votes over the years, as indicated in Table 7. For instance, some votes became sub-votes or vice versa, while some votes have been absorbed into others. Such changes tend to compromise the continuity of budget and expenditure data, which complicates trend analysis in terms of both level and composition of expenditure. It also negatively affects budget planning and accountability in terms of expenditure reporting. For example, whenever a vote is absorbed into another vote, which tends to happen quite frequently, the expenditure for that vote will be reported in a vote that does not have its approved budget provisions. This paints an erroneous picture of variances in budget execution.

Table 7: Functional and administrative classification of agricultural expenditures, 2010/2011 to 2013/2014 (percentage shares)

Centre of expenditure	Admin	Extension	Crops	Irrigation	Livestock	Fisheries	Land	Research	Total
Headquarters	8.86	0.08	76.91	2.13	1.15	0.28	0.09	0.27	**89.78**
Karonga ADD	0.18	0.10	0.12	0.02	0.11	0.00	0.04	0.08	**0.64**
Mzuzu ADD	0.30	0.24	0.22	0.04	0.15	0.06	0.04	0.31	**1.37**
Kasungu ADD	0.25	0.37	0.23	0.03	0.13	0.00	0.05	0.00	**1.07**
Salima ADD	0.18	0.20	0.11	0.03	0.12	0.00	0.02	0.21	**0.87**
Lilongwe ADD	0.25	0.40	0.30	0.02	0.97	0.28	0.07	0.44	**2.74**
Machinga ADD	0.26	0.29	0.22	0.04	0.12	0.19	0.03	0.11	**1.26**
Blantyre ADD	0.30	0.42	0.29	0.02	0.30	0.00	0.04	0.23	**1.61**
Shire Valley ADD	0.20	0.17	0.08	0.03	0.07	0.00	0.02	0.09	**0.66**
Total	**10.77**	**2.27**	**78.50**	**2.36**	**3.13**	**0.81**	**0.40**	**1.76**	**100.00**

Source: Author compilation from the Consolidated Annual Appropriation Accounts (CAAAs)
Note: ADD = Agricultural Development Division. The research component seems to be the highest under Lilongwe ADD because some allocations to Chitedze Research Station have also been included

Table 7 illustrates the functional classification of expenditures across their geographical distribution for 2010/2011 to 2013/2014. To allow for a clear exposition of the results, expenditures for each functional budget programme at each centre of expenditure were aggregated for all three fiscal years and averages were derived. The table shows that the largest share of public agricultural expenditure went toward crops, and the bulk of spending was at headquarters level. This is not surprising considering that the FISP budget is largely located under the crops sub-programme at headquarters. The administration and support services programme consumed the second highest level of budgetary resources, and once again the bulk of spending was at headquarters level. Other supposedly core functions, such as research, extension and land resources, received only limited resources. However, some caution is necessary when analysing these results: whereas expenditures have been reported fairly systematically since the adoption of the new CoA in 2011/2012, different codes were used prior to that; hence, any expenditure analysis that spans a time period before and after 2011/2012 may be subject to identification problems or even expenditure overlaps.

The functional (MGDS outputs) classification, once fully developed, would greatly facilitate the extraction of budget and expenditure data relating to agricultural activities. However, the current status is that the codes for outputs and activities, both two-digit codes, are unique only within each subtheme, implying that cross-subtheme outputs and activities share the same numeric codes. This does not permit the easy extraction of relevant information without further data manipulation. It would be crucial to use this classification system, along with the administrative and programme classifications, if one were to obtain accurate budget and expenditure data from the budget and/or CoA framework.

A combination of all budget classification types is vital to help extract budget and expenditure data from the corresponding budget and/or CoA framework at a deeper level of detail that would enable one to conduct an analysis of the budget in terms of economic lines of expenditure. Substantiated with annual economic reports, Figure 2 demonstrates how the itemised agriculture expenditure data have been translated into the economic classifications based on the IMF-GFS 2001 format. The data for the ministry were captured at the itemised level and then converted into the IMF-GFS classification. However, the itemised data exclude the chapter and subchapter codes, while also avoiding going into too much detail at the sub-item level of the economic classification segment. As the figure shows, agricultural spending is mostly allocated to the consumption of goods and services and the compensation of employees, while capital allocations are relatively small. However, capital allocations increased in the recent budget allocations for the fiscal year 2014/2015 (Government of Malawi 2014c). Consumption is also dominated by the agricultural subsidies line item, which is similar to earlier findings based on alternative classifications.

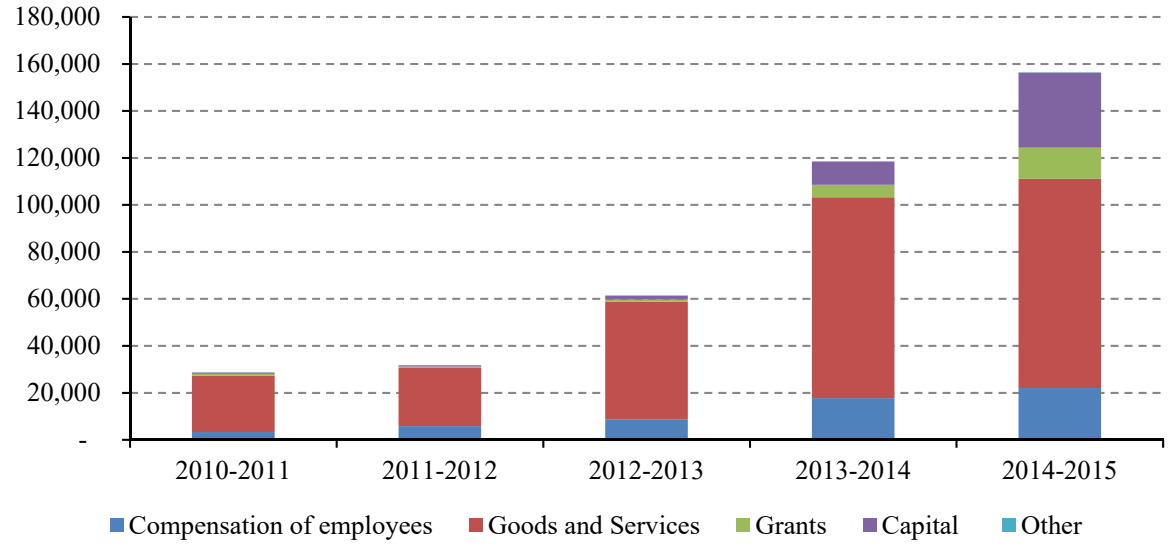

Figure 2: Economic classification of central agricultural expenditure (millions of Malawian kwacha)

Source: Author compilation from the Consolidated Annual Appropriation Accounts (CAAAs) and Annual Economic Reports

Note: All capital-related items from both recurrent and development expenditures are included under Capital

In spite of the observed capabilities of the IFMIS to offer the benefits of timely access to budget and expenditure data, access to this electronic system remains limited. This remains the case even at the time of preparing this study. Apart from using the Consolidated Annual Appropriation Accounts (CAAAs) prepared by the Department of the Accountant General in MoFEPD, various official documents have also been used to fill the gaps in agricultural expenditure and non-agricultural expenditure. The other challenge relates to transactions under the development budget, especially the foreign-financed projects, which are still being processed manually, with records loaded into the system using manual cash controls about nine years after the introduction of the IFMIS system.

4. Conclusion

Tracking agricultural expenditure in Sub-Saharan Africa is important and necessary, not only in the context of the spending commitments made under the Comprehensive Africa Agriculture Development Programme (CAADP), but also in order to gain a better understanding of the impact and efficacy of spending in terms of socio-economic or agricultural development outcome indicators. This study has considered the case of Malawi, a country that has generally achieved the 10% spending target for agriculture, but one in which complexities in the budgeting system and changes in government administrative structures have greatly complicated the task of tracking the levels and composition of agricultural spending. The analysis reveals that data on agricultural expenditure are indeed scattered across many government administrative structures at the central and local government level. In particular, by using accounting coding systems we were able to capture a range of agricultural data arising from across these administrative structures. The captured data also reveal that central government receives 90% of agriculture allocations, which are largely spent on the subsidy programme, with very little being spent on core strategic functions such as research, extension and irrigation. In addition, tracking agriculture expenditure and its composition has been affected by changes in the administrative structure of the government, which have had a negative impact on the stability of the budget and the chart of accounts structures.

Nevertheless, reforms of the public accounting system have improved the budget and expenditure classification and coding system, such that it now adheres to international standards. The system also

facilitates better linkages between expenditure items and policy priorities in line with the Malawi Growth and Development Strategy (MGDS). One notable improvement – in theory at least – is the transformation of budget presentation from a narrative style to one utilising distinct expenditure codes reflective of the Integrated Financial Management Information System (IFMIS). Unfortunately, recent security lapses and abuse of the IFMIS might have meant that fraudulent transactions associated with the "cashgate" scandal also formed part of expenditure. Continued support for the reform and modernisation of the accounting system, together with a commitment from government to implement these reforms, is crucial for establishing trust in government expenditure statistics and the budget process in general.

The approach developed here could serve as a blueprint for constructing long-term expenditure series in a consistent manner in countries that have also changed budget classification systems or government administrative structures. Moreover, tracking off-budget spending, such as donor-supported projects, is also problematic, albeit important for fully understanding the nature and extent of financial support to the agricultural sector. Ultimately, while general guidelines can be developed, many of the decisions about the treatment of expenditure data will remain country-specific and subjective, hence the importance of careful documentation to allow replicability within countries, but also for cross-learning between countries.

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