Analysis of public expenditure in support of food and agriculture in Malawi, 2006-2013

November, 2014
Analysis of public expenditures in support of food and agriculture in Malawi, 2006-2013

November, 2014

This document is a product of the Monitoring and Analysing Food and Agricultural Policies programme (MAFAP). It may be updated as new data becomes available. The data in this document was collected from national sources: the Output-based Budget Books and the Audited Accounts.

MAFAP is implemented by the Food and Agriculture Organization of the United Nations (FAO) in collaboration with the Organisation for Economic Co-operation and Development (OECD) and national partners in participating countries. It is financially supported by the Bill and Melinda Gates Foundation (BMGF), the United States Agency for International Development (USAID), the Dutch Cooperation and FAO.

The description presented in this document is the result of the partnerships established in the context of the MAFAP programme with governments of participating countries and a variety of national institutions.

For more information: www.fao.org/in-action/mafap
# Contents

LIST OF FIGURES ......................................................................................................................... v
LIST OF TABLES ........................................................................................................................... vi
ACRONYMS ................................................................................................................................. vii
SUMMARY ........................................................................................................................................ ix
PURPOSE .......................................................................................................................................... 1
METHODOLOGY ............................................................................................................................ 1
SCOPE ............................................................................................................................................... 2
ANALYSIS OF PUBLIC EXPENDITURES IN SUPPORT OF FOOD AND AGRICULTURE IN MALAWI ...... 5
   General trends in the global budget ............................................................................................... 5
   General trends in public expenditures in support of food and agriculture .................................... 6
   Composition of public expenditures in support of food and agriculture ..................................... 10
   Agriculture-specific public expenditures ..................................................................................... 13
   Agriculture-supportive public expenditures ............................................................................... 19
   Public expenditures on key commodities .................................................................................... 20
   Nature of public expenditure in support of food and agriculture .............................................. 26
   Role of development aid in public expenditure in support of food and agriculture ................. 28
CONCLUSIONS AND RECOMMENDATIONS ............................................................................... 33
REFERENCES ................................................................................................................................. 35
ANNEXES ......................................................................................................................................... 37
LIST OF FIGURES

Figure 1. Total public expenditures in Malawi (million MWK), 2006-2013 ............................................. 5
Figure 2. Total Official Development Assistance to Malawi (Current prices, USD million), .................... 6
Figure 3. Total actual disbursement of on-budget donor support (Current prices, USD million), 2006-2012 ......................................................................................................................................................... 6
Figure 4. Budgeted and actual expenditures in support of food and agriculture in Malawi (Million MWK), 2006-2013 ......................................................................................................................................................... 7
Figure 5. Budgeted and actual expenditures in support of food and agriculture per source of funding in Malawi (Million MWK), 2006-2013 ......................................................................................................................................................... 8
Figure 6. Actual MoAFS public expenditures and other actual public expenditures (Million MWK- left axis) and share of MoAFS expenditures over the total government expenditures (%) right axis), 2006-2013 ............................................. 9
Figure 7. Budgeted and actual expenditures in support of food and agriculture within total public expenditures (%), 2006-2013 ......................................................................................................................................................... 9
Figure 8. Agricultural value added (annual % growth), GDP growth (%), agricultural value added (% of GDP), PEFA (annual % growth) in Malawi, 2006-2013 ......................................................................................................................................................... 10
Figure 9. Composition of PEFA in Malawi (million MWK), 2006-2013 .................................................. 11
Figure 10. Composition of agricultural specific public expenditures in Malawi (Million MWK), 2006-2013 ....................................................................................................................................................... 13
Figure 11. Composition of expenditures allocated to agents of the food and agricultural sector in Malawi (Million MWK), 2006-2013 ....................................................................................................................................................... 14
Figure 12. Composition of expenditures allocated to payments to producers (%) in Malawi, 2006-2013 ....................................................................................................................................................... 15
Figure 13. Expenditures allocated to variable inputs in absolute terms (million MWK- right axis), as a share of agriculture specific expenditures and as a share of total food and agriculture expenditures (%- left axis), 2006-2013 ....................................................................................................................................................... 15
Figure 14. Composition of general support to food and agriculture in Malawi (million MWK), 2006-2013 ....................................................................................................................................................... 17
Figure 15. Agricultural research spending from ASTI and from MAFAP in Malawi (Million MWK and % of Agricultural GDP), 2006-2011 ....................................................................................................................................................... 18
Figure 16. Composition of expenditures allocated to agricultural infrastructure in Malawi (%), average 2006-2013 ....................................................................................................................................................... 18
Figure 17. Composition of rural infrastructure expenditures in Malawi (%), average 2006-2013 ....................................................................................................................................................... 20
Figure 18. Composition of agriculture specific expenditures in Malawi (Million MWK), 2006-2013 ....................................................................................................................................................... 21
Figure 19. Public expenditures allocated to single commodities in Malawi (Million MWK), 2006-2013 ....................................................................................................................................................... 21
Figure 20. Expenditures allocated to variable input subsidies in Malawi (Million MWK), 2006-2013 ....................................................................................................................................................... 22
Figure 21. Public expenditures allocated to single commodities except maize in Malawi (Million MWK), 2006-2013 ....................................................................................................................................................... 22
Figure 22. Composition of the support to the cotton sector in Malawi (%), average 2008-2013 ....................................................................................................................................................... 23
Figure 23. Average volume of production (thousand tonne- Y axis), average expenditures allocated per commodity (million MWK- X axis), number of project or programmes targeting each commodity (total of number of projects - bubble size) in Malawi, average 2006-2013 ....................................................................................................................................................... 24
Figure 24. Public expenditures allocated to group of commodities in Malawi (Million MWK), 2006-2013.................................................................................................................................................................................. 25
Figure 25. Composition of expenditures allocated to livestock in Malawi (%), average 2006-2013 .... 25
Figure 26. Composition of PEFA: policy transfers vs. administrative costs in Malawi (Millions of MWK), ............................................................................................................................................................... 27
Figure 27. Composition of total PEFA by source of funding (Million MWK- left axis) and donor expenditures as a share of PEFA (%- right axis), 2006-2013 ................................................................. 27
Figure 28. Composition of total PEFA by source of funding (Million MWK- left axis) and donor expenditures as a share of PEFA (%- right axis), 2006-2013 ................................................................. 28
Figure 29. Budgeted and actual donor PEFA (Million MWK- left axis) and disbursement rate (%- right axis) in Malawi, 2006-2013.................................................................................................................... 29
Figure 30. Actual donor expenditures for food and agriculture by source in Malawi (Million MWK), 2006-2012 .................................................................................................................................................................................. 30
Figure 31. Share of aid in total public expenditures by category (Million MWK) and donor spending within total expenditure (%), average 2006-2013 ........................................................................................................ 31
Figure 32. Composition of donor expenditures to food and agriculture (Million MWK), 2006-2013 .. 32

LIST OF TABLES

Table 1. Budgeted and actual PEFA (Million MWK), disbursement and growth rates (%) in Malawi, 2006-2013 ............................................................................................................................................................... 7
Table 2. Composition of food and agriculture expenditures in Malawi (Million MWK), 2006-2013 .... 12
Table 3. Expenditures allocated to the FISP, 2006-2013........................................................................ 16
Table 4. Total PEFA by sources, budgeted and actual spending (Million MWK) and disbursement rate (%), 2006-2013 ............................................................................................................................................................... 29
ACRONYMS

ADB: Africa Development Bank
AMP: Aid Management Platform
ASTI: Agricultural Science & Technology Indicators
BADEA: Arab Bank for Economic Development in Africa
CAGR: Compound Annual Growth Rate
COFOG: Classification of the Functions of Government
DAC: Development Assistance Committee
EU: European Union
GDP: Growth Domestic Product
IFPRI: International Food and Policy Research Institute
MaSSP: Malawi Strategy Support Programme
MOF: Ministry of Finance
MWK: Malawi Kwacha
NFRA: National Food and Reserve Agency
ODA: Official Development Assistance
OECD: Organisation for Economic Co-operation and Development
USAID: United Stated Agency for International Development
SUMMARY

This technical note is an analysis of the level and composition of public expenditure in support of food and agriculture in Malawi, and covers the period 2006-2013. The analysis presents the results obtained after an extensive data collection process. The full data set can be obtained from the public expenditure database available on the MAFAP website (http://www.fao.org/in-action/mafap/en/).

Between 2006 and 2013, the government budget increased annually by 17 percent on average and maintained high disbursement rates. While budgeted expenditure in support of food and agriculture followed the same growth rate as the government budget, actual spending experienced two major drops in 2010 and 2011. In 2010, donors suspended their support as a consequence of the deteriorating governance, while in 2011, the level of national spending diminished due to poor economic performance. Expenditure in support of food and agriculture was more affected by external and internal shocks in comparison to other sectors. The authorities seemingly chose to reallocate dwindling funds to non-agricultural sectors while it is acknowledged that agricultural spending has the largest positive effects on growth and poverty reduction (IFPRI, 2009). According to MAFAP definitions1, one observes that the share of actual expenditure in support of food and agriculture within total budget exceeded the 10 percent Maputo/Malabo target as it amounted to 17 percent on average between 2006 and 2013.

Agriculture-specific expenditure represented 84 percent of public expenditure in support of food and agriculture, on average during the period 2006-2013. This shows that priority was given to direct support rather than indirect support to agricultural development. Payments to agents and more precisely producers captured 65 percent of public expenditure in support of food and agriculture, indicating the will of the government to focus on the provision of private goods rather than public goods to develop the sector. Within the FISP framework, producers are chiefly supported through the provision of variable input subsidies. Budget allotted to the FISP amounted to 57 percent of public expenditure in support of food and agriculture and 9 percent of national spending, on average between 2006 and 2013. This gives little room for the implementation of projects and programmes favouring the long-term development of the sector. High recurrent FISP expenditures also affect the reactivity of the government and its ability to tailor expenditures consistently with national priorities. There is a need to understand whether more diversified and balanced spending would better support the development of the sector and then to analyse the costs and benefits of this more holistic expenditure allocation.

On average, between 2006 and 2013, general support to the food and agriculture sector comprised only 14 percent of public expenditure in support of food and agriculture although this share fell in both absolute and relative terms in 2010 and 2013 due to aid suspensions. Indeed, more than half of general support to the food and agriculture sector is funded by donors. General support to agriculture is essential for sustainable long term development; a more balanced distribution of national spending between payments to agents and general support, as well as between recurrent and development budget, would ensure that this support is steady and continual. This is especially true as investments in public goods show higher return than other types of expenditure such as general subsidies (FAO, 2012).

1The MAFAP definition of expenditure in support of agriculture does not follow the official definition as defined by the African Union.
Consistent with government objectives to improve the quality of rural and feeder road networks, rural roads captured 23 percent of public expenditure in support of food and agriculture and 4 percent of government spending, on average during the period under review. Spending on rural roads has a significant effect on poverty reduction and growth (IFPRI, 2009). However, it has come to light that there is a need to focus on the enhancement of feeder roads rather than the trunk network and to ensure that agricultural trade flows are taken into account during road mapping so that development priorities are respected.

The main component of general support is “technical assistance, training and extension”, followed by “agricultural research”. Expenditures allocated to research accounted for only 3 percent of public expenditure in support of food and agriculture on average during the period under review, 86 percent of which was funded by donor contributions. Increasing national spending to agricultural research should become a priority since agricultural research and development has been one of the most effective forms of public investment over the past 40 years (FAO, 2012).

Maize production consumed an average 50 percent of all public expenditure in support of food and agriculture from 2006 to 2013, supported through the provision of variable input subsidies in the context of the FISP. Such strong focus on maize questions the possibility of achieving the ASWAP crop diversification objective. Other commodities important for food security such as cassava and sweet potatoes were barely targeted despite being relatively drought tolerant (IFPRI, 2011) and probably more suitable to agronomic conditions in Malawi. Although the FISP stopped targeting tobacco production in 2009, in relative terms, tobacco was the second targeted commodity during the period under review, and like maize, was exclusively supported through the provision of input subsidies. Cotton and sugar received more diversified but sporadic support, and the share of expenditure allocated to both commodities together represented only 2 percent of agriculture-specific expenditure. Tea, while being the third agricultural export product, was not targeted by public expenditure in 2006-2013.

On average, donor spending represented 19 percent of public expenditure in support of food and agriculture during the period under review, with significant variations between 2010 and 2013, when donors shifted from on-budget to off-budget support (World Bank, 2013). This induced a fragmentation of aid and a loss of control over certain spending, creating uncertainty with regards to the alignment of donor spending with national political priorities. In particular, since donors chiefly contributed to general support to the agricultural sector and to agriculture-supportive expenditure, the regularity of this support is questionable.
PURPOSE

The purpose of this section is to analyse the effectiveness of public expenditure in support of food and agriculture (PEFA) in Malawi. This public expenditure analysis does not intend to provide an in-depth analysis of the relationship between sector performance and public expenditure, nor does it provide an impact assessment of projects and programmes covered in the analysis. Instead, it focuses on a detailed analysis of the level, composition and coherence of PEFA in the country. The objective of such an analysis is to identify the patterns of support to food and agriculture sub-sectors (research, input subsidies, infrastructure etc.) and commodities over time, by type and source of funding.

The time period considered for the analysis is 2006–2013; all values indicated in this chapter refer to the average value for this period of analysis unless stated otherwise.

METHODOLOGY

This analysis uses the MAFAP methodology, which enables the identification, disaggregation and classification of all PEFA in the country, following a typology derived from the Organization for Economic Co-operation and Development (OECD) classification of public expenditures (Box 1). The MAFAP methodology entails the classification of all projects and programmes in support of food and agriculture in the country, based on the nature of the support to the sector that is provided under each project/programme activity. The MAFAP methodology provides the disaggregation of public expenditures by funding source (aid and government), implementing agency, and the distinction between recurrent and capital expenditure, administrative and policy transfers, budgeted and actual expenditure. The methodology also allows us to determine the share of public expenditure allocated to each commodity in the country. More information on the methodology can be found in the methodological guidelines, available on the website²

### Box 1. MAFAP classification of public expenditure in support of food and agriculture (PEFA)

<table>
<thead>
<tr>
<th>I. Agriculture-specific policies</th>
<th>monetary transfers that are specific to the agricultural sector, i.e. agriculture is the only, or principal, beneficiary of a given expenditure measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.1 Payments to agents in the agro-food sector</td>
<td>monetary transfers to individual agents of the agro-food sector</td>
</tr>
<tr>
<td>I.1.1 Payments to producers</td>
<td>monetary transfers to individual agricultural producers (farmers)</td>
</tr>
<tr>
<td>A. Production subsidies based on outputs</td>
<td>monetary transfers to agricultural producers that are based on current output of a specific agricultural commodity</td>
</tr>
<tr>
<td>B. Input subsidies</td>
<td>monetary transfers to agricultural producers that are based on on-farm use of inputs:</td>
</tr>
<tr>
<td>B1 - Variable inputs</td>
<td>monetary transfers reducing the on-farm cost of a specific variable input or a mix of variable inputs</td>
</tr>
<tr>
<td>B2 - Capital</td>
<td>monetary transfers reducing the on-farm cost of farm buildings, equipment, plantations, irrigation, drainage and soil improvements</td>
</tr>
<tr>
<td>B3 - On-farm services</td>
<td>monetary transfers reducing the cost of technical assistance and training provided to individual farmers</td>
</tr>
<tr>
<td>C. Income support</td>
<td>monetary transfers to agricultural producers based on their level of income</td>
</tr>
<tr>
<td>D. Non-classified</td>
<td>monetary transfers to agricultural producers individually, for which there is insufficient information to allocate them into above listed categories</td>
</tr>
<tr>
<td>I.1.2 Payments to consumers</td>
<td>monetary transfers to final consumers of agricultural commodities individually, in the form of:</td>
</tr>
<tr>
<td>E. Food aid</td>
<td>monetary transfers to final consumers to reduce the cost of food</td>
</tr>
<tr>
<td>F. Cash transfers</td>
<td>monetary transfers to final consumers to increase their food consumption expenditure</td>
</tr>
<tr>
<td>G. School meal programmes</td>
<td>monetary transfers to final consumers to provide free or reduced-cost food in schools</td>
</tr>
<tr>
<td>I.1.3 Payments to input suppliers</td>
<td>monetary transfers to processors of agricultural commodities individually</td>
</tr>
<tr>
<td>I.1.4 Payments to processors</td>
<td>monetary transfers to processors of agricultural commodities individually</td>
</tr>
<tr>
<td>I.1.5 Payments to traders</td>
<td>monetary transfers to agricultural traders individually</td>
</tr>
<tr>
<td>I.1.6 Payments to transporters</td>
<td>monetary transfers to transporters of agricultural commodities individually</td>
</tr>
<tr>
<td>I.2 General sector support</td>
<td>public expenditures generating monetary transfers to agents of the agro-food sector collectively</td>
</tr>
<tr>
<td>I. Agricultural research</td>
<td>public expenditures financing research activities that improve agricultural production</td>
</tr>
<tr>
<td>J. Technical assistance</td>
<td>public expenditures financing technical assistance for agricultural sector agents collectively</td>
</tr>
<tr>
<td>K. Training</td>
<td>public expenditures financing agricultural training</td>
</tr>
<tr>
<td>L. Extension/technology transfer</td>
<td>public expenditures financing provision of extension services</td>
</tr>
<tr>
<td>M. Inspection (veterinary/plant)</td>
<td>public expenditures financing control of quality and safety of food, agricultural inputs and the environment</td>
</tr>
<tr>
<td>N. Infrastructure (roads, non-farm irrigation infrastructure, other)</td>
<td>public expenditures financing off-farm collective infrastructure</td>
</tr>
<tr>
<td>N1 - Feeder roads</td>
<td>public expenditures financing off-farm collective infrastructure</td>
</tr>
<tr>
<td>N2 - Off-farm irrigation</td>
<td>public expenditures financing off-farm collective infrastructure</td>
</tr>
<tr>
<td>N3 - Other off-farm infrastructure</td>
<td>public expenditures financing off-farm collective infrastructure</td>
</tr>
<tr>
<td>O. Storage/public stockholding</td>
<td>public expenditures financing public storage of agro-food products</td>
</tr>
<tr>
<td>P. Marketing</td>
<td>public expenditures financing assistance in marketing of agro-food products</td>
</tr>
<tr>
<td>Q. Non-classified</td>
<td>public expenditures that are not specific to the agricultural sector, but which have a strong influence on agricultural sector development</td>
</tr>
<tr>
<td>II. Agriculture-supportive policies</td>
<td>public expenditures that are not specific to agriculture, but which have a strong influence on agricultural sector development</td>
</tr>
<tr>
<td>R. Rural education</td>
<td>public expenditures on education in rural areas</td>
</tr>
<tr>
<td>S. Rural health</td>
<td>public expenditures on health services in rural areas</td>
</tr>
<tr>
<td>T. Rural infrastructure (rural roads, rural water, rural energy and other)</td>
<td>public expenditures on rural infrastructure</td>
</tr>
<tr>
<td>T1 - Rural roads</td>
<td>public expenditures on rural infrastructure</td>
</tr>
<tr>
<td>T2 - Rural water and sanitation</td>
<td>public expenditures on rural infrastructure</td>
</tr>
<tr>
<td>T3 - Rural energy</td>
<td>public expenditures on rural infrastructure</td>
</tr>
<tr>
<td>T4 - Other infrastructure</td>
<td>public expenditures on rural infrastructure</td>
</tr>
<tr>
<td>U. Non-classified</td>
<td>other public expenditures on rural areas benefiting agricultural sector development for which there is insufficient information to allocate them into above listed categories</td>
</tr>
</tbody>
</table>

### SCOPE

The analysis covers budgeted and actual expenditures for all projects and programmes in support of food and agriculture for the period 2006-2013 (all values indicated in this chapter refer to the average value for this period of analysis unless stated otherwise). The analysis includes all expenditures allocated to food and agriculture regardless of the institutions involved. Therefore, expenditures from several institutions were considered (see Annex 1 for more detailed information).

The analysis exclusively covers on-budget expenditures from national and donor sources, namely, expenditures going through the government budget. Despite the fact that quantitative information
on off-budget expenditures is available within the Aid Management Platform (AMP) of the Ministry of Finance (MOF), off-budget support was not analysed in this study. The difficulty in obtaining detailed qualitative information on each programme and project prevented us from proposing a suitable classification of off-budget spending according to the MAFAP methodology.

Projects and programmes analysed in this study were selected from the qualitative information provided in the following budget book: Approved Estimates of Expenditures on Recurrent and Capital Budget (Output-based). Based on information provided on activities and outputs by programme and project, expenditures on approximately 1300 outputs and activities were classified. The annual output-based budget books were collected for the period 2005/06 to 2012/13, indicated as 2006-2013 in this analysis.

Quantitative information, namely, the budgeted expenditures and actual spending allocated per project and programme, was collected from various sources depending on the availability of data. The entire budgeted expenditures were collected in the Output-based Budget Books. Actual expenditures were sourced in the soft and hard copies of the Consolidated Budget Accounts (Part I and II). For some years and/or some ministries, data from the Consolidated Budget Accounts was not available. Therefore, data from the AMP was used as well as revised expenditures as indicated in the Output-based Budget Books (Annex 2).

Expenditures analysed include both recurrent and development public expenditures and are all exclusively at the central level. Public expenditures allocated to food and agriculture through the district councils were not included due to the difficulty in obtaining qualitative information on projects and programmes implemented by the districts.

Information on total government expenditures was collected by the International Food Policy Research Institute (Mwabutwa, C., 2015). Such information has been used to describe the general trends and estimate the share of PEFA.
ANALYSIS OF PUBLIC EXPENDITURES IN SUPPORT OF FOOD AND AGRICULTURE IN MALAWI

General trends in the global budget

- Public expenditure in Malawi increased annually by 17 percent between 2006 and 2013.
- The disbursement rate was particularly high: 91 percent on average during the period.
- Despite aid suspension from donors during the period 2010-2013, public expenditure did not decline.

From 2006 to 2013, public expenditure in Malawi steadily increased (Figure 1). Budgeted expenditure rose by 17 percent on average each year (Compound Annual Growth Rate-CAGR) and actual spending by 15 percent, reaching about MWK 386 500 million in 2013. The disbursement rate\(^3\) was particularly high and increased from 87 percent in 2006 to 95 percent in 2013, resulting in a 91 percent average over the review period.

Figure 1. Total public expenditures in Malawi (million MWK), 2006-2013

Donor inflows dropped between 2010 and 2013 due to governance and human rights concerns as mentioned in the African Economic Outlook (2013). Total government spending also decreased in 2013 following the so-called “Cashgate” scandal.\(^5\) However, the decline in donor support is not immediately apparent when comparing the various sources reporting on development partners’ expenditure (Box. 2).

\(^3\) The disbursement rate corresponds to the share of actual spending within the budgeted amount.
\(^4\) Total expenditure, as reported by IFPRI (Mwabutwa, 2015), are composed of Statutory Expenditure and Voted Expenditure.
\(^5\) The “Cashgate” refers to a financial scandal involving looting, theft and corruption that happened at Capital Hill the seat of Government of Malawi. Some estimates indicate that 35 percent of government funds may have vanished over the last decade as a result of this widespread corruption practices involving civil servants even in high ranking positions of the ruling party.
Box. 2. Donor expenditures in Malawi, 2006-2012

The Organisation for Economic Co-operation and Development (OECD) records development expenditures from OECD countries to Malawi. They are reported in the Creditor Reporting System Database. Data collected from the Development Assistance Committee (DAC) shows a decline in Official Development Assistance in 2011 (ODA). An OCDE and Development Gateway study (Petras, 2009) revealed that the aggregate figures of aid reported at national level and in the CRS database in Malawi are “broadly comparable”.

Figure 2. Total Official Development Assistance to Malawi (Current prices, USD million), 2006-2012

![Graph showing total official development assistance to Malawi, 2006-2012](source: OECD, 2014)

Figure 3. Total actual disbursement of on-budget donor support (Current prices, USD million), 2006-2012

![Graph showing total actual disbursement of on-budget donor support, 2006-2012](source: AMP, 2014)

The AMP allows us to distinguish aid allocated through both on and off-budget support. It is interesting to note that, while off-budget support increased from 2006 to 2013 with an annual growth rate of 33 percent, on-budget support only increased by 6 percent, experiencing declines in 2007 and 2010 (Figure 3). Donor expenditures recorded at national level by the Ministry of Finance in the framework of the AMP are higher than ODA data shows. This could be explained by the fact that the AMP covers various sources of expenditures, while the scope of the ODA is more limited.

Source: MAFAP, 2014

General trends in public expenditures in support of food and agriculture

- Budgeted PEFA increased at a similar rate as total public expenditures.
- The 2010-2013 period was challenging since donor support fell in 2010, 2011 and 2013, affecting food and agriculture spending overall. In 2011, national spending also fell due to poor economic performance, shrinking the budget allocated to food and agriculture.
- Actual PEFA accounted for 17 percent of the total public expenditure.

From 2006 to 2013, budgeted PEFA including administrative costs increased at an annual rate of 16 percent; similar to the total budgeted government expenditures. However, in 2012, budgeted PEFA

---

6 ODA is defined as those flows to countries and territories on the DAC list of ODA recipients and to multilateral development agencies which are (1) provided by official agencies, including state and local government, or by their executive agencies and (2) each transaction of which is administered with the promotion of the economic development and welfare of developing countries as its main objectives; and is concessional in character and conveys a grand element of at least 25 percent (OCDE, 2008).

7 Data for 2013 are not available.

8 Data for 2013 are not available.

9 ODA corresponds to donor aid reported by 18 non-Development Assistance Committee countries, 33 multilateral agencies and the Bill and Melinda Gates Foundation.
witnessed a decline of 12 percent, while actual spending was in decline for the two previous consecutive years: 2010 and 2011 (Figure 4 and Table 1).

The disbursement rates varied during the period and were particularly low in 2010 and 2011, amounting to 58 and 38 percent, respectively. On average, PEFA execution rates were lower (74 percent) than the disbursement rates of total government expenditure (95 percent).

Figure 4. Budgeted and actual expenditures in support of food and agriculture in Malawi (Million MWK), 2006-2013

Table 1. Budgeted and actual PEFA (Million MWK), disbursement and growth rates (%) in Malawi, 2006-2013

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budgeted amount (Million MWK)</td>
<td>25,312</td>
<td>30,253</td>
<td>34,532</td>
<td>48,149</td>
<td>59,797</td>
<td>66,783</td>
<td>59,055</td>
<td>79,150</td>
</tr>
<tr>
<td>Actual spending (Million MWK)</td>
<td>19,907</td>
<td>19,686</td>
<td>31,535</td>
<td>44,747</td>
<td>34,509</td>
<td>25,227</td>
<td>54,217</td>
<td>60,474</td>
</tr>
<tr>
<td>Disbursement rate (%)</td>
<td>79</td>
<td>65</td>
<td>91</td>
<td>93</td>
<td>58</td>
<td>38</td>
<td>92</td>
<td>76</td>
</tr>
<tr>
<td>Annual growth rate Budgeted amount (%)</td>
<td>20</td>
<td>14</td>
<td>39</td>
<td>24</td>
<td>12</td>
<td>-12</td>
<td>34</td>
<td>20</td>
</tr>
<tr>
<td>Annual growth rate Actual spending (%)</td>
<td>-1</td>
<td>60</td>
<td>42</td>
<td>-23</td>
<td>-27</td>
<td>115</td>
<td>12</td>
<td>-1</td>
</tr>
</tbody>
</table>

Source: MAFAP, 2014

The decline observed in actual food and agriculture expenditures in 2010 is the result of the suspension of aid from several donors. In 2010 and 2011, according to the African Economic Outlook (2013), donors from bilateral and multilateral cooperation interrupted their support, expressing concern about the deteriorating governance environment in the country, resulting in lower public expenditures in these two years. While the suspension of aid did not affect total government expenditure, agricultural expenditure was heavily penalized since donor expenditure in support of food and agriculture decreased by 83 percent in 2009-2010. In 2010, actual spending of donor support represented only 11 percent of the budgeted amount, and in 2011, amounted to only 22 percent (Figure 5) (see more in the “Role of development aid in public expenditure in support of food and agriculture”).

Actual national PEFA remained stable in 2010 but decreased by 35 percent in 2011. While the disbursement rate of national spending was 99 percent on average between 2006 and 2013, it fell to 41 percent in 2011. Indeed, Malawi faced economic challenges due to inappropriate macroeconomic
policies such as a rising budget deficit and domestic debt in the context of the overvalued exchange rate. Moreover, government revenue declined due to falling export earnings, particularly from tobacco (African Economic Outlook, 2013). The government also reinforced their exchange rate control to mitigate the depletion of foreign reserves. However, this resulted in the emergence of a dynamic parallel market, increasing the cost of imports. As a consequence, this created an additional burden for the total, and in particular, the food and agriculture budget.

In 2012, since the government implemented a range of market-oriented reforms (devaluation of the currency, fuel pricing mechanism, reduction of import duties), the relation between government and donors improved and the aid inflows recovered. The level of actual donor support increased and the disbursement rate was particularly high relative to the previous year (87 percent).

In 2013, actual donor spending in support of food and agriculture represented only 31 percent of budgeted spending (Figure 5). Following the “Cashgate” scandal, several donors again interrupted the aid flow. However, actual national spending exceeded budgeted amounts, allowing some compensation for the decline in donor support.

The period 2010-2013 was challenging for the Malawian Government. The decline in actual donor expenditures compared to the previous years and the low disbursement rate of donor spending clearly show that donors interrupted their aid in 2010, 2011 and 2013. However, the literature review reporting such aid suspension during the period is scarce. It is likely due to the fact that the aid suspension was not the result of a common decision from donors and they might have interrupted their support at different times during the period.

Figure 5. Budgeted and actual expenditures in support of food and agriculture per source of funding in Malawi (Million MWK), 2006-2013

When looking at the expenditures incurred by the Ministry of Agriculture and Food Security (MoAFS) compared to the total government budget, we observe that it declined in 2010 and 2011, while the total government budget increased (Figure 6). In relative terms, while the MoAFS represented 24 percent of total government expenditures in 2009, it accounted for 13 and 11 percent in 2010 and
2011, respectively. This shows that the agricultural sector was hit harder by budget cuts than other sectors during these years.

**Figure 6.** Actual MoAFS public expenditures and other actual public expenditures (Million MWK - left axis) and share of MoAFS expenditures over the total government expenditures (%- right axis), 2006-2013

Source: Mwabutwa, 2015

According to the MAFAP definition, the share of PEFA within total government expenditures was high (Figure 7). Annual average budgeted amounts, during the period under review, exceeded 20 percent of total public expenditures. With regards to actual expenditures, PEFA amounted to 17 percent on average and always above 10 percent of total expenditures, except in 2011.

**Figure 7.** Budgeted and actual expenditures in support of food and agriculture within total public expenditures (%), 2006-2013

Source: MAFAP, 2014

Despite the high variability over time of public spending in support of food and agriculture in absolute terms, its share on the Gross Domestic Product (GDP) remained stable, accounting for an average 30 percent of GDP over the 2006-2013 period. Agricultural GDP growth was unstable but this

---

10 Expenditures by vote as reported in the IFPRI database, compiled by Mwabutwa, C., 2015.

11 This includes policy transfers and administrative costs.
does not seem related to the level of public expenditure (Figure 8). For instance, while PEFA increased strongly in 2008 and 2012, the agricultural value added declined.

Figure 8. Agricultural value added (annual % growth), GDP growth (%), agricultural value added (% of GDP), PEFA (annual % growth) in Malawi, 2006-2013

By looking at the performance of the agricultural sector and the PEFA variability, it appears they are not strongly correlated. This might reveal a certain inelasticity of economic growth in regards to public expenditure. However, a more detailed econometric study would be required to better understand the correlation between the performance of the sector and the variability of public spending since lagged effects could then be observed.

The variability of GDP growth also demonstrates the effect of other factors on agricultural growth such as the influence of adverse weather events (FAO-WFP, 2005). From 1993 to 2004, it was estimated that the main factor contributing to the unbalanced growth was the effects of droughts and floods.

**Composition of public expenditures in support of food and agriculture**

- Agriculture-specific expenditure represented 84 percent of PEFA on average during the period 2006-2013; this shows that priority is given to direct support rather than indirect support.

PEFA are composed of administrative costs and policy transfers. Policy transfers include (1) agriculture-specific expenditures and (2) agriculture-supportive expenditures.

Agriculture-specific expenditures include those that directly influence the development of agriculture in the country. They are composed of payments to sector agents (producers, consumers, input suppliers, processors, traders) and general support to the sector (agricultural research, technical assistance, training, extension, inspection, agricultural infrastructure, storage, marketing and other types of general support).
Agriculture-supportive expenditure is composed of expenditures that are not specific to agriculture but have an impact on agricultural development. These include expenditures in support of rural education, rural health and rural infrastructure.

MAFAP analysis reveals that the food and agriculture sector in Malawi is chiefly supported through agriculture-specific expenditure, namely, policy transfers that directly influence the development of the sector (Figure 9). Agriculture-specific expenditures represented 84 percent of total expenditures in support of food and agriculture. The composition of PEFA remained broadly similar across years, with 2009 and 2012 showing higher values for agricultural-supportive expenditures. In 2010, when actual PEFA witnessed a decline, agriculture supportive expenditures decreased at a higher rate than specific expenditure.

Figure 9. Composition of PEFA in Malawi (million MWK), 2006-2013

Policy transfers in support of food and agriculture, as classified by MAFAP, are presented in the table below (Table 2).
### Table 2. Composition of food and agriculture expenditures in Malawi (Million MWK), 2006-2013

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Payments to agents in the food and agriculture sector</td>
<td>17,732</td>
<td>11,461</td>
<td>17,707</td>
<td>23,353</td>
<td>27,547</td>
<td>13,671</td>
<td>25,908</td>
<td>53,229</td>
</tr>
<tr>
<td>1.1. Payments to producers</td>
<td>17,712</td>
<td>11,453</td>
<td>14,675</td>
<td>23,227</td>
<td>27,415</td>
<td>13,181</td>
<td>25,683</td>
<td>53,186</td>
</tr>
<tr>
<td>A. Production subsidies based on outputs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B. Input subsidies</td>
<td>8,369</td>
<td>11,180</td>
<td>14,629</td>
<td>23,227</td>
<td>27,415</td>
<td>13,180</td>
<td>25,683</td>
<td>53,186</td>
</tr>
<tr>
<td>B1. Variable inputs</td>
<td>8,174</td>
<td>10,311</td>
<td>13,971</td>
<td>22,417</td>
<td>26,661</td>
<td>12,514</td>
<td>24,632</td>
<td>51,044</td>
</tr>
<tr>
<td>B2. Capital (including on-farm irrigation and infrastructure)</td>
<td>194</td>
<td>650</td>
<td>596</td>
<td>519</td>
<td>385</td>
<td>467</td>
<td>486</td>
<td>849</td>
</tr>
<tr>
<td>B3. On-farm services</td>
<td>1</td>
<td>220</td>
<td>63</td>
<td>291</td>
<td>368</td>
<td>198</td>
<td>565</td>
<td>1,293</td>
</tr>
<tr>
<td>C. Income support</td>
<td>9,343</td>
<td>41</td>
<td>46</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>D. Other payments to producers</td>
<td>0</td>
<td>231</td>
<td>63</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1.1.2. Payments to consumers</td>
<td>18</td>
<td>0</td>
<td>2,614</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>91</td>
<td>0</td>
</tr>
<tr>
<td>E. Food aid</td>
<td>0</td>
<td>0</td>
<td>2,614</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>F. Cash transfers</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>G. School feeding programmes</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>H. Other payments to consumers</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>91</td>
<td>0</td>
</tr>
<tr>
<td>1.1.3. Payments to input suppliers</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1.1.4. Payments to processors</td>
<td>1</td>
<td>8</td>
<td>410</td>
<td>98</td>
<td>56</td>
<td>486</td>
<td>134</td>
<td>43</td>
</tr>
<tr>
<td>1.1.5. Payments to processors</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>24</td>
<td>75</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1.1.6. Payments to traders</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I. Agriculture support to the food and agriculture sector</td>
<td>894</td>
<td>5,780</td>
<td>4,861</td>
<td>7,164</td>
<td>1,985</td>
<td>6,327</td>
<td>10,382</td>
<td>7,204</td>
</tr>
<tr>
<td>J. Agricultural research</td>
<td>137</td>
<td>529</td>
<td>922</td>
<td>1,314</td>
<td>317</td>
<td>997</td>
<td>2,781</td>
<td>2,256</td>
</tr>
<tr>
<td>K. Technical assistance</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>86</td>
<td>4</td>
<td>0</td>
<td>547</td>
<td>0</td>
</tr>
<tr>
<td>L. Extension/technology transfer</td>
<td>373</td>
<td>570</td>
<td>836</td>
<td>1,417</td>
<td>351</td>
<td>864</td>
<td>2,754</td>
<td>2,479</td>
</tr>
<tr>
<td>M. Inspection</td>
<td>297</td>
<td>659</td>
<td>823</td>
<td>607</td>
<td>107</td>
<td>1,137</td>
<td>1,128</td>
<td>134</td>
</tr>
<tr>
<td>N. Agricultural infrastructure</td>
<td>35</td>
<td>97</td>
<td>839</td>
<td>202</td>
<td>4</td>
<td>574</td>
<td>256</td>
<td>265</td>
</tr>
<tr>
<td>N1. Feeder roads</td>
<td>16</td>
<td>265</td>
<td>656</td>
<td>2,587</td>
<td>323</td>
<td>760</td>
<td>1,835</td>
<td>1,212</td>
</tr>
<tr>
<td>N2. Off-farm irrigation</td>
<td>14</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>68</td>
<td>500</td>
<td>219</td>
</tr>
<tr>
<td>N3. Other off-farm infrastructure</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>O. Storage/public stockholding</td>
<td>1</td>
<td>3,426</td>
<td>71</td>
<td>6</td>
<td>49</td>
<td>17</td>
<td>15</td>
<td>174</td>
</tr>
<tr>
<td>P. Marketing</td>
<td>33</td>
<td>232</td>
<td>606</td>
<td>946</td>
<td>285</td>
<td>1,861</td>
<td>992</td>
<td>317</td>
</tr>
<tr>
<td>Q. Other general support to the food and agriculture sector</td>
<td>0</td>
<td>1</td>
<td>107</td>
<td>0</td>
<td>544</td>
<td>117</td>
<td>74</td>
<td>368</td>
</tr>
<tr>
<td>II. Agriculture-supportive expenditure</td>
<td>3,939</td>
<td>5,348</td>
<td>7,856</td>
<td>13,608</td>
<td>14,684</td>
<td>16,272</td>
<td>16,175</td>
<td>9,998</td>
</tr>
<tr>
<td>R. Rural education</td>
<td>12</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>94</td>
<td>0</td>
<td>33</td>
<td>0</td>
</tr>
<tr>
<td>S. Rural health</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>369</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>T. Rural infrastructure</td>
<td>3,752</td>
<td>5,075</td>
<td>7,411</td>
<td>12,584</td>
<td>14,112</td>
<td>15,361</td>
<td>15,358</td>
<td>8,398</td>
</tr>
<tr>
<td>T1. Rural roads</td>
<td>3,679</td>
<td>4,338</td>
<td>6,755</td>
<td>12,244</td>
<td>12,602</td>
<td>13,600</td>
<td>12,611</td>
<td>8,221</td>
</tr>
<tr>
<td>T2. Rural water and sanitation</td>
<td>68</td>
<td>697</td>
<td>656</td>
<td>39</td>
<td>782</td>
<td>1,694</td>
<td>366</td>
<td>177</td>
</tr>
<tr>
<td>T3. Rural energy</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>68</td>
<td>283</td>
<td>0</td>
</tr>
<tr>
<td>T4. Other rural infrastructure</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>300</td>
<td>728</td>
<td>0</td>
<td>2,098</td>
<td>0</td>
</tr>
<tr>
<td>U. Other support to the rural sector</td>
<td>173</td>
<td>271</td>
<td>41</td>
<td>1,024</td>
<td>110</td>
<td>911</td>
<td>783</td>
<td>700</td>
</tr>
<tr>
<td>III. Total expenditure on agriculture and rural development (policy transfers)</td>
<td>22,565</td>
<td>22,589</td>
<td>30,424</td>
<td>44,125</td>
<td>44,217</td>
<td>36,271</td>
<td>52,485</td>
<td>69,531</td>
</tr>
</tbody>
</table>

Source: MAFAP, 2014
Agriculture-specific public expenditures

- Payments to producers capture 65 percent of PEFA and 80 percent of agriculture-specific expenditures, revealing a focus on the provision of private goods rather than public goods.
- Producers are chiefly supported in the framework of the FISP, namely through the provision of variable input subsidies. Budget allotted to the FISP amounted to 57 percent of PEFA and 9 percent of national spending. Furthermore, actual spending allocated to the FISP increased each year by an average 20 percent.
- Although general support to the food and agriculture sector increased over the period, it represented only 20 percent of the agriculture-specific expenditure. Drops were recorded in 2010 and 2013 due to the aid suspension. The main component of the general support is technical assistance, training and extension, followed by agricultural research.
- The concentration of expenditures allocated to the FISP prevented a more diversified and balanced allocation of PEFA.

Agriculture-specific public expenditures are composed of payments to agents in the food and agricultural sector and general support to the sector. Payments to agents are monetary transfers to individuals including producers, consumers, input suppliers, processors, and traders. General support consists of agricultural research, technical assistance, training, extension, inspection, agricultural infrastructure, storage, marketing and other types of general support.

From 2006 to 2013, general support to the sector was limited, representing only 20 percent of agriculture-specific expenditure (Figure 10). The general support allocations were particularly low in 2006 and 2010, amounting to only 5 and 7 percent respectively.

This reflects the will of the government to prioritize support to individual agents (mainly producers) rather than providing support to the sector using a value chain approach that would target inefficiencies and thus, affect other agents and elements beyond production. Payments to agents accounted for 68 percent of PEFA.

**Figure 10. Composition of agricultural specific public expenditures in Malawi (Million MWK), 2006-2013**

![Graph showing composition of agricultural specific public expenditures](source: MAFAP, 2014)

Among agents of the food and agricultural sector, the main beneficiaries were producers (Figure 11). Payments to producers represented 98 percent of payments to agents. In other words, payments to producers amounted to 65 percent of PEFA.
The remaining 2 percent was allocated to other agents but followed a more scattered and discontinuous path. In 2008, public expenditures also targeted consumers, with MWK 2,597 million allocated to the procurement of maize through ADMARC in order to redistribute it during the lean season at subsidised prices, probably to hedge against the effect of the soaring food prices.

Payments to processors are also observed in 2008 and 2011. In 2011, several projects were developed to improve agro-processing activities including the project implemented by the MoAFS that aimed to facilitate access to credit, equipment and technology in order to increase the value added of certain commodities. In 2011, payments to processors were delivered by the Ministry of Industry, Trade and Private Sector Development in an effort to increase the production of locally manufactured products. Payments to the remaining agents, such as inputs suppliers, traders and transporters, were not significant.

Figure 11. Composition of expenditures allocated to agents of the food and agricultural sector in Malawi (Million MWK), 2006-2013

The MAFAP methodology enables the identification of the composition of payments to producers, showing that 96 percent of the resources allocated to producers were in form of variable inputs (Figure 12) provided in the framework of the Farm Inputs Subsidy Programme (FISP).
From 2006 to 2013, the level of expenditure allocated to inputs (fertilizer and seeds) varied widely in absolute and relative terms (Figure 13). For instance, in 2006, support to producers through variable inputs represented 43 percent of PEFA, while this share amounted to 84 percent in 2010.

According to the Agricultural Public Expenditures review undertaken by the World Bank, since the introduction of the FISP, the programme has mobilized 69 percent of the MoAFS budget, on average. This figure is close to the MAFAP results, showing that the FISP accounted for 64 percent of the MoAFS budget, corresponding to 57 percent of the PEFA. The Chirwa and Dorward (2013) analysis of the programme estimated that the FISP represented, on average, 9 percent of the total government budget and 56 percent of the food and agriculture expenditures between 2007 and 2012 (Chirwa, 2013). These results are almost identical to the MAFAP results for the same period (Table 2).

---

12 The slight discrepancy between WB and MAFAP data could be explained by the fact that revised expenditures were collected by the World Bank while actual expenditures were used for this analysis.
Between 2008 and 2009, the costs of the programme increased by 60 percent owing to the surge in the international price of fertilizer as well as increases in transport, procurement and seed costs (World Bank, 2014; Chirwa, 2013). The drop observed in 2011 is likely linked to the reduction of national budget that year. Indeed, actual spending allocated to the FISP represented only 50 percent of the budgeted amount (MWK 22,613 vs. MWK 11,403 million).\(^\text{13}\) In 2012, expenditure allocated to the FISP recovered, reaching the level of 2010. In 2013, FISP expenditure attained the highest level with 51,044 million of MWK. The budget books show that the FISP is exclusively funded through national spending.

As mentioned previously, development of the agricultural sector was chiefly supported by payments to agents and more precisely, to producers in the framework of the FISP. Therefore, general support to agriculture accounted for only 20 percent. General support includes interventions that generate an impact on overall agricultural development, such as: agricultural research, technical assistance, training, extension and technology transfer, inspection (vegetal and animal), agricultural infrastructure, storage/public stockholding and marketing.

General support increased steadily by an average 20 percent per year from 2006 to 2013. Donors funded more than half of the general support to agriculture (54 percent). As a consequence, in the context of the aid suspension in 2010, the level of general support witnessed a strong decline in absolute terms, with a decrease of 47 percent between 2009 and 2010 (Figure 14). Indeed, actual spending from donors allocated to general support represented only 30 percent of the budgeted amount in 2010. Also in 2012, general support was limited and represented only 12 percent of agriculture-specific spending, while it amounted to 29 percent the previous year.

\(^{13}\) This drop in 2011 is not reflected in the WB review as revised expenditures were collected.
Among categories encompassed in the general support to food and agriculture, technical assistance, training, extension, and agricultural research were the main targeted categories. These four categories accounted for more than 50 percent of general support to agriculture. Agricultural infrastructure, marketing, storage, inspection are the categories receiving the lowest share of expenditure allocated to general support to agriculture.

The main form of general support is spending on transfer of knowledge and skills, namely, training (64 percent of expenditures), extension (32 percent) and technical assistance (4 percent) (Figure 14).

Support to agricultural research represented 21 percent of the general support with an average annual growth rate of about 30 percent over the period. As with the general support to agriculture, the level of expenditure allotted to agricultural research decreased in 2010 and 2013.

The Agricultural Science & Technology Indicators (ASTI) initiative, implemented by the International Food Policy Research Institute (IFPRI), enables the measurement of the public spending allocated to agricultural research. ASTI data refers to public spending allotted to agricultural research, namely, salaries, operational costs, programme expenditures and capital investments. This includes expenditures for research activities within national institutions, higher education and non-profit education (ASTI, 2014). Data reported by ASTI are on average higher than data collected by MAFAP in absolute and relative terms (share of agricultural GDP) (Figure 15). This could be explained by the fact that the MAFAP methodology distinguishes and excludes administrative costs from policy transfers, while ASTI includes the administrative costs related to agricultural research. Moreover, only on-budget expenditures were included in the MAFAP public expenditure analysis, while ASTI collects all types of public expenditures whether on- or off-budget. Support to agricultural research represented 21 percent of the general support with an average annual growth rate of about 30 percent over the period. As with the general support to agriculture, the level of expenditure allotted to agricultural research decreased in 2010 and 2013.
Expenditure allocated to agricultural infrastructure is the third component of general support to agriculture. The category is composed of feeder roads, off-farm irrigation and other off-farm infrastructure. The main targeted category is off-farm irrigation, representing three quarters of spending allocated to agricultural infrastructure (Figure 16). Off-farm irrigation refers to collective support to irrigation development and diverges from on-farm irrigation, which is included in the category “Payments to producers”. Off-farm irrigation was particularly high in 2009, with the implementation of the small farm irrigation project implemented by the Ministry of Irrigation and Water Development and funded by the Arab Bank for Economic Development in Africa (BADEA). With regards to expenditures allocated to feeder roads, they are probably underestimated as most of the expenditure incurred by the Road Fund Administration was included in the rural infrastructure category due to the lack of specific information needed to distinguish feeder roads from rural roads.

Expenditures allocated to the development of marketing activities represented 12 percent of general support to agriculture, expanding in 2011 with the development of the Cooperative Development...
and Management programme implemented by the Ministry of Industry, Trade & Private Sector Development. Expenditures towards storage and public stockholding were low during the period (8 percent of the general support to agriculture) but witnessed an increase in 2007 with spending used to restock the National Food and Reserve Agency (NFRA). Animal and vegetal inspection amounted to 5 percent of the general support to agriculture.

In summary, agriculture was mainly supported through payments to producers in the framework of the FISP. General support represented only 20 percent of specific agricultural spending, with more than half of the general support allocated to training, technical assistance, extension and agricultural research. The level of spending allocated to the FISP experienced an increasing trend but dropped in 2011, when national funds declined. General support to agriculture increased, but also experienced two significant declines in 2011 and 2013, when support from donors fell.

**Agriculture-supportive public expenditures**

- Agriculture-supportive expenditures accounted for 16 percent of public expenditures in support of food and agriculture, on average between 2006 and 2013.
- Development of rural road is highly targeted since it captured 23 percent of public expenditures in support of food and agriculture and 4 percent of government spending, on average during the period under review.

Using MAFAP methodology, it is possible to capture each agriculture-supportive public expenditure measure. This includes expenditures having an impact on agricultural development but which do not directly target agriculture. Agriculture-supportive expenditures accounted for an average 16 percent of PEFA (Figure 10), indicating that priority was given to direct spending for sector development.

Agriculture-supportive expenditure is composed of four categories: rural education, rural health, rural infrastructure and other support to the rural sector. Rural infrastructure accounted for 91 percent of the agriculture-supportive expenditure. This large share could be partially explained by the fact that the analysis only includes expenditures towards rural education and health, while it is likely that education and health are targeted through global programmes implemented not only in rural areas. Thereby, rural education represented only 0.3 percent and rural health 1 percent of agriculture-supportive spending over the period.

Expenditures allocated to rural infrastructure are composed of rural roads, rural water and sanitation, rural energy, and “other”. Rural roads amounted to 90 percent of spending allocated to rural infrastructure (Figure 17). As with expenditure targeting rural health and education, the programmes and projects aiming at developing energy, water and sanitation identified in the framework of the analysis, covered both rural and urban areas. Therefore, they were not included in the analysis and rural water & sanitation and rural energy expenditure accounted for only 5 and 1 percent of expenditures in support of rural infrastructure, respectively.
Road development was firmly targeted during the period under review, representing 86 percent of agriculture-supportive expenditure, 23 percent of PEFA, and 4 percent of the government budget. It refers mainly to projects implemented by the Road Fund Administration, whose mandate is to construct rural roads. The World Bank Public expenditure review (2013) showed that roads dominate transport expenditures with 22 projects per year targeting road construction and rehabilitation in rural areas.

Public expenditures on key commodities

- Maize attracted 50 percent of PEFA on average during the reviewed period; production was primarily supported through the provision of variable input subsidies in the framework of the FISP.
- Other commodities important for food security such as cassava and sweet potatoes were barely targeted.
- Although FISP stopped targeting tobacco production in 2009, tobacco was the second commodity targeted during the period under review. Like maize, tobacco was exclusively supported through the provision of input subsidies.
- Unlike tobacco, cotton and sugar received more diversified albeit sporadic support. The share of expenditure allocated to both commodities together represented only 2 percent of agriculture-specific expenditure.
- Although tea is the third agricultural export product, it was not targeted by public expenditures at all.

Through MAFAP analysis, it is possible to identify, among agriculture specific spending, expenditures allocated to single commodities, to groups of commodities and in support of all commodities. In Malawi, priority is given to the support of individual commodities (Figure 18) with 75 percent of agriculture-specific expenditure allotted to single commodities. The level of support to groups of commodities and non-targeted support remained low compared in comparison.
Regarding single commodities, maize is by far the first targeted commodity (Figure 19). Maize represented 69 percent of agriculture-specific spending and accounted for 50 percent of PEFA, over the 2006-2013 period.

Maize was targeted mainly through the provision of variable input subsidies in the framework of the FISP as 91 percent of variable input subsidies expenditure targeted maize (Figure 20). Since maize represented a major part of FISP expenditures, maize and FISP expenditures followed approximately the same trend with an average annual increase of 20 percent (CAGR) between 2006 and 2013.

---

15 “Other” includes macadamia, poultry, wheat and cassava.
16 Total expenditures allocated to the FISP were systematically collected in the annual budget books. However, no information on the level of expenditure allocated per commodity in the framework of the FISP was provided. Therefore, in order to identify the amount allotted to each commodity, we used an estimation made by Chirwa & Dorward, 2013. They estimated the volume of seeds and fertilizers allocated per commodity. The share allocated per commodity within total volume was used to determine the share of expenditure allocated per commodity within total FISP expenditure.
In 2006, the maize sector was also targeted by income support through national purchases of maize. This explains the higher level of maize expenditures in 2006 compared to 2007, while on the other hand, FISP expenditures were lower in 2006 than 2007 (Figure 19).

Concerning other single commodities supported by public expenditure, tobacco is the second targeted commodity (Figure 19 and Figure 21). Despite tobacco being the first export product (average 2005-2012), it only received support from FISP from 2006 to 2009. During this period, average expenditure on tobacco represented 7 percent of agriculture-specific expenditure.

The third single commodity targeted by public expenditure is cotton, the fourth export in terms of value (average 2005-2012). Cotton production received support from 2008 to 2013 and accounted for only 1 percent of specific agriculture expenditures on average during this period. Contrary to tobacco and maize, the cotton sector was supported through different programmes and projects and not only through input subsidies. Two main projects were recorded: the “Promotion of Cotton Production” project implemented by the MoAFS and the “Cotton Strengthening” project, implemented by the Ministry of Industry, Trade & Private Sector Development. Expenditures towards...
the “Promotion of Cotton Production” project were recorded from 2008 to 2013 while “The Cotton Strengthening” project was implemented in 2011. The cotton sector was mainly supported through extension and training (Figure 22). The FISP also targeted cotton production in 2008 and 2009 but the share of expenditure allocated to cotton in the framework of the FISP could not be identified.

Figure 22. Composition of the support to the cotton sector in Malawi (%), average 2008-2013

![Pie chart showing the composition of support to the cotton sector in Malawi, average 2008-2013.](chart.png)

Source: MAFAP, 2014

Sugar, the fourth commodity targeted by public expenditure, is the second export product in terms of value (average 2005-2012). The sector was only supported from 2007 to 2009 through the “Smallholder Out-grower Sugar Cane” project, which received contributions from the European Union (EU) and the African Development Bank (ADB). The main components of the programme were the provision of variable inputs, on and off-farm irrigation and training.

Other single commodities targeted include important products for food security such as cassava, wheat and poultry, but also cash crops like macadamia, although amounts allocated to these commodities were sporadic and low (less than 50 million MWK).

It is interesting to observe that, although cassava was the first commodity in terms of volume of production during the period, support to cassava was limited (Figure 23).

Moreover, cassava, together with maize, is among the main commodities important for food security. Three projects targeting cassava were recorded, showing a more diversified support to production than maize. As mentioned previously, maize is almost exclusively targeted through the provision of input subsidies to boost production and no interventions strengthening value chain integration and agri-business development are foreseen in the current national policy strategies. Other commodities are relevant in terms of production, such as sweet and Irish potatoes, but there were only one project targeting these commodities according to our analysis.17

Tobacco was the main cash crop supported during the period under review, despite the suspension of the provision of input subsidies to tobacco producers in 2009 under the FISP. Although discontinuous, the level of the support is consistent with the fact that tobacco is the first export commodity, accounting for more than 60 percent of the value of total agricultural exports.

17 In 2007 and 2008, the “Cassava and Sweet Potatoes production” project was implemented with funds from USAID.
Cotton is the second cash crop supported by public expenditures, while it is the 4th commodity in terms of export value. Such support is coherent with the NES, which aims at boosting oil seed production, including cotton seed oil. As mentioned previously, more diversified support to cotton is observed, with two main projects targeting production.

Although it is the third export product in terms of value, no expenditure towards the tea sector was recorded (between 2005 and 2012).

Figure 23. Average volume of production (thousand tonne - Y axis), average expenditures allocated per commodity (million MWK - X axis), number of project or programmes targeting each commodity (total of number of projects - bubble size)\(^{18}\) in Malawi, average 2006-2013

\[ \text{Source: MAFAP, 2014 and AMIS, 2014} \]

Regarding targeted groups of commodities, no priority could be clearly identified since various groups received support (Figure 24). At the beginning of the period, cereals and more precisely storage of cereals were strongly targeted, absorbing about 20 percent of agriculture-specific expenditure. The 2007 peak corresponds to the grain restocking of the NFRA in order to increase the level of public storage.

\[ \text{Source: MAFAP, 2014 and AMIS, 2014} \]

\(^{18}\) For cassava, the cassava and sweet potatoes production project was included despite the fact that the project does not only focus on single commodity.
Then, the second group of commodities targeted during the period was livestock, with production regularly supported throughout the period and representing 1.2 percent of agriculture-specific expenditure. Numerous projects and programmes supporting livestock production and marketing were recorded. Payments to producers through on-farm services, variable inputs and on-farm capital, were the major instruments used in order to boost the livestock sector and represented 80 percent of the expenditures allocated to the livestock sector (Figure 25). Compared to the direct support to producers, support to marketing or inspections were minor.

Expenditures allotted to the crop sector\textsuperscript{20} increased with the implementation of the Smallholder Crop Production and Marketing programme in 2011. Nonetheless, expenditures for crops production

\textsuperscript{19} Other groups include cassava and sweet potatoes, forestry, fruit, horticulture and crops, livestock and crops and macadamia and cotton.

\textsuperscript{20} Several programmes targeted crops but the type of crops was not specified.
remained low, with an average 1.2 percent of agriculture specific expenditures between 2006 and 2013.

Fish production and commercialisation was targeted by numerous projects and programmes but accounted for less than 1 percent of agriculture-specific expenditure. Contrary to livestock, which is mainly supported through the provision of inputs; support to the fish sector was more diversified, with projects and programmes aiming at supporting production through the provision of capital and variable inputs as well as processing and marketing.

Over the period, expenditures towards legumes were low. However, growing expenditures were recorded owing to the fact that the FISP started to target legumes in 2010. Between 2010 and 2013, expenditures allotted to legumes accounted for 1.3 percent of agriculture-specific expenditures on average.

At the beginning of the period, horticulture was targeted by the Horticulture and Food Crop Development project (2006-2009). In 2010, a more focused programme was implemented to develop the horticultural sector, namely, the Horticultural and Floricultural Export Project.

In summary, support to maize production and productivity captured the major share of agriculture-specific expenditure through the FISP. Such focus leaves little room to support other commodities or groups of commodities, not to mention other interventions aimed at value chain development. Other commodities and groups of commodities were targeted through various projects and programmes but the amount remained insignificant compared to the budget allocated to maize input subsidies.

**Nature of public expenditure in support of food and agriculture**

- Recurrent expenditure exceeded development expenditure between 2006 and 2013. The relatively high operational budget compared to investment expenditure shows the constraints for the government to invest in the agricultural sector.
- Donors contributed exclusively to development expenditures and since donor aid declined in 2010, so did development expenditures.

The MAFAP methodology distinguishes policy transfers from administrative costs. Policy transfers are all budgetary transfers that are associated with a good or a service supporting the agricultural sector, including salaries of extension workers. On the other hand, MAFAP counts as administrative costs all expenditures that correspond to the functional costs of Ministries such as office infrastructure, wages of Ministry staff at central level or policy design costs.

Administrative costs recorded are low compared to the budget allocated to policy transfers (Figure 26), amounting to 5 percent of the total PEFA. Administrative costs according to the MAFAP definition are limited since the category does not include administrative costs incurred in the framework of projects or programmes.
The distinction between recurrent and development expenditures is made based on the information provided in the budget books. In most cases, administrative costs corresponded to recurrent expenditures. Recurrent expenditures are entirely financed by national funds, whereas donors contribute exclusively to development expenditure. Although the share of recurrent expenditure within total PEFA witnessed a decline between 2006 and 2009, the share significantly increased in 2009 due to the suspension of aid from donors. A similar situation is observed in 2013. Recurrent expenditures exceeded development expenditures and accounted for 63 percent of total PEFA.

Recurrent expenditures correspond to regular support to the sector and refer to the operational budget. Thus, the low level of development expenditures shows the limited leeway that the government can use to invest in agriculture and to ensure the development of the sector. This also affects the capacity of the government to react and the ability to annually tailor expenditures in a way that is consistent with national needs and priorities. In addition, development budget is subject
to variation since it relies on donor funding and therefore donor priorities. The situation experienced in 2010 and 2013 reflects this challenge.

**Role of development aid in public expenditure in support of food and agriculture**

- On average, donor spending represented 19 percent of PEFA during the period under review. However, the share and level of donor contributions experienced significant variations since donors suspended aid in 2010, 2011 and 2013.
- Donors contributed to about 50 percent of both the general support to the agriculture sector and to agricultural-supportive expenditures. Given this high share, sustainability and stability of the support to the agricultural sector is somehow questionable.
- The contribution of donor spending to agricultural research expenditures reached 86 percent.

PEFA covered by the analysis are composed of national spending and on-budget donor expenditures. As mentioned previously, off-budget donor expenditures were not included in the analysis due to a lack of qualitative information to classify the off-budget support. According to the World Bank, off-budget support represented 25 percent of the total agricultural expenditures (World Bank, 2014).

Donor support represented 19 percent of PEFA during the period under review; nonetheless, it should be mentioned that the share of donor support varied widely and in several cases was suspended entirely between the years 2010 and 2013. For example, donor contributions accounted for 37 percent of total PEFA in 2007, while this percentage was only 6 percent in 2013 (maximum and minimum). Indeed, while the share of donor spending increased between 2006 and 2009, it strongly declined in 2010 and again in 2013 (Figure 28).

Figure 28. Composition of total PEFA by source of funding (Million MWK- left axis) and donor expenditures as a share of PEFA (%- right axis), 2006-2013

The particularly low disbursement rates in 2010, 2011 and 2013 reflect the decision taken by donors to suspend their on-budget support due to the deteriorating governance (Figure 29). The average disbursement rate was 49 percent during the period under review but it decreased to 22 percent in 2010 (Table 4). This situation affected the overall level of support to the agricultural sector in 2010. However, as mentioned by the World Bank (2014), off-budget expenditure more than doubled in
2009/10. This is because donors shifted from on-budget to off-budget support from 2010 onward in reaction to the governance issues which had affected donor contributions in the past.

While the budgeted amount of PEFA increased by 25 percent between 2009 and 2010, actual spending remained stable because the government managed to compensate for the decline in donor spending. This is reflected by the high disbursement rate of national spending of 114 percent in 2010. A similar situation is observed for 2013. In that year, the government allocated additional funds compared to the initial budgeted amount and the disbursement rate of national spending reached 105 percent (Table 4).

Figure 29. Budgeted and actual donor PEFA (Million MWK - left axis) and disbursement rate (% - right axis) in Malawi, 2006-2013

As mentioned previously, several institutions measure the level of donor spending allotted to food and agriculture (Figure 30). The ODA recorded in the CRS database and computed by the OECD compiles expenditures reported by donors through all channels (public sector, multilateral organization, NGO and Private-Public Partnership). The ODA database however does not distinguish on and off-budget support. This explains the systematically higher level of support reported in the CRS database\(^\text{21}\) compared to the MAFAP database (Figure 30). Data collected by the Ministry of Finance in the framework of the Aid Management Platform is based on information reported by

---

\(^{21}\) Data from the CRS database are expressed in USD. The high peak in 2012 is explained by the fact that in 2012, expenditures in USD more than doubled. Moreover, the floating exchange rate implemented in 2012 led to a strong increase in the exchange rate level.
donors, which could explain the discrepancies with the MAFAP database. Concerning data collected in the framework of the World Bank Agriculture Public Expenditure Review, data corresponding to donor contributions to the development budget of the MoAFS was selected to allow for comparison. Since donor support to other ministries is not included, the level is systematically lower than data collected in the MAFAP database.

Figure 30. Actual donor expenditures for food and agriculture by source in Malawi (Million MWK), 2006-2012

The share of donor contribution strongly differs across categories. For example, donor contribution to payments to agents amounted to only 3 percent of these payments (Figure 31). Donors tended to focus on general support to agriculture with a contribution of 54 percent. Within this category, donors strongly targeted agricultural research, providing 86 percent of the funding. Moreover, donors contributed to agriculture-supportive expenditure, namely, rural infrastructure, rural health and rural education, with support amounting to 42 percent of agriculture-supportive expenditure.

Source: MAFAP, 2014
The suspension of aid from donors significantly impacted the level of spending of general support to the sector and agriculture-supportive expenditure (Figure 32). While the government ensured direct specific support to agriculture, the level of general support was uneven during the period, impeding the implementation of programmes and projects that would benefit the sector as a whole. This also reflects the challenges in the implementation of long-term programmes and projects.
Figure 32. Composition of donor expenditures to food and agriculture (Million MWK), 2006-2013

Source: MAFAP, 2014
CONCLUSIONS AND RECOMMENDATIONS

While the government budget increased steadily during the 2006-2013 period, PEFA witnessed uneven growth. This reveals the vulnerability of the agricultural budget to internal and external shocks compared to other sectors. The period 2010-2013 was particularly challenging for the government since donors interrupted their support due to deteriorating governance, while a decline in export earnings also led to a reduction of the national budget. The Malawian authorities seemingly chose to reallocate the dwindling funds to non-agricultural sectors even though it is acknowledged that agricultural spending has the largest positive effects on growth and poverty reduction (IFPRI, 2009).

Despite the uneven, sometimes declining (2009-2011) level of expenditure in support of food and agriculture, agricultural growth was not immediately affected. This could show some inelasticity of agricultural growth with regards to public expenditures, while other variables, such as weather conditions, play a major role. However, more detailed econometric analysis would be needed to understand the correlation between performance of the sector and level of public expenditure since lagged effects could then be observed.

In terms of development of the food and agricultural sector, priority is given to the direct and individual support to producers, namely, the provision of private goods at the expense of the general support to the sector. Indeed, the development of the food and agricultural sector is chiefly supported with the provision of input subsidies in the framework of the FISP. The FISP accounted for 57 percent of PEFA and 9 percent of the government budget. Given the importance of the FISP in terms of budget, this leaves little room for non-FISP development expenditures. The implementation of the FISP met the basic needs of the Malawian population, namely, boosting maize production by increasing productivity, yet prevented the implementation of projects and programmes aiming at the long-term development of the sector. Moreover, the implementation of the FISP suffered corruption and distortions that reduced the efficiency of the programme (World Bank, 2013). The dependence on recurrent FISP expenditures also affects the ability of the government to react and to tailor expenditures in a manner that is consistent with national needs and priorities. Whether a more diversified form of support, both in terms of sub-sectoral targeting and types of measures adopted, would have the impact needed to boost the agricultural sector and contribute to the achievement of Malawi’s overall economic and trade objectives, is a question that must be addressed with due consideration. An analysis of the costs and benefits of a more balanced budget structure, aiming at both supporting individual producers and the sector as a whole, would be the first step in such an undertaking.

General support expenditures, which benefit the sector collectively, only accounted for 20 percent of PEFA, more than half of which was contributed by donors. Therefore, general support witnessed a decline in 2010 and 2013 in the context of the aid suspension from donors who shifted from on-budget to off-budget support from 2010 onwards, inducing fragmentation of aid and a loss of control over spending (World Bank, 2013). This created growing uncertainty with regards to the alignment of donor spending with national political priorities. A more balanced distribution of national spending between both payments to agents and general support and between recurrent and development budget is needed in order to avoid uneven and sporadic resources on general sector support, an
essential type of expenditures to develop agriculture in the long run. Investments in public goods show higher returns than other types of expenditure such as general subsidies (FAO, 2012).

Expenditures allocated to agricultural research accounted for 3 percent of PEFA. Donors contributed to 86 percent of the agricultural research expenditure for the same period. Increasing national spending towards agricultural should be a top priority for the Government. Investment in agricultural research and development has been one of the most effective forms of public investment over the past 40 years (FAO, 2012).

Priority is also given to rural road development, representing 23 percent of PEFA. This is consistent with the need to improve road infrastructure since the poor quality of the feeder roads has a significant bearing in transport cost in Malawi (World Bank, 2009). Furthermore, spending on rural roads also has a significant effect on growth and poverty reduction (IFPRI, 2009). Good road mapping and understanding of agricultural trade flows are required to ensure that the priorities in terms of road development are respected. Moreover, there is a need to focus on enhancing feeder roads rather than the trunk network.

Maize production captured the major share of agriculture-specific expenditure, exclusively through the provision of input subsidies in the context of FISP. Other types of support to the maize value chain that would ensure increased and more sustainable production in the long term include support to processing, marketing and storage. Since the implementation of the FISP, land allocated to maize production increased at the expense of other crops (IFPRI, 2011). Furthermore, the focus on maize leaves little room to support other commodities or groups of commodities that are also of major importance for food security and which are relatively drought-tolerant such as cassava and sweet potatoes (IFPRI, 2011). From 2006 to 2013, these two commodities were barely targeted by public spending. Such strong attention to maize leaves to question the possibility of achieving the ASWAP crop diversification objective. Therefore, there is a need to reconsider the FISP focus and approach to boost overall agricultural productivity.
REFERENCES


Petras, R. (2009). “Comparative Study of Dat Reported to the OECD Creditor Reporting System (CRS) and to the Aid Management Platform (AMP)”.

World Bank (2009). Explaining High Transports within Malawi- Bad Roads or Lack of Trucking Competition?


World Bank (2014). World Data Bank- World Development Indicators. Consulted in October 2014
### Annex 1. Institutions covered by the MAFAP PE analysis

<table>
<thead>
<tr>
<th>Year</th>
<th>Ministries and Agencies</th>
</tr>
</thead>
</table>
| 2006 | - Ministry of Agriculture  
     | - Ministry of Economic Planning and Development  
     | - National Statistic Office; Ministry of Local Government and Rural development;  
     | - Ministry of Land, Housing, Physical Planning and Survey  
     | - Ministry of Water Development  
     | - Ministry of Trade and Private Sector Development  
     | - Ministry of Transport and Public Works  
     | - National Road Authority  
     | - Ministry of Mines, Natural Resources and Environment  
     | - Ministry of Industry, Science, Technology |
| 2007 | - Ministry of Agriculture and Food Security  
     | - Office of President and Cabinet  
     | - Department of Poverty Alleviation and Management Affairs  
     | - Ministry of Economic, Planning and Development  
     | - National Statistic Office  
     | - Ministry of Local Government and Rural development  
     | - Ministry of Land, Housing, Physical Planning and Survey  
     | - Ministry of Irrigation and Water Development  
     | - Ministry of Industry, Trade and Private Sector Development  
     | - Ministry of Health |
| 2008 | - Ministry of Agriculture and Food Security  
     | - Office of President and Cabinet  
     | - Ministry of Economic, Planning and Development  
     | - Ministry of Local Government and Rural development  
     | - Ministry of Land, Natural Resources, Physical Planning and Survey  
     | - Ministry of Irrigation and Water Development  
     | - Ministry of Industry, Trade and Private Sector Development  
     | - Roads Fund Administration  
     | - Ministry of Energy and Mines |
| 2009 | - Ministry of Agriculture and Food Security  
     | - National Statistic Office  
     | - Ministry of Local Government and Rural development  
     | - Ministry of Land, Natural Resources, Physical Planning and Survey  
     | - Ministry of Irrigation and Water Development  
     | - Ministry of Women and Child Development  
     | - Ministry of Industry and Trade  
     | - Ministry of Transport, Public Works and Housing  
     | - Roads Fund Administration |
| 2010 | - Ministry of Agriculture and Food Security  
     | - National Statistic Office  
     | - Ministry of Development, Planning and Cooperation  
     | - Ministry of Local Government and Rural development  
     | - Ministry of Irrigation and Water Development  
     | - Ministry of Gender, Child Development and Community Development  
     | - Ministry of Tourism, Wildlife and Culture  
     | - Ministry of Industry and Trade  
     | - Roads Fund Administration  
     | - Ministry of Energy and Mines |
| 2011 | - Ministry of Agriculture and Food Security  
     | - Office of President and Cabinet  
     | - Ministry of Development, Planning and Cooperation  
     | - Ministry of Local Government and Rural Development  
     | - Ministry of Land, Housing and Urban Development  
     | - Ministry of Irrigation and Water Development  
     | - Ministry of Industry, Trade and Private Sector Development  
     | - Roads Authority  
     | - Ministry of Natural Resources, Energy and Environment |
| 2012 | - Ministry of Agriculture and Food Security  
     | - Office of President and Cabinet  
<pre><code> | - Ministry of Development Planning and Cooperation |
</code></pre>
<table>
<thead>
<tr>
<th>Year</th>
<th>Departments</th>
</tr>
</thead>
</table>
| 2013 | - Ministry of Agriculture and Food Security  
      - Office of President and Cabinet  
      - Ministry of Local Government and Rural development  
      - Ministry of Irrigation and Water Development  
      - Ministry of Industry, Trade and Private Sector Development  
      - Roads Authority |
Annex 2. Sources and type of data reported for actual spending

<table>
<thead>
<tr>
<th>Year</th>
<th>Recurrent</th>
<th>Ministry of Agriculture</th>
<th>Ministry of water resources and irrigation</th>
<th>Other institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Development</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
</tr>
<tr>
<td>2007</td>
<td>Recurrent</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
</tr>
<tr>
<td></td>
<td>Development</td>
<td>Aid Management database Actual spending</td>
<td>Aid Management database Actual spending</td>
<td>Aid Management database Actual spending</td>
</tr>
<tr>
<td>2008</td>
<td>Recurrent</td>
<td>Consolidated accounts Actual spending + Aid Management database when available</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
</tr>
<tr>
<td></td>
<td>Development</td>
<td>Consolidated accounts Actual spending + Aid Management database when available</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
</tr>
<tr>
<td>2009</td>
<td>Recurrent</td>
<td>Consolidated accounts Actual spending + Aid Management database when available</td>
<td>Output based budget book Revised expenditures + Aid Management database when available</td>
<td>Output based budget book Revised expenditures + Aid Management database when available</td>
</tr>
<tr>
<td></td>
<td>Development</td>
<td>Consolidated accounts Actual spending + Aid Management database when available</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
</tr>
<tr>
<td>2010</td>
<td>Recurrent</td>
<td>Consolidated accounts Actual spending + Aid Management database when available</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
</tr>
<tr>
<td></td>
<td>Development</td>
<td>Consolidated accounts Actual spending + Aid Management database when available</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
</tr>
<tr>
<td>2011</td>
<td>Recurrent</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
<td>Output based budget book Revised expenditures</td>
</tr>
<tr>
<td></td>
<td>Development</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
</tr>
<tr>
<td>2012</td>
<td>Recurrent</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
<td>Output based budget book Revised expenditures</td>
</tr>
<tr>
<td></td>
<td>Development</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
<td>Output based budget book Revised expenditures</td>
</tr>
<tr>
<td>2013</td>
<td>Recurrent</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
<td>Output based budget book Revised expenditures</td>
</tr>
<tr>
<td></td>
<td>Development</td>
<td>Consolidated accounts Actual spending</td>
<td>Consolidated accounts Actual spending</td>
<td>Output based budget book Revised expenditures</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aid Management database when available</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aid Management database when available</td>
</tr>
</tbody>
</table>