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Strengthening National Comprehensive Agricultural Public Expenditure in Sub-Saharan Africa

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FINAL REPORT

BASIC AGRICULTURAL PUBLIC EXPENDITURE DIAGNOSTIC REVIEW (2000-2013)

MALAWI

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BILL & MELINDA GATES foundation

CAADP

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ABBREVIATIONS AND ACRONYMS

ADD	:	Agricultural Development Division
ADMARC	:	Agricultural Development and Marketing Corporation
AEDC	:	Agricultural Extension Development Coordinator
AEDO	:	Agricultural Extension Development Officer
AfDB	:	African Development Bank
AgPER	:	Agricultural Public Expenditure Review
AISB	:	Agriculture Infrastructure Support Project
AMP	:	Aid Management Platform (MoF)
ARET	:	Agricultural Research and Extension Trust
ASSMAG	:	Association of Smallholder Seed Multiplication Action Group
ASTI	:	Agricultural Science and Technology Indicators
ASWAp	:	Agricultural Sector Wide Approach
AU	:	African Union
CAADP	:	Comprehensive Africa Agriculture Development Program
CABS	:	Common Approach to Budget Support
CGIAR	:	Consultative Group on International Agricultural Research
CIAT	:	International Centre for Tropical Agriculture
CIP	:	International Potato Centre
DADO	:	District Agricultural Development Officer
DAES	:	Department of Agricultural Extension Services (MoAFS)
DAHLD	:	Department of Animal Health and Livestock Development (MoAFS)
DAPS	:	Department of Agricultural Planning Services (MoAFS)
DARS	:	Department of Agricultural Research Services (MoAFS)
DCAFS	:	Donor Committee on Agriculture and Food Security
DFID	:	Department for International Development
DLRC	:	Department of Land Conservation (MoAFS)
DP	:	Development Partner
EPA	:	Extension Planning Area
ERP	:	Economic Recovery Plan
EU	:	European Union
FAO	:	Food and Agriculture Organization
FICA	:	Flemish International Cooperation Agency
FISP	:	Farm Input Subsidy Programme
FRIM	:	Forestry Research Institute of Malawi
FRU	:	Fisheries Research Unit
FUM	:	Farmers' Union of Malawi
FY	:	Fiscal year
GoM	:	Government of Malawi
HIPC	:	Highly Indebted Poor Countries
ICRAF	:	International Centre for Research in Agro-Forestry
ICRISAT	:	International Crops Research Institute for the Semi-Arid Tropics
IFAD	:	International Fund for Agricultural Development
IFMIS	:	Integrated Financial Management Information System
IFPRI	:	International Food Policy Research Institute
IHS	:	Integrated Household Survey
IITA	:	International Institute of Tropical Agriculture
IMF	:	International Monetary Fund
JICA	:	Japanese International Cooperation Agency
LUANAR	:	Lilongwe University of Agriculture and Natural Resources

MASAF	:	Malawi Social Action Fund
MASIP	:	Malawi Agriculture Sector Investment Programme
M&E	:	Monitoring and Evaluation
MCC	:	Millennium Challenge Corporation
MDG	:	Millennium Development Goal
MEPD	:	Ministry of Economic Planning and Development
MGDS	:	Malawi Growth and Development Strategy
MoAFS	:	Ministry of Agriculture and Food Security
MoF	:	Ministry of Finance
MoLGRD	:	Ministry of Local Government and Rural Development
MPRS	:	Malawi Poverty Reduction Strategy
MRFC	:	Malawi Rural Finance Company
mt	:	metric tonne
MTEF	:	Medium-Term Expenditure Framework
MWK	:	Malawi Kwacha
NAP	:	National Agricultural Policy
NASFAM	:	National Smallholder Farmers' Association of Malawi
NEPAD	:	New Partnership for Africa's Development
NFRA	:	National Food Reserve Agency
NSO	:	National Statistical Office
OPC	:	Office of the President and Cabinet
OPV	:	Open Pollinated Variety
ORT	:	Other Recurrent Transaction
PCB	:	Pesticides Control Board
PEFA	:	Public Expenditure Financial Accountability
PER	:	Public Expenditure Review
PIU	:	Project Implementation Unit
PM	:	Programme Manager
PS	:	Principal Secretary
R&D	:	Research and Development
RDP	:	Rural Development Project
ReSAKSS-SA	:	Regional Strategic Analysis and Knowledge Support System for Southern Africa
SACA	:	Smallholder Agricultural Credit Administration
SAP	:	Structural Adjustment Program
SFFRFM	:	Smallholder Farmers Fertilizer Revolving Fund of Malawi
SPI	:	Starter Pack Initiative
SUCOMA	:	Sugar Company of Malawi
SWAp	:	Sector-Wide Approach
TA	:	Technical Assistance
TAMA	:	Tobacco Association of Malawi
TCT	:	Technical Core Team
TIP	:	Targeted Input Program
TRF	:	Tea Research Foundation
TTL	:	Task Team Leader
TWG	:	Technical Working Group
UNDP	:	United Nations Development Programme
UNIDO	:	United Nations Industrial Development Organization
USAID	:	United States Agency for International Development
WB	:	World Bank
WDI	:	World Development Indicators
WFP	:	World Food Programme

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2. The AgPER was prepared by a team of consultants comprised of Mr. Joël Hourticq, Dr Alexander Phiri and Mr. Horace Phiri, Agricultural Economists, in collaboration with a Technical Core Team (TCT) including two representatives of MoAFS: Mr. Hermes Mauwa and Mr. Thokozani Sentala, Budget Unit; two representatives of the Ministry of Finance (MoF): Mr. Arnold Kondowe, Economic Affairs, and Mr. Winston Nyasulu, Budget; a representative of the Ministry of Economic Planning and Development (MEPD): Mr. Nyengo Chowa, Budget Planning; and a representative of the Ministry of Local Government and Rural Development (MoLGRD): Mr. Walusungu Kayira.

3. The consultants and the TCT worked under the guidance and supervision of the Principal Secretary (PS) of MoAFS, Dr Geoffrey Luhanga.

4. Contributions were also sought from Development Partners (DPs) and other non-Government stakeholders. The team expresses its appreciation for the support and cooperation extended by all people met.

5. The team also wishes to acknowledge the guidance and support received from World Bank's resident staff: Ms. Sandra Bloemenkamp (Country Manager), Mr. Olivier Durand (Senior Agricultural Specialist), Ms. Appolenia Mbowe (Senior Economist), Mr. Temwa Gondwe (Country Economist) and Ms. Deliwe Ziyendammanja and Zione Kansinde (Team Assistants); from the AgPER Task Team Leader (TTL), Mr. Stephen Mink (Lead Economist, World Bank's headquarters); and from the TTL for the broader Public Expenditure Review carried out at the same time as this AgPER: Mr. Tuan Minh Le (Senior Economist, World Bank's headquarters).

6. The core work was undertaken between September 2012 and July 2013.

EXECUTIVE SUMMARY

Introduction, methodology and data issues

i. Agriculture is the backbone of Malawi's economy, contributing about 30% to total GDP and accounting for about 85% of employment and 80% of foreign exchange earnings (60% of which come from tobacco alone), but it largely remains subsistence farming plagued by low productivity and high vulnerability. Agriculture development and food security are amongst the key priorities of the Government of Malawi (GoM) to achieve sustainable economic growth and poverty alleviation. Increased agricultural productivity, diversification and commercialization constitute a key focus area of the overarching national development framework, the Malawi Growth and Development Strategy (MGDS) 2006-2011, followed by MGDS II 2011-2016. In 2010, this priority was translated into an Agricultural Sector Wide Approach (ASWAp), aligned with the CAADP pillars and the MGDS.

ii. This Agricultural Public Expenditure Review (AgPER), carried out at the request of the Ministry of Agriculture and Food Security (MoAFS), intends to enhance the efficiency, effectiveness and equity of future public spending in the sector, and thus contribute to ASWAp successful implementation. It was financed by the program "Strengthening National Comprehensive Agricultural Public Expenditure in Sub-Saharan Africa", funded by the Bill and Melinda Gates Foundation and the CAADP Multi-Donor Trust Fund and implemented by the World Bank.

iii. It was decided that the study period would cover the fiscal years from 2000/01 to 2012/13, so as to include important agricultural strategy changes, especially as regards input subsidies (Targeted Input Program (TIP) until 2003/04; Farm Input Subsidy Program (FISP) since 2005/06). However, given the major difficulties encountered in tracking accurate data, off-Budget expenditure analysis had to be limited to the period 2007/08-2011/12.

iv. In this exercise, in conformity with NEPAD guidelines, agriculture in its broad sense, covers crops, livestock, fisheries and forestry. However, despite repeated attempts, forestry expenditures could not be obtained. Another major issue encountered in public expenditure tracking concerned the irrigation subsector that changed umbrella ministries several times over the study period; tracking public expenditures in irrigation across institutions proved tedious and did not yield fully reliable results.

v. Overall, reporting on budget execution was weak and inconsistent during the period, due to the incomplete implementation of the Integrated Financial Management Information System (IFMIS) that has been deployed in all ministries since 2001. Up to date, IFMIS has been used primarily as an improved budget preparation and payment system but is lacking several core areas of functionality normally associated with an IFMIS, including commitment control, procurement management, accounting and reporting. As a result, the extent to which on-Budget actual expenditures, when available, reflect the reality is not clear, and for the years in which detailed actual expenditures were not reported, revised estimates (adjusted during the mid-year Budget review process) had to be used as the only available approximation for actual expenditures.

vi. As it will be seen, off-Budget expenditures (essentially development partners (DPs) project financing that is not registered in GoM Budget) represented a very high proportion of public expenditures in the agriculture sector over the study period. However, DPs' disbursements over the 2007/08-2011/12 period could be obtained from two sources: (a) with major DPs or Project Implementation Units (PIUs); and (b) with Ministry of Finance (MoF)'s Aid Management Platform; overall, off-Budget expenditures are thought to have been satisfactorily captured in this study.

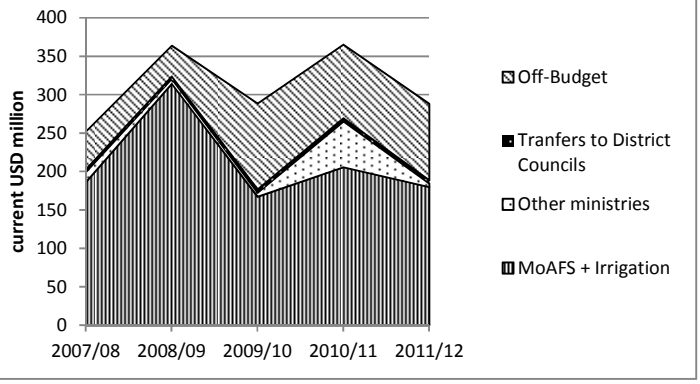
vii. Finally, although Malawi's agriculture sector parastatals (SFFRFM, ADMARC, NFRA and MRFC) are clearly engaged in Government social functions such as serving remote areas and poorer farmers

or playing a role in price stabilization, and are building up important contingent liabilities to fulfil these missions, their expenditures were not taken into account in this study, in accordance with NEPAD guidelines that specify that only net transfers to public enterprises operating in the agriculture sector on a commercial basis should be taken into account in AgPERs.

During 2007/08-2011/12, total agricultural expenditures were well above the Maputo target but increasingly financed by highly fragmented and predominantly off-Budget external support.

viii. During 2007/08-2011/12, the expenditures executed by MoAFS and the Department of Irrigation represented 68% of total agricultural expenditures, off-Budget expenditures 25%, expenditures incurred by other ministries 6% and the transfers to District Councils by the Ministry of Local Government and Rural Development (MoLGRD) to cover District agricultural services operational costs, 1%. Total agricultural expenditures oscillated between USD 250 million and USD 365 million over the period in current terms [1]. Off-Budget expenditures more than doubled as of 2009/10 to stabilize at around USD 100 million per year thereafter, and as a result their share in total agricultural expenditure rose, representing 35% of total agricultural expenditure in 2011/12 (figure E1).

Figure E1: Trends in the distribution of actual agricultural expenditure by institutional status

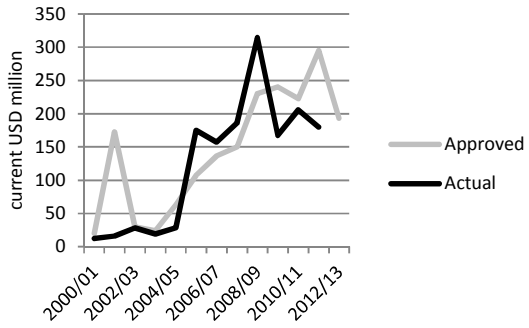


ix. Notwithstanding the fact that forestry expenditures could not be obtained and included in the calculation as they should, agricultural expenditures ranged between 17 and 21% of total national expenditures over the period (19% on average). Malawi therefore largely exceeded the Maputo objective of 10% support to agriculture.

[1] Conversion of agricultural expenditure into constant terms was not attempted because ideally, to adequately reflect the purchasing power of the resources available to the sector, one would have to distinguish three components to which different deflators would apply: to the Farm Input Subsidy Programme (FISP) component that has represented about 70% of MoAFS expenditure since 2005/06 an international fertilizer price deflator should be applied; for the other imported goods and services international inflation should be used whereas for local costs the local consumer price index would prevail; applying only one of these deflators to the total expenditure would produce distorted results.

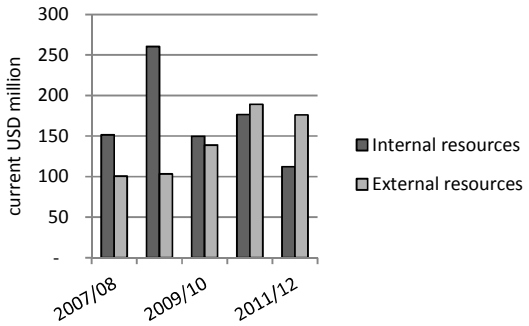
x. While it had remained at about USD 20-30 million up to then, agricultural expenditure executed by MoAFS and the Department of Irrigation skyrocketed to USD 175 million in 2005/06 with the launching of the FISP (figure E2). In that year and the next three ones, actual expenditures exceeded the approved budgets. In 2008/09, due to the surge in fertilizer and fuel prices, the approved budget was exceeded by 36% and actual expenditure by MoAFS reached USD 315 million. For the following three years, 2009/10 to 2011/12, actual expenditures were again contained within approved budgets.

Figure E2: Trends in approved and actual expenditures of MoAFS and the Department of Irrigation



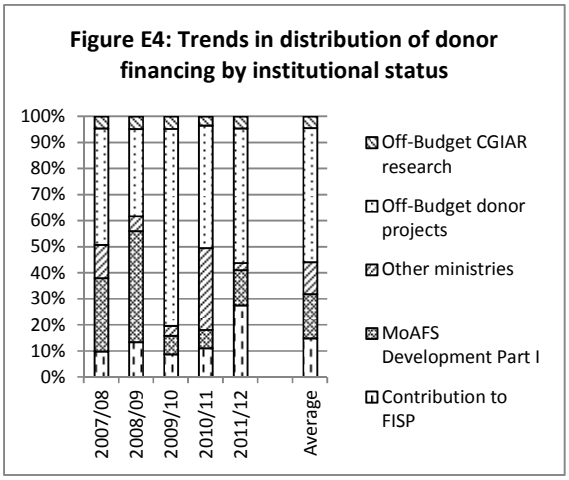
xi. On average over the 2007/08-2011/12 period, agricultural expenditures were financed at 55% by local resources and 45% by external resources. However, a change in trends was observed as of 2009/10 with the share of external resources growing to become slightly bigger than that of internal resources in 2010/11 and reach just over 60% of total expenditure in 2011/12 (figure E3). In absolute terms donor support to agriculture kept increasing throughout the period while internal financing dropped by more than 35% in 2011/12. This shows that while the agriculture sector was affected by the freeze in donor support to Malawi in 2010 and 2011 through the reduction in general budget support, paradoxically this was more than offset by donor direct financing that had started increasing as of 2009/10, especially off-Budget.

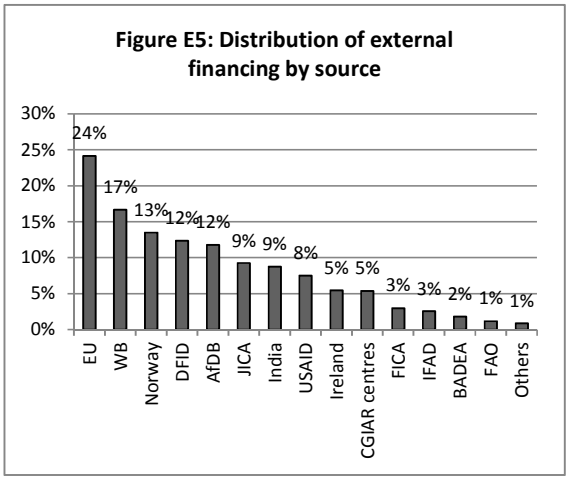
Figure E3: Distribution of actual agricultural expenditure by source of funding



xii. Over 50% of donor financing was spent on off-Budget projects and programmes, while the share of donor financing that was registered in MoAFS accounts was split almost equally between contribution to FISP (15%) and part I of the Development account (17%, figure E4). The FISP component of donor support increased to 28% in 2011/12, when donors that had traditionally been involved in supporting the programme more than doubled their contribution to help GoM overcome the foreign exchange shortage crisis.

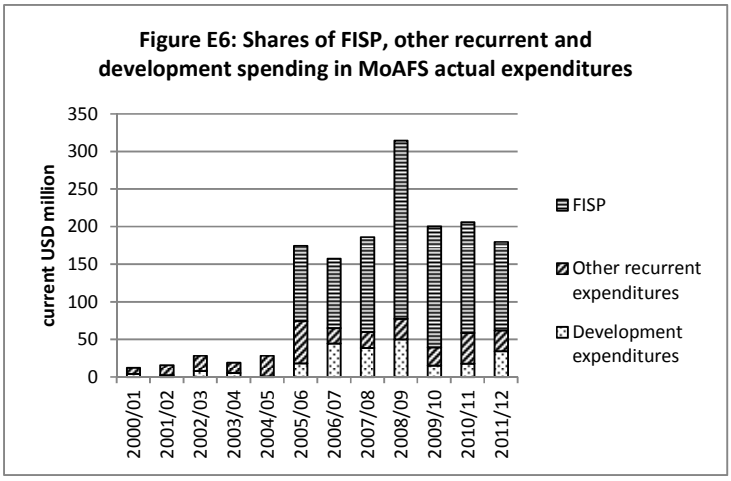
xiii. Donor financing in the agriculture sector in Malawi is extremely fragmented (figure E5), which poses a serious challenge in terms of linkage between policy framework and expenditure (see further).





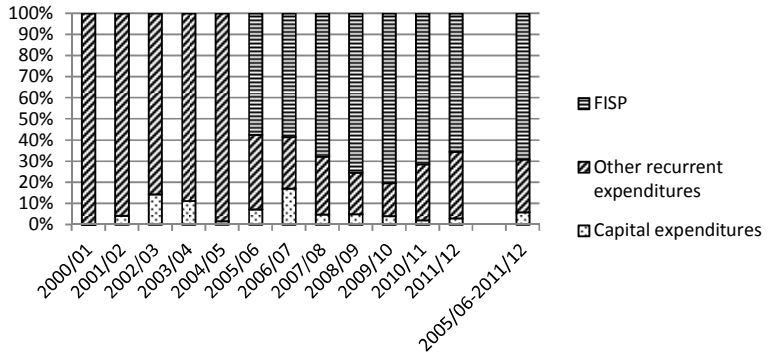
MoAFS budget was dominated by recurrent expenditure and since 2005/06, dedicated at 69% to FISP.

xiv. The introduction of FISP in 2005/06 was not at the expense of the other components of MoAFS budget that also experienced a dramatic increase, by 160%, in the same year (figure E6). Even in 2008/09 when the budget of FISP had to be raised due to the surge in fertilizer and transport prices, the other components of MoAFS budget were not affected and even saw their actual expenditures increase respect to previous years. Since its introduction in 2005/06, the FISP has mobilized 69% of MoAFS budget on average, the rest being equitably split between other recurrent and development expenditures. While other recurrent expenditures were entirely financed on internal resources, donors contributed to FISP (13% on average over the 2007/08-2011/12 period with a peak at 41% in 2011/12) and to development expenditures (79% on average over the 2000/01-2011/12 period).



xv. However, as in many other Subsaharan-Africa countries, Government development accounts in Malawi "hide" substantial amounts of salaries and other recurrent costs. This is an important issue as it reduces budget transparency and precludes ministries from adequately planning and monitoring both recurrent and capital expenditures and in particular, from ensuring that sufficient provision is made for operation and maintenance beyond the investment phase. Over the 2000/01-2011/12 period, the non-capital element in development actual expenditures has been estimated at 63% (of which 4% salaries and 59% other recurrent expenditures), leaving only 37% for real capital expenditure. As a result real capital expenditure was very low over the period and rarely exceeded 5% of MoAFS actual expenditures (figure E7).

Figure E7: Shares of FISP, other recurrent and capital spending in MoAFS actual expenditures



xvi. The wage bill in the agriculture sector administration has increased more than elevenfold in current terms and more than threefold in constant terms from 2000/01 to 2011/12, in line with the tendency observed for the civil service as a whole, as a result of an effort by the GoM to improve civil servants' salaries and motivation. Another finding consistent with observations made for the civil service as a whole is the very high cost of internal travels. In MoAFS internal travel costs have dramatically increased since 2005/06 and in total, amounted to 60% of salary expenditures over the 2000/01-2011/12 period.

Government budget control and decision making remain highly centralized.

xvii. While they represent only 7% of filled staff positions, central services control the entirety of capital and FISP spending and 84% of non-wage non-FISP recurrent spending (figures E8 and E9). At the other end, RDPs represent 62% of filled staff positions but in budgets, they are allocated only 4% of agriculture sector non-wage non-FISP recurrent expenditure provisions, in the form of MoLGRD transfers to District Councils exclusively. RDPs do however receive financial support from donor financed projects but although this support largely outweighs the MoLGRD funding, its level and continuity are not fully predictable. Insufficient operational means, along with staff vacancies and high turnover and the heavy workload imposed on field agents by the FISP, probably account for most of the low outreach of extension services that has been evidenced by various studies.

Figure E8: Distribution of staff (filled positions)

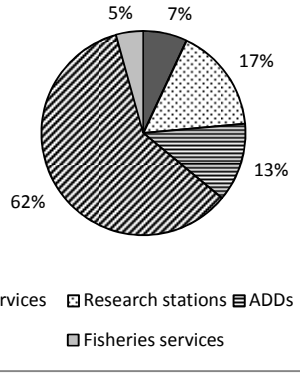
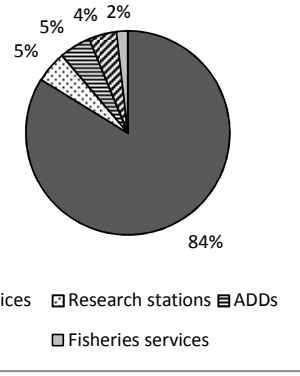


Figure E9: Non-wage non-FISP recurrent budget allocations (2012/13)



xviii. As with budget allocation, decision making appears to be also highly centralized, with little space given so far, at least in Government-based interventions, to demand-driven initiatives; these could be encouraged by matching grants programmes whereby agricultural deconcentrated services would act as technical assistance to local communities and private promoters. Such programmes have proved powerful tools to support decentralization in other countries.

Overall, agricultural expenditure was not fully aligned with national strategy.

xix. Comparing the functional classification of total actual agricultural expenditures, including off-Budget expenditures and other ministries agricultural expenditures, over the 2007/08-2011/12 period (figure E10) with ASWAp intentions for 2011/12-2014/15 (figure E11) reveals substantial discrepancies between what is presently being done and what is aimed at. The current predominance of FISP (73% of MoAFS budget over the 2007/08-2011/12 period) does not leave room for developing the sustainable land and water management and commercial agriculture and market development components to the levels planned in ASWAp. It is clear that unless additional resources are raised or shifted from FISP, some crucial components of ASWAp will not receive sufficient support and are highly likely to fail to achieve their objectives.

Figure E10: Respective shares of focus areas in ASWAp budget, 2011/12-2014/15

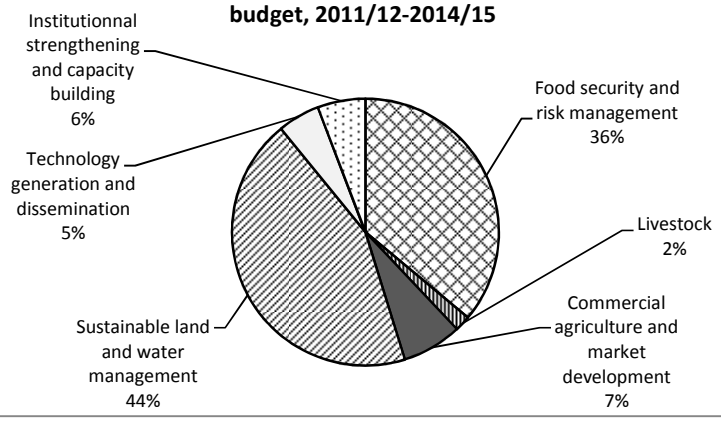
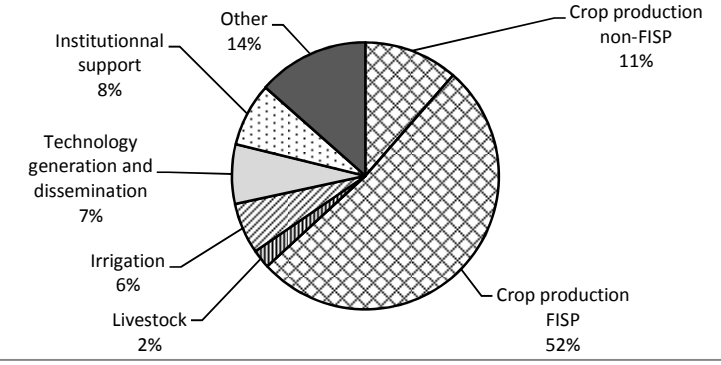


Figure E11: Functional classification of total actual agricultural expenditures, 2007/08-2011/12



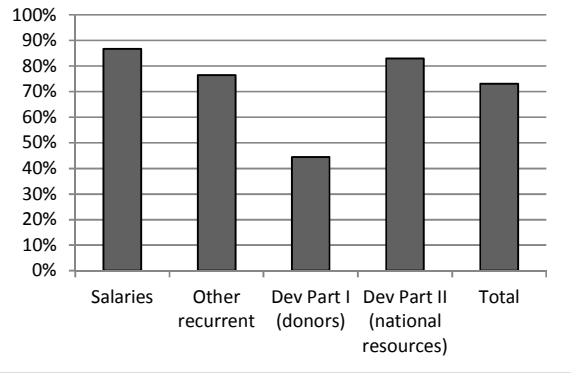
xx. Furthermore, one could question whether the resources planned in ASWAp for technology generation and dissemination (5%) and for livestock development (2%) will be sufficient for these subsectors to express their potential in terms of growth stimulation, especially in view of the fact that annual resources currently available for support to agriculture total only about half the resources that were expected when ASWAp was launched (USD 250 to 300 million instead of USD 500 to 600 million in ASWAp initial budget). In addition, it was shown that non cash-crop

research and extension are predominantly and increasingly donor financed which puts research and extension prioritization, coordination and continuity at risk.

Efficiency of Government agricultural expenditure planning and execution is low, with in particular, inefficient procurement mechanisms and a very weak link between policy framework and budgeting.

xxi. Execution rates of on-Budget donor financed expenditures were very low during the study period, well under the execution rates for the expenditures financed on national resources (figure E12), which speaks in favour of more resources to be spent by Government under national procedures. This is an issue frequently encountered in Sub-Saharan Africa countries that is largely accounted for by deficiencies of communication between the donors and the national administration and the difficulty for the latter to master the myriad procedures of the development partners. In some cases the execution rate may also turn out to be low only because planned expenditures were not correctly entered and/or actual expenditures not fully recorded. National procurement mechanisms are weak and ought to be streamlined. Also, one could question the relevance of a fiscal year from July to June in a country whose economy is largely agriculture-based with a rainy season extending from November to March.

Figure E12: Execution rates of MoAFS expenditures by type, 2009/10-2011/12



xxii. Substantial progress remains to be made in integrating policy and budget planning in the agriculture sector, in spite of the adoption – more in theory than in practice so far - of an Agricultural Sector Wide Approach (ASWAp) in 2010. Three inter-related factors explain the slow progress achieved to date:

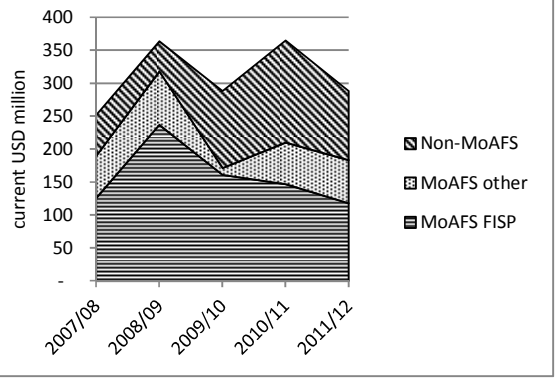
a. Insufficient capacities to organize a strategic thinking phase prior to budget planning; capacities at MoAFS Department of Agricultural Planning Services (DAPS) are inadequate and further weakened by an important staff turnover. A strategic thinking phase upstream from budget planning would allow MoAFS, in collaboration with all stakeholders, to take stock of the progress made in ASWAp implementation, update strategies and re-establish priorities and allocate budgetary resources accordingly. Planning and M&E capacities must be strengthened at all levels.

b. Inadequate organizational arrangements, resulting in low levels of ownership and accountability; this is a frequent weakness of policy reform attempts in Sub-Saharan African countries: new policies are prepared but the organizational aspects of their implementation are overlooked. The need for revisiting existing procedures and organizational arrangements is not assessed, and this very often results in a "business as usual" behaviour amongst the various stakeholders, under which the new policy is most likely to remain rhetoric. In the case of ASWAp, only the apex oversight bodies for a programme approach have been put in place so far in the form of Technical Working Groups (TWGs) for each key area. However, in the absence of clearly designated programme coordinators having authority on all activities implemented in their sub-sector, including projects and other initiatives (e.g. presidential initiatives), there is a high risk that levels of ownership and accountability within the administration remain low, discussions within the TWGs inadequately concrete, and stakeholders other than public services and DPs little interested in participating.

Representatives of the private sector and civil society who are essential to associate in order to guarantee the relevance, sustainability and fast replication of public interventions, will only participate actively and durably when they feel that TWGs are fora where concrete and important decisions for the future of their constituency are taken, which requires that they can interact with civil servants who are fully empowered and accountable. Adjustments in MoAFS organizational chart and budget are also likely to be required for a greater consistency with ASWAp architecture (managing a programme approach is much easier if programme perimeters (ASWAp key areas), managers' responsibility areas and budget classification match, which is not the case at present).

c. Lack of fiscal space: with the highly politicized FISP that takes the lion's share of MoAFS budget on one hand and highly fragmented and often off-Budget DP financed projects on the other hand, it is clear that MoAFS fiscal space to achieve a greater linkage between policy framework and budgeting is currently rather limited. It was estimated at only 18% of total agricultural expenditure during 2007/08-2011/12 ("MoAFS other" area in figure E13). Nevertheless, apart from possible savings on the FISP, the discretionary funding at MoAFS disposal could be increased through the inclusion in the budget of all DP financed activities, which would also enable greater comprehensiveness of strategic planning's link to budget implementation, and the greater use by DPs of both Government systems and common financing mechanisms (pooled funds, sectoral budget support, etc.), which would also help reducing the currently exorbitant aid transaction costs. In this respect the new trust fund that major DPs are currently pulling together to finance the ASWAp-SP is a welcome initiative, provided it becomes a pool of resources available to stimulate a proper annual strategic planning process and not an additional project with pre-set and hardly changeable activities. Finally, substantial fiscal space can also be brought about through a change of mindset: the budgeting process as currently implemented overly focuses on new spending initiatives and fails to address the possibility of a better use of existing resources through the reorientation of those expenditures failing to produce valuable outcomes, which sends back to the issue of M&E capacities.

Figure E13: Level of MoAFS control over public spending in agriculture



xxiii. Although DPs claim that their interventions are aligned with ASWAp, alignment remains very theoretical. The only criteria that appears to be used to support DPs' alignment claim relates to whether or not the field of intervention of their projects belongs to one of ASWAp key areas, but given that ASWAp broadly covers the whole agriculture sector it would be difficult for a project not to be declared aligned. Vetting project proposals at TWG level in view of their fit into ASWAp under-served priorities and providing orientation to project design at the conceptualization stage would be the first step of effective alignment but such mechanism is not in place yet.

FISP has had a remarkable impact on national maize production but has proved not to be an effective pro poor instrument that in addition, has generated a lot of fraud, corruption and distortions and put a heavy toll on MoAFS over-stretched human resources.

xxiv. FISP cost has ranged between USD 30-40 million and USD 283 million[2] since its inception in 2005/06 (USD 153 million in 2012/13), which accounted for 4 to 15% of GoM expenditure (10% in 2012/13) and represented 1 to 6% of GDP (4% in 2012/13) and 4 to 18% of agricultural GDP (14% in 2012/13).

xxv. The impact of FISP on agricultural productivity and national food self-sufficiency has been spectacular, as its introduction sparked a series of bumper maize harvests induced to a limited extent (5%) by a slight increase in the area cultivated and to a much larger extent (95%) by a surge in yields that went up from 1.2 tons/ha to over 2.0 tons/ha. The average harvest during the 2005/06-2010/11 period officially reached 3.2 million tons, representing an augmentation by about 80% over the average harvest during the preceding six year period (1.8 million tons). However, persistent high prices and continued importations of maize over the past few years have cast doubt on the accuracy of the country's agricultural statistics regarding cultivated areas, production and surpluses.

xxvi. Direct effects of FISP on coupon recipients have clearly been of two types: (a) immediate cash income for the most vulnerable smallholders that resell their fertilizer allocation; and (b) lower average cost and hence higher profitability of fertilizer for the more productive farmers that effectively use their own allocation and/or buy their neighbours'. Other indirect important benefits for the poorest have arisen from strong economy-wide impacts owing to the scale of the programme, such as lower food prices induced by the more abundant harvests and higher off-farm (ganyu) wages. Various studies have evidenced that although FISP has most probably induced some displacement of commercial sales, total fertilizer use has increased and commercial fertilizer purchases are on the rise amongst FISP participants.

xxvii. However, there is a growing consensus that due to widespread coupon redistribution and fertilizer reselling practices, the distribution of the subsidy across the rural population has most probably been significantly biased towards the better-off income groups. Moreover, despite its large scale and share in public expenditure, FISP has had no significant impact on rural poverty and failed to bring about structural transformation in the agricultural sector; in particular, contrary to what would have been expected under such a large agricultural intensification programme and what is called for by the national Economic Recovery Plan (ERP), diversification is thought to have declined over the period of FISP implementation. There is also increasing evidence of FISP having a negative impact on rural social fabric, with communities competing for coupon allocations. Fraud, corruption and distortions, as well as the fact that most of MoAFS human resources are monopolised by FISP preparation and implementation during three to four months every year, have all been important sources of inefficiency. Moreover, the very strong signals that the current FISP conveys in favour of heavy State intervention in the sector does not contribute to a conducive environment for private sector expansion in agriculture and agribusiness as called for by ASWAp and the ERP.

xxviii. Finally, studies have evidenced that maize production is a weak driver of growth compared to export crops due to low multiplier effects. The very positive, and widely unknown, response of other crops such as roots and tubers and pulses to limited public support focusing on research and dissemination also calls for a rebalancing of public resources to benefit a larger range of crops.

[2] This peak was reached in 2008/09 when fertilizer and transport cost surged.

xxix. Consequently, reform of FISP should build on the experience gained and aim at:

a. Streamlining and enhancing the two core elements that have underpinned FISP success so far: (a) direct cash income for the poorest (currently realized through fertilizer reselling); and (b) lower average price and thus greater profitability of fertilizer for the more productive farmers. The first step should be to revisit FISP objective and targeted population that have proved ambiguous: FISP objective of increasing food self-sufficiency requires to design a programme clearly targeted at the more productive farmers who can effectively and efficiently use improved inputs, while FISP current target group (the most vulnerable, often land and labour constrained) would be better catered for by other type of support such as social safety nets;

b. Reducing/eliminating the above mentioned flaws of the current system. In particular, a greater involvement of the private sector and the release of part of the substantial MoAFS human resources that are currently involved in the programme and could be re-directed to agriculture support public goods provision, would be expected to generate important multiplier effects.

c. Freeing public resources to finance currently underserved subsectors and fund social safety nets for the most vulnerable.

Conclusions and recommendations

xxx. Malawi agricultural policy orientations have produced mixed results in the past decade. On one hand public expenditure in agriculture was considerably increased to reach about 20% of total national expenditure and the launching of FISP in 2005/06 induced an impressive turnaround in maize productivity and production allowing the country to recover food self-sufficiency at national level.

xxxi. On the other hand, the country now finds itself somehow blocked in a situation in which its Ministry of Agriculture and Food Security has very little space to promote any further contribution of agriculture to growth and poverty alleviation. This is because on one side, its major programme, FISP, absorbs the lion's share of its financial and human resources (69% of MoAFS actual expenditures since FISP inception in 2005/06, 51% of total public spending in agriculture over the 2007/08-2011/12 period) and is not likely in its current form to contribute any further to growth and poverty reduction; and on the other side, a substantial share of agricultural spending is not under MoAFS direct oversight (off-Budget expenditure and agricultural expenditure under the supervision of other ministries accounted for 31% of total agricultural spending over the 2007/08-2011/12 period). MoAFS is thus left with a very little share of the resources dedicated to agriculture (18% of total agricultural spending over the 2007/08-2011/12 period) to both maintain a minimum level of activity in its traditional missions and possibly promote new high growth potential orientations called for by the ASWAp and ERP (irrigation development, agriculture diversification and commercialization).

xxxii. In addition, this study has evidenced that agricultural spending in Malawi is penalized by numerous inefficiencies that greatly reduce its impact. These include:

a. Low efficiency of budget planning and implementation, penalized by heavy procedures, low level of expenditure control, weak monitoring and evaluation and low motivation of staff owing to salary erosion;

b. A very weak linkage between policy framework and budget planning, compounded by the high fragmentation of aid and the high proportion of expenditures off-Budget (25% over the 2007/08-2011/12 period) that entail limited oversight and ownership by the Government and high transaction costs;

c. FISP inefficiencies, in the first place a cumbersome targeting process that takes a heavy toll on MoAFS staff resources and eventually proves ineffective, aggravated by substantial fraud, corruption and distortions and wrong signals sent to operators in the rural economy;

d. The high level of centralization of agricultural policy making and implementation, with insufficient involvement of deconcentrated administrations and non-State actors.

xxxiii. In order to remedy these imbalances and inefficiencies and revive the sector's capacity to produce and sustain robust growth, six areas of reform are suggested as follows (table E1).

Table E1: Proposed actions to increase agricultural public expenditure efficiency and effectiveness

Field	Actions	Responsa-bilities	Support needed			
			Low	Mode-rate	High	Nature
1. Improved technical efficiency	**Full rolling out of IFMIS** to generate comprehensive and real-time budget execution data;	MoF/ MoAFS		X		Technical Assistance (TA), training
	Greater use of national procedures for the execution and recording of on-Budget externally funded expenditures;	DPs/MoF/ MoAFS		X		TA, training
	Improve analytical accounting to make budgets and accounts more transparent (distinction ORT/capital, level of capital spending (at beneficiary or public service level?), etc.)	MoF/ MoAFS		X		TA, training
	Streamline procurement procedures;	MoF/ MoAFS		X		TA, training
	Strengthen M&E at all levels;	MoAFS			X	TA, training, special support to enhance the reliability of agricultural statistics
	Correction of the erosion of civil servants' salaries combined with strengthened performance assessment mechanisms and the discontinuation of the use of travel allowances as salary supplement;	MoF/ MoAFS			X	TA, training, sectoral budget support
	Use the civil year as the fiscal year?	MoF	X			

Table E1: Proposed actions to increase agricultural public expenditure efficiency and effectiveness (continued)

Field	Actions	Responsa-bilities	Support needed			
			Low	Mode-rate	High	Nature
2. Operationalization of ASWAp in order to increase ownership and accountability and establish a stronger linkage between policy framework and budget planning	**Revisit ASWAp key focus areas** to ensure that they are workable for a single TWG and create sub-focus areas if necessary;	MoAFS/ DPs	X			TA might be necessary.
	Adjust MoAFS organizational chart and budget to make them consistent with ASWAp architecture;	MoF/ MoAFS			X	TA, training
	Establish ASWAp programme coordinators with full authority on all activities in their respective subsectors, including projects, and accountable to the TWGs for the progress achieved in their subsector;	MoAFS	X			n/a
	Effectively use the TWGs as the space where the link between policy framework and project/budget planning is established, through the introduction of a strategic thinking phase to annual budget planning, projects and activities vetting, etc.**;**	MoAFS/ DPs			X	TA, training
	Manage ASWAp-SP as a pool of resources available to stimulate a properly integrated strategy and budget planning process and not as an additional project with pre-set activities;	MoAFs/ DPs			X	TA, training
	Constantly reallocate financial resources unsuccessful initiatives to more promising ones with the objective of spending better rather than spending more;	MoAFS			X	Investment in M&E as already mentioned above
	Bring all DP financed activities into MoAFS budget in order to facilitate strategic planning and increase MoAFS fiscal space**;**	MoAFS/ DPs			X	TA, training
	Make greater use of both Government systems and common financing mechanisms (pooled funds, sectoral budget support, etc.) in order to further increase fiscal space and reduce aid transaction costs;	DPs	X			Training

Table E1: Proposed actions to increase agricultural public expenditure efficiency and effectiveness (continued)

Field	Actions	Responsa-bilities	Support needed			
			Low	Mode-rate	High	Nature
3. Reform of FISP	**Re-visit FISP objective and targeted population and re-design FISP** in order to serve the more productive farmers, who can make an effective and efficient use of improved inputs, in a market-smarter way, while reducing/eliminating the numerous flaws of the current system (fraud, corruption and distortions; heavy toll on MoAFS human resources; exclusion of private sector in fertilizer distribution) and freeing public resources to finance currently underserved subsectors and fund social safety nets;	MoAFS			X	TA
4. Re-balancing of spending	**Re-balance spending towards currently under-funded subsectors (research and extension, irrigation, livestock, agriculture commercialization) and capital investment at beneficiary level (rural infrastructure);**	MoAFS/ DPs			X	TA
5. Fostering of the decentralization process	**Devolution of increasing on-Budget resources to frontline services (District agricultural services);**	MoAFS/ MoLGRD			X	TA, training
	Greater involvement of local stakeholders (District administration, local communities, farmers' organizations, NGOs and private operators) in decision making, through matching grant programmes to finance demand-driven initiatives by local communities or local promoters with the technical support of the deconcentrated administration;	MoAFS/ DPs			X	TA. Training, financial resources
6. Effective implementation of validated recommendations and strategies	**Ensure that validated recommendations of policy documents, including this one, are implemented and in particular, translate into changes in processes and organizational arrangements and DP alignment;**	MoAFS/ DPs	X			n/a
	Incorporate the validated recommendations of this AgPER in the ASWAp roadmap with clearly defined implementation responsibilities, timeframe and indicators.	MoAFS	X			n/a

INTRODUCTION

1. **Agriculture is the backbone of Malawi's economy, contributing about 30% to total GDP[3] and accounting for about 85% of employment and 80% of foreign exchange earnings (60% of which come from tobacco alone), but it largely remains subsistence farming plagued by low productivity and high vulnerability.** Smallholders are responsible for over 80% of Malawi's agricultural production, but theirs is predominantly subsistence farming characterized by heavy reliance on rains and very limited investment in productivity enhancement. As a result, poverty and food insecurity remain pervasive, even though since the famines of 2002 and 2005 caused by drought and floods, more favourable climatic conditions and the launching of a massive fertilizer and seed subsidy programme in 2005/06 have allowed Malawi to recover its food self-sufficiency status at national level.

2. **Agriculture development and food security are amongst the key priorities of the Government of Malawi (GoM) to achieve sustainable economic growth and poverty alleviation.** Increased agricultural productivity, diversification and commercialization constitute a key focus area of the overarching national development framework, the Malawi Growth and Development Strategy (MGDS) 2006-2011[4], followed by MGDS II 2011-2016[5]. This priority has been recently translated into a series of sectoral strategy documents: a Comprehensive Africa Agriculture Development Program (CAADP) compact was signed in 2010, a National Agricultural Policy (NAP) for the period 2010-2016 was developed and an Agricultural Sector Wide Approach (ASWAp), aligned with the CAADP pillars and the MGDS, was finalized in 2010 and updated in 2011[6].

3. **This Agricultural Public Expenditure Review (AgPER), carried out at the request of the Ministry of Agriculture and Food Security (MoAFS) and covering the fiscal years from 2000/01 to 2012/13, intends to enhance the efficiency, effectiveness and equity of future public spending in the sector, and thus contribute to ASWAp successful implementation.** This AgPER was financed by the program "Strengthening National Comprehensive Agricultural Public Expenditure in Sub-Saharan Africa", funded by the Bill and Melinda Gates Foundation and the CAADP Multi-Donor Trust Fund and implemented by the World Bank. This program operates in the context of the CAADP and encourages governments and Development Partners (DPs) to improve agricultural public expenditure in order to stimulate growth in the sector and improve the welfare of predominantly poor rural populations. The program is intended to provide evidence-based recommendations that will address, *inter alia*: the level of expenditure on agriculture (with reference to the target set by African Heads of State in the Maputo Declaration to allocate 10% of national budgets to the sector); the composition and priorities of expenditure with respect to stated national strategies; budget planning and execution so as to strengthen public finance management in the sector, including supporting mechanisms such as procurement and monitoring and evaluation (M&E); production of reliable expenditure data; intra- and inter-sectoral coordination; ownership and accountability; and evidence of impact and sustainability. It is also aimed at stimulating larger donor resource allocations, and enhanced harmonization and alignment of resources behind national strategies. Finally, the AgPER exercise also aims at establishing a methodology and a database to be used for subsequent regular, and possibly lighter, AgPERs.

[3]World Development Indicators (WDI) 2011, http://data.worldbank.org/.
[4]GoM 2006.
[5]MEPD 2011.
[6]MoAFS 2010 and MoAFS 2011a.

4. **This AgPER report is structured as follows:**

i. **Chapter 1 briefly reviews the historical, political, economic, policy and institutional context and the performance of agriculture over the study period;**

ii. **Chapter 2 establishes the level of agricultural public expenditure,** be it channelled through the national Budget or off-Budget, with reference to the Maputo target;

iii. **Chapter 3 assesses the allocative efficiency of agricultural public expenditure:**

a. Economic composition of agricultural public expenditure (personnel, other recurrent costs, investment): is the composition satisfactorily balanced; does it allow for adequate operation and maintenance of investments?

b. Administrative distribution of agricultural public expenditure, across the various levels of deconcentrated administration: is this distribution aligned to and supportive of the decentralization process?

c. Intra-sectoral and functional composition of agricultural public expenditure (support received by the various subsectors and functions vs. their relative current and potential importance in Malawi's rural economy): has this intra-sectoral and functional composition been consistent with national strategies?

iv. **Chapter 4 assesses the technical efficiency of agricultural public expenditure:** does it deliver outputs in a timely (execution rates) and cost-effective way? Is there adequate M&E? What is the level of ownership and accountability amongst the various stakeholders along the agricultural public expenditure chain? What is the level of alignment to national procedures? In particular, stock is taken of the progress made in implementing an effective output-based program approach[7];

v. **Chapter 5 seeks to assess the effectiveness of agricultural public expenditure,** in terms of incidence, impact and sustainability; trends in agricultural production and productivity and rural poverty are analysed, as well as the impact of some of the major public interventions in the sector (input subsidies and extension);

vi. **Finally, Chapter 6 details the conclusions arising from the analysis and proposes related recommendations aimed at improving the efficiency, effectiveness and equity of agricultural public spending and enhancing ASWAp outcomes.**

5. **In this exercise, in conformity with the New Partnership for Africa's Development (NEPAD) guidelines (AU/NEPAD 2005), agriculture in its broad sense, covers crops, livestock, fisheries and forestry.**

6. **It was decided that the study period would be 2000/01 to 2012/13, so as to include important agricultural strategy changes,** especially as regards input subsidies (Targeted Input Program (TIP) until 2003/04; Farm Input Subsidy Program (FISP) since 2005/06). However, given the

[7] In its most sophisticated form, a program approach would be characterized by strong and evolving impact driven strategies, aligned output-based budgets and achievement indicators, aligned institutional setting, aligned donor support, strong monitoring and evaluation (M&E) systems, high accountability and strong ownership at all levels. At the opposite end of the public expenditure implementation spectrum, a classical input-based approach is often characterized by weak strategies, input-based budgets, donor-driven activities, high proportion of off-budget funding, duplications and gaps in funding, poor M&E, poor ownership and accountability, low impact and sustainability, etc.

major difficulties encountered in tracking accurate data and time constraints, off-Budget expenditure analysis had to be limited to the period 2007/08-2011/12.

7. **Finally, this AgPER draws on a number of related studies carried out in the recent past, in particular:**

i. A draft AgPER report produced in 2006 (Mauwa et al. 2006);

ii. Work by the Regional Strategic Analysis and Knowledge Support System for Southern Africa (ReSAKSS-SA 2008);

iii. A Public Expenditure Review carried out in the Sustainable Land Management subsector in 2009 (FAO-TerrAfrica 2009);

iv. The latest Public Finance Management Assessment for Malawi based on the Public Expenditure Financial Accountability (PEFA) framework (EU 2011);

v. A broader Public Expenditure Review conducted by the World Bank at the same time this AgPER was carried out (World Bank 2013).

1. ECONOMIC, POLICY AND INSTITUTIONAL CONTEXT AND RECENT PERFORMANCE OF AGRICULTURE IN MALAWI

1.1. General historical, political, economic and policy context

1.1.1. General historical, political and economic context[8]

8. **Malawi is a landlocked and poorly regionally integrated country in Southern Africa with a very narrow resource base.** Unlike many of its neighbours where the recent commodity boom has re-emphasized mining as strategic for the entire economy, Malawi does not seem to have significant mineral endowments. Uranium mining started in 2009 and interest in Malawi's mineral potential has since intensified, but when and how much the mining sector will contribute to the economy is still very uncertain. The manufacturing sector is also barely developed and contributed to only 12% of GDP in 2011[9]. The country's economy is therefore concentrated in a few agricultural commodities, which makes it highly vulnerable to weather and terms of trade shocks. In addition, Malawi suffers from weak regional integration in terms of both trade and physical infrastructure. Although civil war in neighbouring Mozambique ended in 1992, export corridors to the ports in that country have yet to be fully repaired. Delays at ports and complex transit procedures further increase the cost of importing raw materials and inputs and accessing export markets.

9. **Malawi has also one of the highest population densities, and as a result one of the lowest per capita incomes, in Africa.** With a population of 15.4 million in 2011, population density exceeded 163 people per square kilometre[10], and 210 in the more densely populated Southern region. Although Malawi has been severely affected by the HIV/AIDS pandemic - its prevalence of the disease was estimated at 10.0% in 2011 (ages 15-49), the ninth highest in the world - population growth continues to be high at 2.9%. Gross National Income per capita was USD 320 in 2012[11], one of

[8] This section draws heavily on World Bank/AfDB/DFID/MCC 2010 and World Bank 2012.
[9] Industry as a whole contributed 19%, services 51% and agriculture 30% (WDI 2011, http://data.worldbank.org/).
[10] WDI 2011, http://data.worldbank.org/.
[11] World Bank Atlas method (WDI 2012, http://data.worldbank.org/).

the lowest in the world. Since agriculture accounts for about 85% of employment but only 30% of GDP, income distribution in Malawi is highly skewed (and increasingly so, see chapter 5), with a Gini coefficient estimated at 0.45 in 2010/11 (NSO 2011).

10. **The history of growth in Malawi has been volatile and can be classified into five major phases (figure 1):**

i. **Independence (1964) - 1979: Strong growth was founded on export agriculture from estates, with smallholders producing food and supplying labour**. During this period, the government supported large-scale agriculture through preferential access to land, investment and credit. Estates grew at an average annual rate of 17% while smallholder production grew at 3%. Smallholder income was supplemented by remittances from migrant labour. Estate-led growth was made possible by relatively high product prices, the efficient value chain of estate marketing, good transport infrastructure down to the Mozambican ports of Nacala and Beira and cheap credit as interest rates were kept low.

ii. **1979 - 1989: Incomes strongly declined following the oil price shock accompanied by severe deterioration in the terms of trade.** Malawi's terms of trade collapsed by 25% at the end of the 1970s beginning a long deteriorating trend. The worsening of export prices reduced demand for migrant labour in South-Africa, consequently reducing household remittance incomes in Malawi. Furthermore, civil war in Mozambique between 1985 and 1992 resulted in large refugee influx and damaged transport infrastructure, which further raised transport costs.

iii. **1989 - 2003: Agriculture became smallholder-led while macro-instability and external shocks caused economic stagnation.** The introduction of legislation[12] in the early 1990s making it legal for smallholders to grow export crops dramatically shifted the pattern of agricultural production away from estates. From nearly nothing in 1990, smallholders came to produce around 70% of the tobacco crop. However, high fiscal deficits combined with exchange rate liberalization rapidly transmitted price instability to the rest of the economy, and inflation reached a high of 83% in 1995. Additionally high domestic borrowing caused real interest rates to exceed 20% in 2000-2004 which strongly crowded out private investment. Volatility was further exacerbated by various external shocks including droughts in 1992 and 1994.

iv. **2004 - 2009: Stabilization enabled growth to resume.** The change of government in 2004 brought about a rapid turnaround in government finances. In extremely difficult fiscal circumstances, and for the first time since 1994, the government stayed within the planned budget and, as a result, the fiscal position dramatically improved. This led to an increase in donor inflows, which in turn allowed the government to further reduce its need to borrow domestically thus allowing more resources to become available for private sector investment. From 2006 to 2010, Malawi averaged a solid 7% growth in GDP annually and in 2008, after 29 years, incomes per capita recovered their levels of 1979. This growth, however, was largely driven by exports (mainly tobacco), relatively large foreign direct investment in the uranium mining project and fiscal expansion (favoured by the debt relief from the Highly Indebted Poor Countries (HIPC) initiative in 2006), and did not translate in higher living standards for most Malawians.

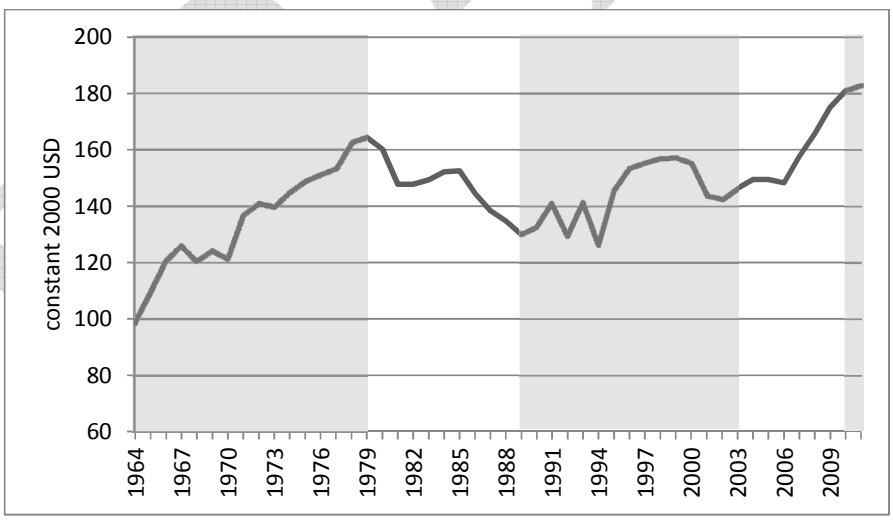
v. **2010 - 2012: Macroeconomic imbalances and drop in donor inflows threatened to trigger economic reversal.** Macroeconomic imbalances started to build up after the 2008 global crisis and the 2009 presidential elections. In addition, in 2010 Malawi's record on governance

[12] Repeal of the Special Crops Act in 1994.

began to deteriorate significantly, resulting in social conflicts and causing DPs to put their planned Budget support and some major long-term investments on hold. In 2011 adverse terms of trade and significant reduction in tobacco proceeds added to the drop in donor inflows to generate a severe foreign exchange deficit that led to increasing shortages of critical goods such as fuel and started choking the economy.

11. **Since April 2012, major economic and political reforms have been initiated but the poorest have been hit hard by the Malawi Kwacha depreciation and economic recovery remains fragile due to the risk of social unrest and policy reversal, the constrained supply side response of the economy and exogenous threats.** After the death of President Bingu wa Mutharika in April 2012, the then Vice-President Joyce Banda took over and acted swiftly to arrest the economic crisis and restore the confidence of all stakeholders including DPs. While the macroeconomic and structural reforms her new Cabinet passed have brightened the medium-term economic outlook (in particular the supply of critical goods has loosened), the 49% devaluation and the introduction of a floating exchange rate in May 2012 have since then translated into an over 100% depreciation of the Malawi Kwacha and generated a surge in inflationary pressures that is hitting hard the poorest groups of the population, creating a high risk of social unrest that would slow down economic recovery. Simultaneous presidential, parliamentary and local government elections planned for 2014 obviously further complicate the current Government's reform endeavour. In addition, to take full advantage of the greater competitiveness induced by recent reforms and become an export-led economy, Malawi still has very substantial challenges to overcome on the supply side, amongst which diversifying its economy, improving the business environment, reducing the infrastructure deficit, improving its regional integration, increasing credit availability and affordability, reducing the skills gap, and enhancing governance and public services accountability. Climatic and terms of trade shocks also continue to represent significant threats to economic recovery in a low diversification context.

Figure 1: Phases of GDP per capita in Malawi, 1964-2011, constant 2000 USD



Source: WDI, http://data.worldbank.org/.

1.1.2. National poverty reduction and growth strategies

12. **The various growth-consistent periods described in the previous section broadly corresponded to the periods of variably successful implementation of national strategies aimed at stimulating the economy and reducing poverty.**

13. **In the 1980s and 1990s, inconsistent implementation of several Structural Adjustment Programs (SAPs) combined with macroeconomic instability, droughts and other external shocks led to only short-lived economic recovery and failed to create sustainable broad-based growth.** SAPs brought about a welcome modernization of the economy. In the agricultural sector in particular, the initial impact of the reforms led to a substantial increase in smallholder production of tobacco as well as private sector participation in distribution of inputs and marketing of agricultural produce. However, over time, the failure to foster competition in both the input and output markets in response to the lifting of price controls and elimination of fertilizer subsidies and to significantly improve agricultural productivity compromised the sector's ability to consolidate and sustain the benefits accruing to the poor. Furthermore, as already stated in the previous section, macroeconomic instability, droughts and other external shocks such as the war in Mozambique aggravated the poverty situation.

14. **The Malawi Poverty Reduction Strategy (MPRS) 2002-2005 pinpointed priorities that are still valid today but did not reach its objectives due to insufficient operationalization.** The MPRS[13] was the first attempt to translate the long-term strategy of Malawi Vision 2020, issued in 1998, into medium-term focused action plans. The overall goal of the MPRS was to achieve "sustainable poverty reduction through empowerment of the poor". The MPRS was built around four strategic pillars, namely: sustainable pro-poor growth; human capital development; improving the quality of life of the most vulnerable; and governance. In addition, it had four key cross-cutting issues, namely: HIV/AIDS, gender, environment, and science and technology. The MPRS identified priorities that are still challenges of paramount importance today, such as the necessity to develop an enabling environment for non-government stakeholders (farmer groups, local communities and private operators) to take over growth generation and diversify the structure of the economy. This enabling environment as defined under the MPRS included macroeconomic stability, good governance and accountability, enhanced decentralization, development of rural infrastructure, credit availability, and strengthening of research and education. The MPRS aimed at reducing the incidence of poverty by 6 percentage points, extreme poverty by 9 percentage points and sustaining a 5.3% average real annual growth over the period. However, the MPRS evaluation in 2005 showed that it failed to produce its expected results due to implementation shortfalls including failure by Ministries and Departments to translate MPRS activities into their budget and Medium-Term Expenditure Framework (MTEF), funding not based on MPRS defined priorities, and slow implementation of the devolution process.

15. **The first Malawi Growth and Development Strategy (MGDS) 2006-2011 has been effective in achieving several of the country's development goals, in particular food self-sufficiency, but failed to achieve equitable growth distribution.** The thematic framework of the MGDS[14] represented a policy shift towards economic growth and infrastructure development. Six broad themes were identified, namely: sustainable economic growth; social protection; social development; prevention and management of nutrition disorders and HIV/AIDS; infrastructure development; and improving good governance. In addition six key focus areas were singled out as particularly critical to accelerate the attainment of the Millennium Development Goals (MDGs): agriculture and food security; infrastructure development; irrigation and water development; energy generation and supply; integrated rural development; and HIV/AIDS prevention and management. The MGDS aimed at sustaining an average real annual growth of 6% and reducing poverty by 8 percentage points. As already said, the economy performed remarkably well over the period, with an average real GDP growth rate of 7% through 2006-2010, inflation rates reduced to single digit levels, and declining bank lending rates. The introduction of the Farmer Input Subsidy Program (FISP) in 2005/06 combined with favourable climatic conditions led to a series of bumper harvests (for example, 3.4

[13]GoM 2002.
[14]GoM 2006.

million metric tons of maize in 2010 compared to 1.2 million metric tons in 2005) that allowed the country to recover its food self-sufficiency. Simultaneously the country made noteworthy progress in the health sector (life expectancy surged from 38 in 2005 to 53 in 2012) and is considered to do better on achieving the MDGs than many other Sub-Saharan countries. Malawi is in particular thought to be on track to meet four of the eight MDGs (reduce child mortality; combat HIV/AIDS, malaria and other diseases; ensure environmental sustainability; and develop global partnership for development). However, while the country was believed to be also on track to achieve the MDG on poverty eradication based on the 2009 Welfare Monitoring Survey (NSO 2010), the results from the recently published Integrated Household Survey (IHS3, based on 2010-2011 data, NSO 2012) reflect a much less optimistic picture. While the 2009 Welfare Monitoring Survey had indicated that national and rural poverty headcounts had declined from respectively 50 and 53% to 39 and 43% over the 2005-2009 period, IHS3 produced very different figures, with national and rural poverty headcounts having stagnated at around respectively 50-52 and 56% and the Gini coefficient at national level having deteriorated from 0.39 to 0.45 since IHS2 (based on 2004-2005 data).

16. **The extent to which the implementation of MGDS II 2011-2016 will capitalize on the main lessons learnt from MPRS (insufficient operationalization of policies) and MGDS I (failure to achieve equitable growth) will determine Government's ability to effectively boost growth and reduce poverty.** Like its predecessor, MGDS II[15] plans to reduce poverty through sustainable economic growth (target: 6.9% per year on average in real terms) and infrastructure development and prioritizes six very similar thematic areas: sustainable economic growth; social development; social support and disaster risk management; infrastructure development; improved governance; and gender and capacity development. To accelerate economic growth, it isolates nine key priority areas, namely: agriculture and food security; transport infrastructure and Nsanje World Inland Port; energy, industrial development, mining and tourism; education, science and technology; public health, sanitation, malaria and HIV/AIDS management; integrated rural development; Green Belt irrigation and water development; child development, youth development and empowerment; and climate change, natural resources and environmental management. The MGDS II commits to heightened efficiency, accountability, effectiveness and transparency in the public sector and recognizes the importance of reforming public finance management and public administration. As illustrated by the insufficiencies of previous national strategies implementation, aligning public interventions and budgets and donor support with national and sectoral priorities, fostering decentralization and promoting effective pro-poor public interventions will be critical for Government's ability to effectively boost growth and reduce poverty.

17. **In May 2012, in order to stimulate an economic rebound, the new Cabinet issued an Economic Recovery Plan (ERP)[16] which emphasizes an export-led growth strategy and, amongst MGDS II priorities, places focus on energy generation and supply, transport infrastructure and exports diversification.** Accordingly, the following sectors became priorities amongst priorities: energy, tourism, mining, agriculture and agro-processing (intensification, diversification and commercialization), transport infrastructure and information and communication technology.

1.2. Agricultural policy and institutional background

18. **In the agricultural sector, the Ministry of Agriculture and Food Security (MoAFS) in collaboration with its development partners (DPs) and other relevant stakeholders has formulated in 2010 the Agricultural Sector Wide Approach (ASWAp) as a vehicle for achieving agricultural growth and as a means of reaching the targets set in the MGDS of reducing poverty.** ASWAp[17] is a

[15] MEPD 2012.
[16] GoM 2012.
[17] MoAFS 2010 and MoAFS 2011a.

strategy, spearheaded by Government, that prioritizes activities in the sector that aim to increase agricultural productivity, enable access to nutritious food for people, and increase the contribution of agro-processing to economic growth. The ASWAp is a single comprehensive programme and budget framework that offers a formalized process for better donor coordination and harmonization of investment and alignment of funding arrangements between GoM and donors in the agricultural sector. It promotes increased use of local procedures for programme design, implementation, financial management, planning and M&E. The ASWAp, implemented through 2010-2015, sets a growth target of 6% per annum for the agricultural sector, in line with the Maputo Declaration and CAADP.

19. **The current agricultural sector landscape is however, anchored on a rich policy and institutional history.** Key to the landscape is the institutional and structural transformation that has taken place in the country in the last three decades which largely defines Government current policy, prioritization process of issues and provision of support services to the agricultural sector.

Agricultural input and output marketing in Malawi

20. **Malawi's smallholder agricultural sector was for a long time one of the most highly controlled and regulated in the country.** The dualism in Malawi's agricultural sector, which is the division of the sector into estate sub-sector and smallholder sub-sector, has been defined historically by land tenure, type of crops grown and marketing arrangements between the two sub-sectors. The Agricultural Development and Marketing Corporation (ADMARC) was established in 1971 with the mission, among other things, to buy on cash basis all crop produce offered for sale from the smallholder sub-sector. It was also the sole seller or outlet of key inputs for smallholder farmers at subsidized prices. Other parastatal organizations involved in input and credit subsidies and price control schemes in the smallholder sector included the Smallholder Agricultural Credit Administration (SACA) and the Smallholder Farmers Fertilizer Revolving Fund of Malawi (SFFRFM). On the other hand, farmers in the estate sub-sector were supposed to buy all their inputs at full cost from private outlets and had the privilege of selling directly their crop produce on the export markets or through the Auction Floors in the case of tobacco.

21. **Between 1981 and 1994, Malawi implemented several Structural Adjustment Programs (SAPs) supported by the International Monetary Fund (IMF) and the World Bank, with many reforms focused on the agricultural sector.** The key reform was the price decontrol, which was aimed at allowing market forces to drive resource allocation in production. Both input and output markets were liberalized and agricultural input subsidies were totally removed by 1994/95 cropping season. In the process ADMARC was restructured several times and the degree of smallholder farmer dependence on this parastatal for the purchase of inputs and marketing of crops declined steadily as private sector participation increased over the years. However, despite the fact that ADMARC no longer had a monopoly in the purchase and sale of agricultural produce including maize, the Government continued to play its social role by using this parastatal to maintain input provision and crop outlets in non-profitable areas and control produce price fluctuation, particularly for maize, through purchases from farmers at harvest and sales to the masses when their stocks were depleted. Between the early 1990s and December, 2000, Government pursued a maize price band policy which meant that prices would only oscillate within the preset band with the aim of protecting the producers (through a floor price) and the consumers (through a ceiling price).Although the price band was then removed, the continued participation of ADMARC in the market means that market prices revolve around ADMARC's guiding prices. Since 1999, ADMARC's maize price stabilization role has been complemented by the establishment of the National Food Reserve Agency (NFRA). Its objectives are to (i) maintain the Strategic Grain Reserve; (ii) to stabilize the grain market price, and (iii) to carry out grain importations and exportations on behalf of the Government. The marketing arrangements under the estate or commercial farm type have not significantly changed due to the implementation of SAPs.

22. **To reverse the discontinuity in the use of improved inputs induced by the complete removal of agricultural input subsidies in the mid-1990s, the GoM introduced the Starter Pack Initiative (SPI) in 1998/99 and the Targeted Input Programme (TIP) in 2000/01 but with limited success.** The complete removal of agricultural input subsidies in the mid-1990s which coincided with the collapse of the SACA created major challenges to smallholder farmers with respect to access to productivity enhancing technologies, in particular improved crop varieties and inorganic fertilizers. By the late 1990s, this resulted in significant challenges in achieving national as well as household food security. It is for this reason that the GoM in collaboration with its development partners introduced the Starter Pack Initiative (SPI) during the 1998/99 cropping season. The aim of the SPI, implemented as a general input support program targeting all smallholder farmers in the country, was to *"jump-start"* agricultural productivity among smallholders through the provision of a fertilizer and hybrid seed package to plant 0.1 ha. In 2000/01 it was transformed into a Targeted Input Programme (TIP), targeted to the poorest, that lasted until the 2003/04 cropping season. However, marred by various levels of inefficiencies ranging from poor beneficiary selection processes to logistical challenges which usually led to late distribution of the inputs, the overall impact of both programs on crop productivity gains were very limited (Douillet 2011). This was compounded by a relatively poor rainfall pattern during the period of implementation with the most serious drought experienced in 2001/02 when a large number of people needed food aid. Paradoxically, it could be pointed out that a large number of people still starved from hunger during a period of massive public expenditure to support food production in the country. Hence, these input support programs were temporarily discontinued.

23. **However, after a new disastrous harvest in 2004/05, Malawi reintroduced input subsidy support to smallholder farmers in the 2005/06 cropping season through the Agricultural Input Subsidy Programme that later on became the Farm Input Subsidy Programme (FISP), still under implementation today.** The purpose of the programme is to increase resource poor smallholder farmers' access to improved agricultural inputs in order to achieve food self-sufficiency and increased incomes (MoAFS 2011b). FISP implementation modalities, cost, incidence and impact are discussed in greater detail in section 5.1.

Agricultural research and extension (summary of key players and linkages in figure 3)

24. **The bulk of agricultural research in Malawi is carried out and coordinated by the Department of Agricultural Research Services (DARS) of MoAFS.** The DARS is responsible for conducting research and technology development and providing regulatory and specialist services on all crops and livestock, except tobacco, tea, sugarcane, fisheries and forestry. It operates through a network of sixteen research centres located in all agro-ecological zones of the country. Research and development is carried out through seven technical groups:

i. Cereals group (maize, rice and small grains (sorghum, millets, wheat and barley));

ii. Horticulture group (fruits, tree nuts, flowers and coffee, vegetables and spices, roots and tubers);

iii. Livestock and pastures group;

iv. Grain legumes, oilseeds and fibre group (groundnuts, pulses, fibres and oilseeds);

v. Soils and agricultural engineering group (soil fertility and agro-forestry, farm machinery and agro-processing, irrigation and drainage);

vi. Technical services group (seed certification and quality control, plant genetic resources and biotechnology, library and information services, agricultural statistics and economics analytical services);

vii. Plant protection group (integrated field insect pest management, integrated field disease management, storage pest management).

25. **The Fisheries Research Unit (FRU) is also under MoAFS while the Forestry Research Institute of Malawi (FRIM) falls under the Department of Forestry of the Ministry of Natural Resources, Energy and Environment for which data could not be obtained.**

26. **Malawi is a host to six CGIAR centres.** These are the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), the International Institute of Tropical Agriculture (IITA), the International Centre for Research in Agro-Forestry (ICRAF), the International Centre for Tropical Agriculture (CIAT), the International Potato Centre (CIP), and the World Fish Centre. For ease of coordinating all research activities and ensuring better collaboration with the national research system, all the CGIAR centres, except the World Fish Centre have their main offices at Chitedze Research Station in Lilongwe which is also the headquarters of DARS. Their activities, however, are implemented across all the regions of the country based on their mandate crops. The budgets of ICRISAT, IITA, CIAT and CIP were taken into account in this study.

27. **In addition to the CGIAR centres, academic institutions of higher learning also complement research conducted by the DARS but their budget could not be obtained.** The main ones are the Lilongwe University of Agriculture and Natural Resources (LUANAR – Bunda), the Natural Resources College (Lilongwe), Chancellor College (Zomba) and Mzuzu University (Mzuzu).

28. **Tobacco, tea and sugarcane have their own non-Government based research centres that were not covered by this study.** The Agricultural Research and Extension Trust (ARET) is in charge of research and extension in the tobacco sector under the Tobacco Association of Malawi (TAMA) and is financed through a levy of 1% on tobacco sales (at auction). The Tea Research Foundation (TRF) of Central Africa is located in Malawi but conducts tea research for Malawi, Zimbabwe, South Africa and Zambia and receives most of its funding from the Tea Associations of Malawi and Zimbabwe and also from donors. The Illovo previously Sugar Company of Malawi (SUCOMA) has its own small R&D unit.

29. **Public agricultural extension in Malawi is delivered through the Department of Agricultural Extension Services (DAES) of MoAFS.** The Department of Agricultural Extension Services formerly Department of Agriculture was instituted in 1907. Its mandate is to provide quality agricultural extension services in order to enhance adoption of improved technologies for farmers of all gender categories and vulnerable groups. Agricultural extension delivery strategies have evolved over the years. However, the current policy of the department advocates a *pluralistic, decentralized and demand-driven agricultural extension service in Malawi.* This policy was formulated in 2000 and operationalized in 2001 with the aim of responding to the growing demands from the farmers, based on commodity specialization. The policy also forms a basis for coordinating all players providing extension services in the agricultural sector. Agricultural extension is delivered through a well-organized structure with four decentralized levels (figure 2). Extension delivery by DAES is carried out in collaboration with a number of partners at varying degrees, namely: Non-Governmental Organizations (NGOs), Bunda and the Natural Resources College through their outreach activities, farmers' organizations (FUM, NASFAM, ASSMAG, etc.), agro-dealers through demonstrations close to their shops.

Figure 2: Structure of public agricultural extension delivery in Malawi

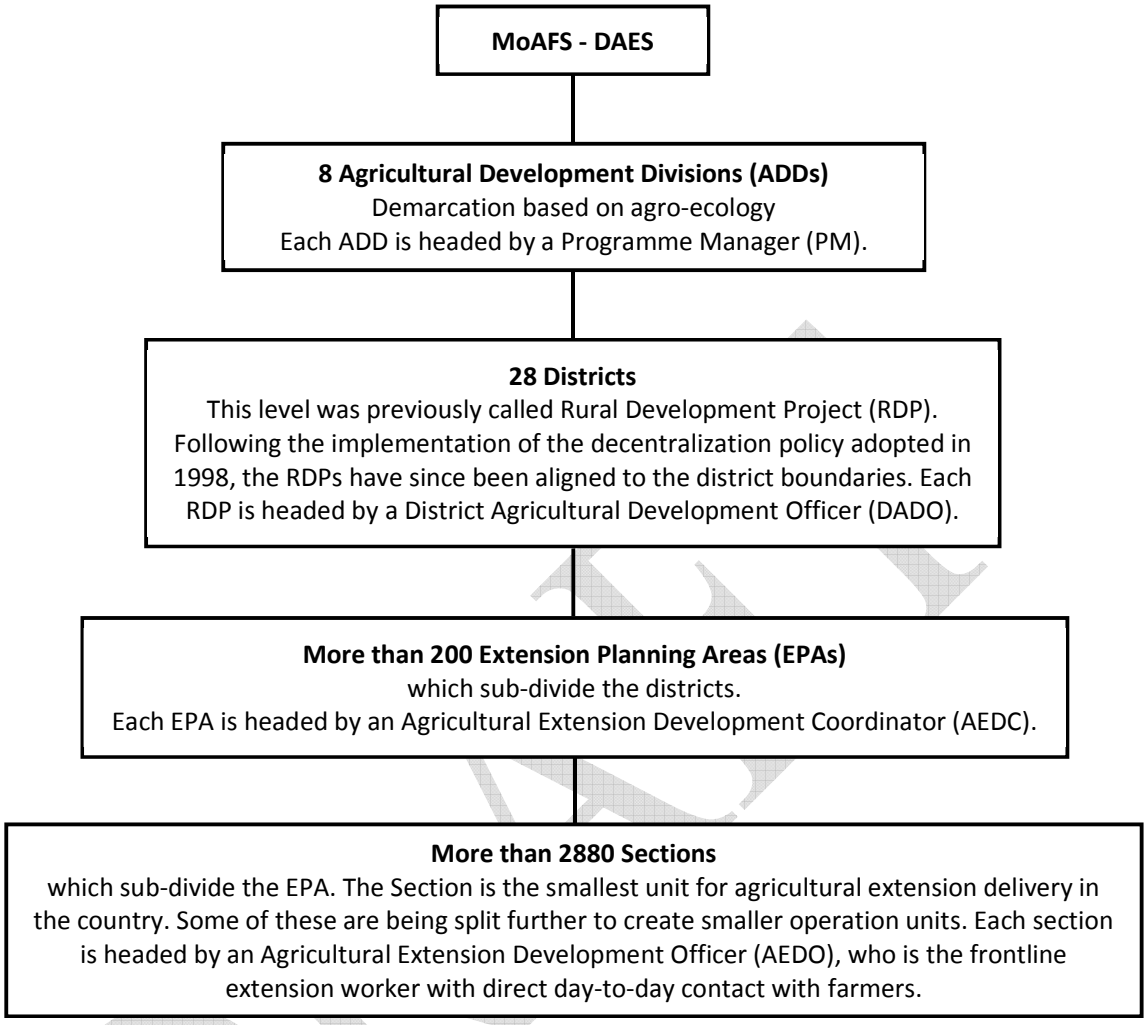
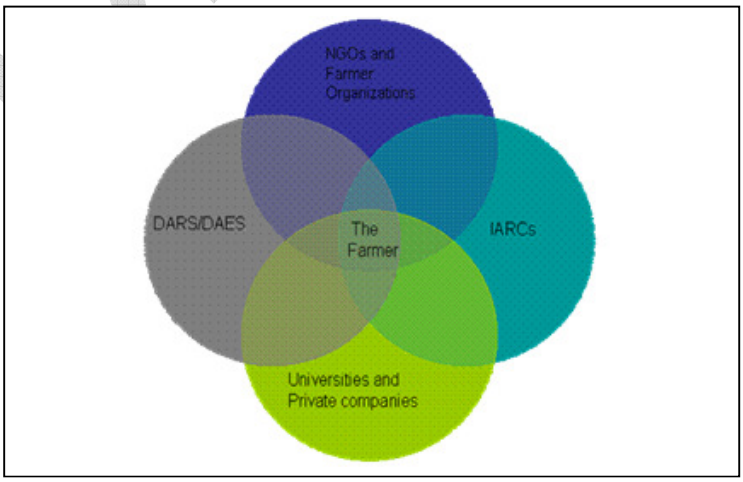


Figure 3: Summary of key players and linkages in the agricultural research and extension delivery system in Malawi



Source: Phiri et al. 2012

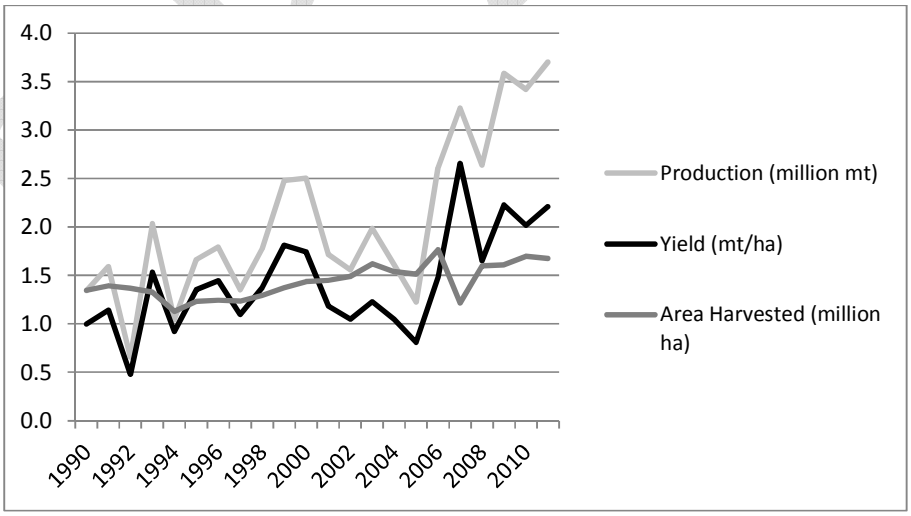
1.3. Recent performance of agriculture

30. **The combination of the introduction of FISP in 2005/06 and good rainfalls in the subsequent years sparked a series of bumper maize harvests, officially above population needs; however the persistence of high maize prices and importations from neighbouring countries cast increasing doubts on the reliability of official cultivated area and crop estimates.** Maize being Malawi's main staple food, maize production is often, and not necessarily appropriately as will be demonstrated below, used as the main benchmark for the performance of agriculture. As will be further developed in section 5.1 on the impact of FISP, two phases have to be distinguished over the period covered by this study (figure 4):

i. **From 2000/01 to 2004/05, Malawi experienced poor harvests,** below population requirements every single year, and was in particular hit by severe droughts in 2001/02 and 2004/05 leading to situations of acute food shortages;

ii. **From 2005/06 onwards, the introduction of FISP combined with adequate rainfall to dramatically raise maize yields and bring about national food self-sufficiency**[18]**;** official statistics claim that maize production increased twofold in the first year of FISP and threefold within four years of inception. The average harvest during the 2005/06-2010/11 period reached 3.2 million tons, representing an augmentation by about 80% over the average harvest during the preceding six year period (1.8 million tons). Ninety-five percent of this increase was accounted for by an increase in yields that went up from 1.2 tons/ha to over 2.0 tons/ha, the remaining 5% being imputable to a slight increase in the area under maize (6%). However, persistently high maize prices and continued importations over the past few years raise questions about the accuracy of the country's agricultural statistics regarding cultivated areas, production and surpluses (Jayne et al. 2008, Douillet et al. 2012[19]); this is again the case in 2013 as the country needs to import maize while the 2012/13 harvest was announced to have produced a surplus of about 700,000 mt (Dorward et al. 2013).

Figure 4: Evolution of maize yield, area harvested and production, 1990-2011



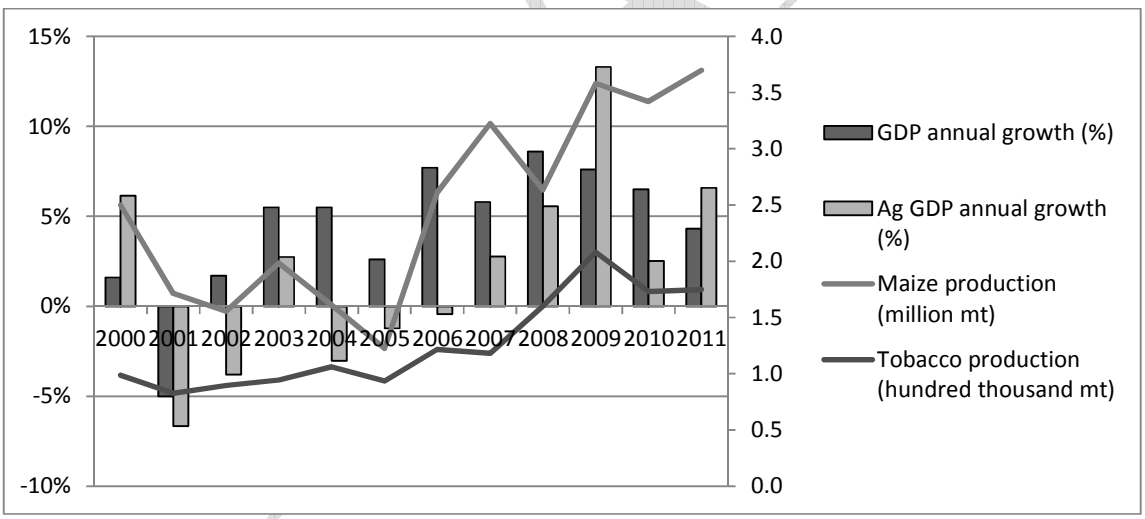
Source: FAOSTAT http://faostat3.fao.org

[18] On the basis of a population of about 16 million and annual maize per capita consumption of about 193kg, the annual national maize needs are estimated at about 3.1 million tons (Dorward et al. 2013).

[19] In particular, Jayne et al. (2008) estimated that the 2007 maize harvest may have been over-estimated by as much as 25 to 35%.

31. **The increase in maize production contributed to a much improved economic growth, although it has been demonstrated that the maize harvest drives volatility but is less central to growth than agricultural exports.** National GDP expanded by over 7% per annum in real terms during 2006-2010 while it had grown by only just over 2% per annum on average over the previous five year period (figure 5). Yet despite the prevailing assumption of the centrality of maize, which accounts for roughly one-quarter of agricultural GDP (Douillet et al. 2012), in the economy, analysis by the World Bank (2010) showed that tobacco exports may have had a greater impact on national GDP growth than maize production. Although it is clear that very poor maize harvests are associated with contractions in GDP, the correlation is weaker in years of good harvest. One explanation for this is that maize creates a limited multiplier effect on the rest of the economy due to the low proportion of production, 10 to 15%, which is sold. Furthermore, maize is subject to an export ban, which ensures that total demand is inelastic – hence even if cash-selling were more widespread, the ceiling on domestic demand would limit its potential as a driver of growth. Finally, a further explanation for the weak connection between maize and growth is the low net profitability of production under fertilizer, which, while increasing yield, has little effect on value-added because of the increased cost of inputs. On the other hand, agricultural exports could significantly affect growth through a stronger domestic multiplier effect: firstly, because they contribute directly to GDP; secondly, because of the stimulus effect of exporters spending their income in the rest of the economy; and thirdly, because of the need for auxiliary services such as transport and finance. In addition, the structure of export crops production in Malawi offers some guarantees in terms of growth distribution, since exports are highly labour intensive and production is dispersed over a large area. This is particularly true for tobacco which accounts for about 60% of export revenue, but also applies to estate crops such as sugar and tea, which disburse cash income to a large labour force (World Bank 2010).

Figure 5: GDP and Agricultural GDP annual growth and maize and tobacco production

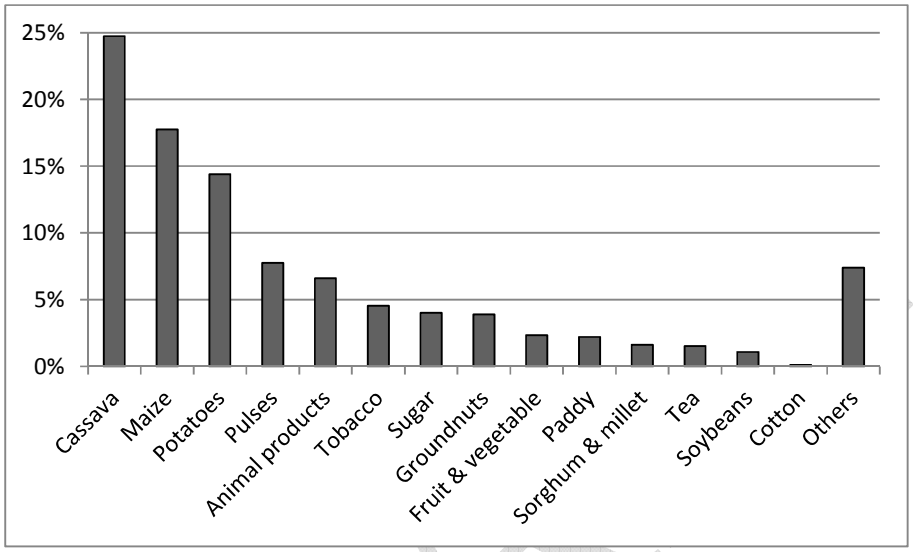


Source: IMF/World Bank for growth rates, FAOSTAT for maize and tobacco production.

32. **It is important to note that while maize was the main focus of attention over the past decade, because of its traditional central place in Malawians' diet and because of all discussions around FISP, roots and tubers experienced a robust and "silent" growth over the same period, though they did not benefit from any incentive programme and got little public support, largely limited to research and dissemination of pest resistant and more productive varieties (mainly through CIP and IITA).** Although this fact is widely unknown, cassava is actually the first crop in volume and farm-gate value in Malawi (accounting for 25% of total agricultural production farm-gate value expressed in 2005 prices), before maize which stands at 18% (figures 6, 7 and 8). The area under cassava is now back at its early 2000s level and average yield increased by 39% during 2000-2011 (figure 9).

Although more labour intensive, cassava is less drought sensitive and less input demanding than maize. Its low production cost has recently started to attract a fast expanding industrial demand as a substitute for wheat flour and as a starch source for the paper industry (Douillet 2011). Sweet and Irish potatoes also benefited from research efforts and arrive third in agricultural production volume and farm-gate value (14%). Their cultivated area remained about constant over the period of study but their average yield increased by 49%.

Figure 6: Share of the various agricultural commodities in total farm-gate value of agricultural production expressed in 2005 prices, 2011, %



Source: FAOSTAT http://faostat3.fao.org

33. **Pulses and groundnuts (respectively 8% and 4% of total agricultural production farm-gate value in 2011) also experienced a significant increase in production during 2000-2011, driven by an increase in both areas and yields.** The area under beans doubled while the average yield increased by 50%. For pigeon peas, the same growth rates were 43% and 57% and for groundnuts, 73% and 43%.

34. **Animal production (7% of total agricultural production farm-gate value in 2011) is on the rise but still remains modest.** Pig meat production more than doubled in volume over the study period and is now the first meat produced in Malawi, before cattle, the production of which just doubled. Goat meat production increased by more than threefold and is now the third type of meat produced in Malawi in volume, after pig and cattle and before chicken. Chicken meat production obviously benefited from the surge in maize production as of FISP inception - it grew by 46% during 2006-2011 after having stagnated before then – but it still remains limited. Finally milk production increased by 43% over the period while egg production stagnated.

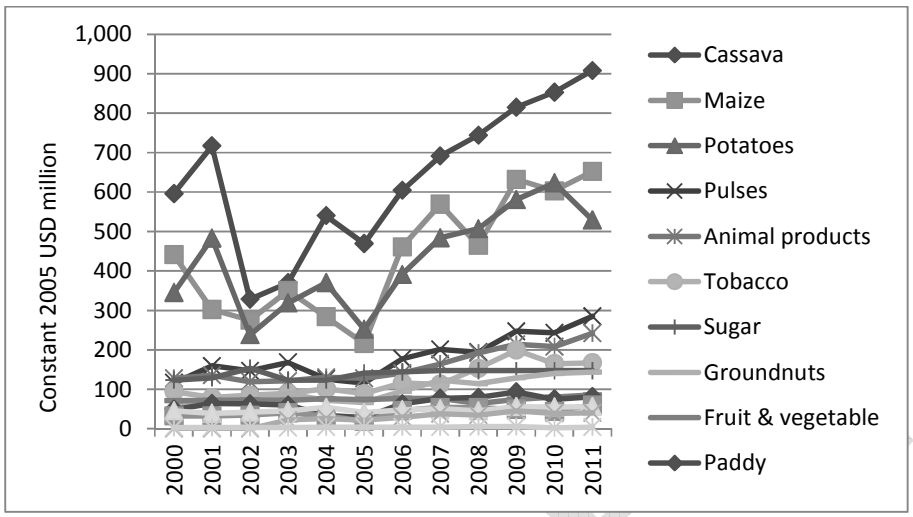
35. **Although less impressive, growth in tobacco production (5% of total agricultural production farm-gate value) was fairly constant, both in area (+37%) and yields (+38%).**

36. **On the other hand, fruit and vegetable production (2% of total agricultural production farm-gate value in 2011) did not achieve much progress, neither did sugar (4%) nor tea (2%) production.**

37. **Progress was also limited for rice production (2% of total agricultural production farm-gate value) and cotton (0.1%) had not really taken off yet by 2011.** The area under rice increased by 50% over the 2000-2011 period but remained modest at only 62,000 ha, while yields improved by less

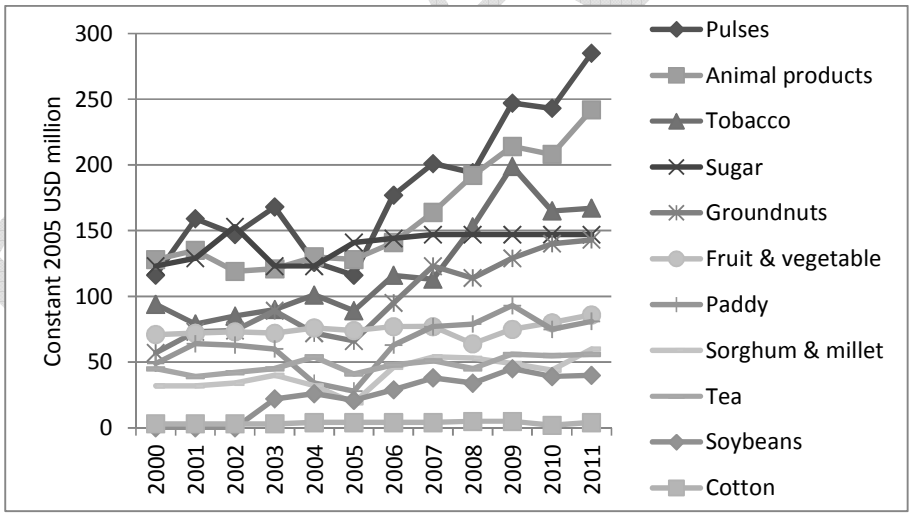
than 20% at just below 2 mt/ha. The production of cotton increased steadily to a peak of 48,000 mt in 2008 and 2009 but then fell to 19,000 mt in 2010.

Figure 7: Evolution of the farm-gate value of the various agricultural commodities expressed in 2005 prices, 2000-2011, constant 2005 USD million



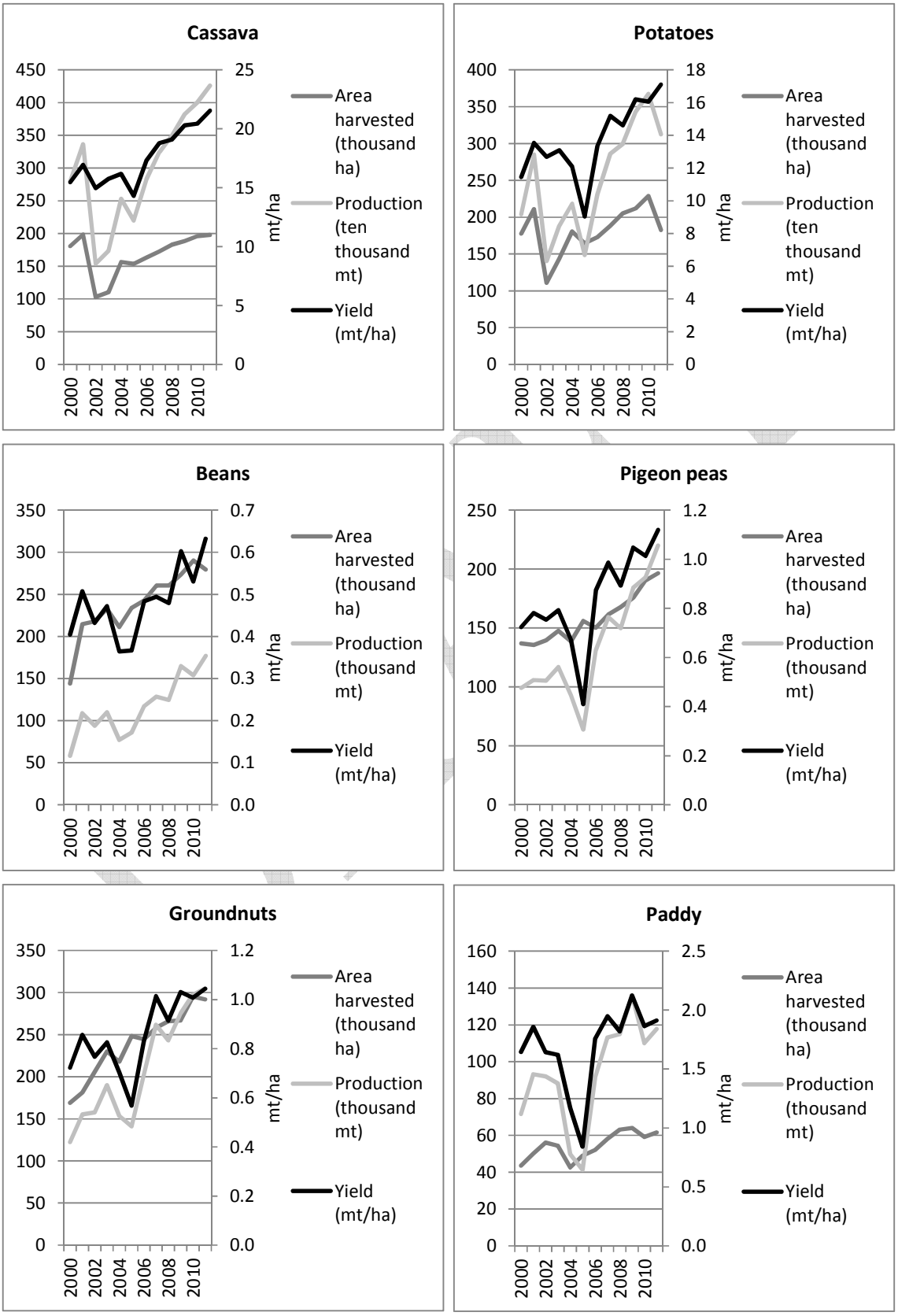
Source: FAOSTAT http://faostat3.fao.org

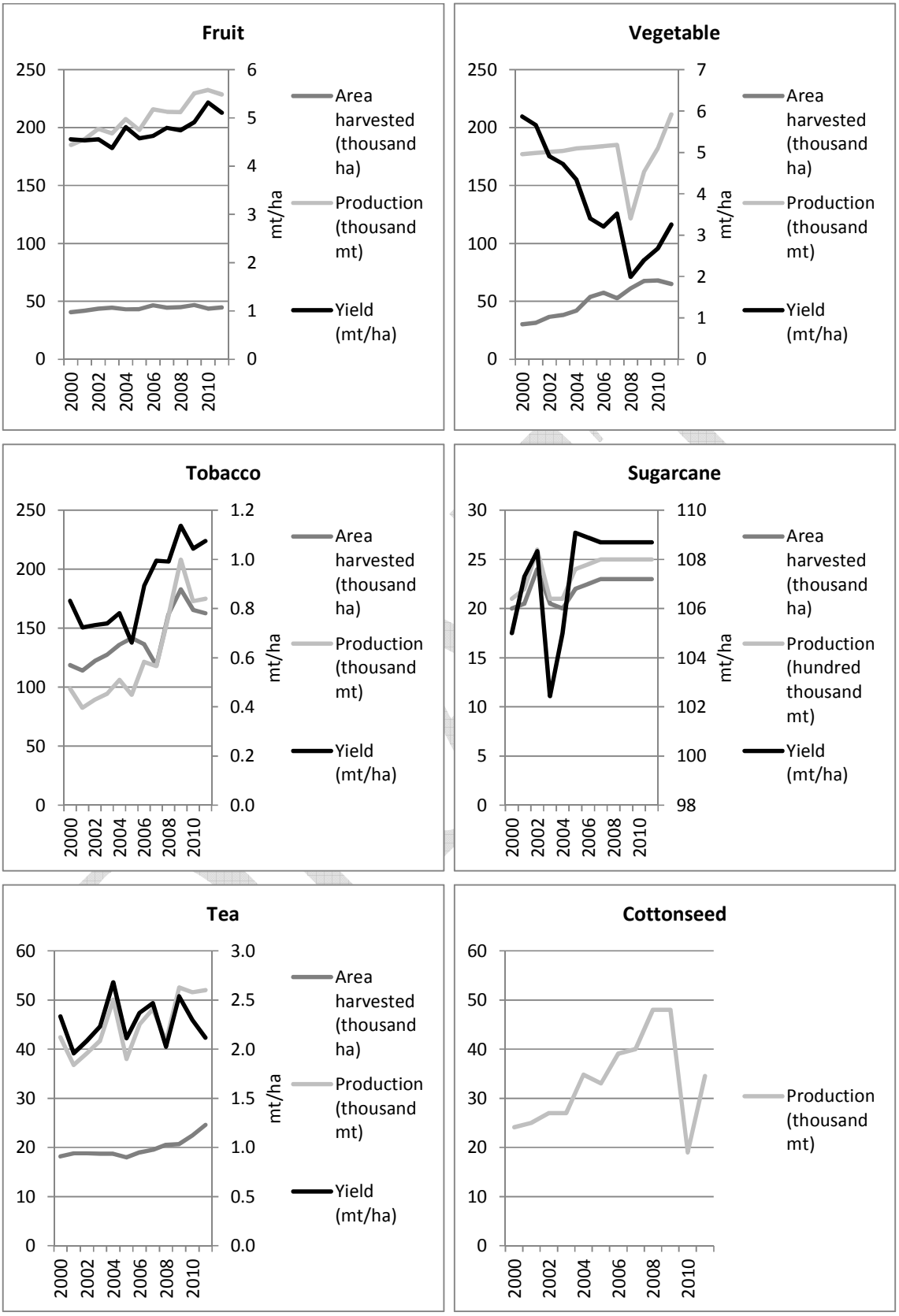
Figure 8: Evolution of the farm-gate value of the various agricultural commodities expressed in 2005 prices, 2000-2011, constant 2005 USD million – Detail of the under USD 300 million commodities

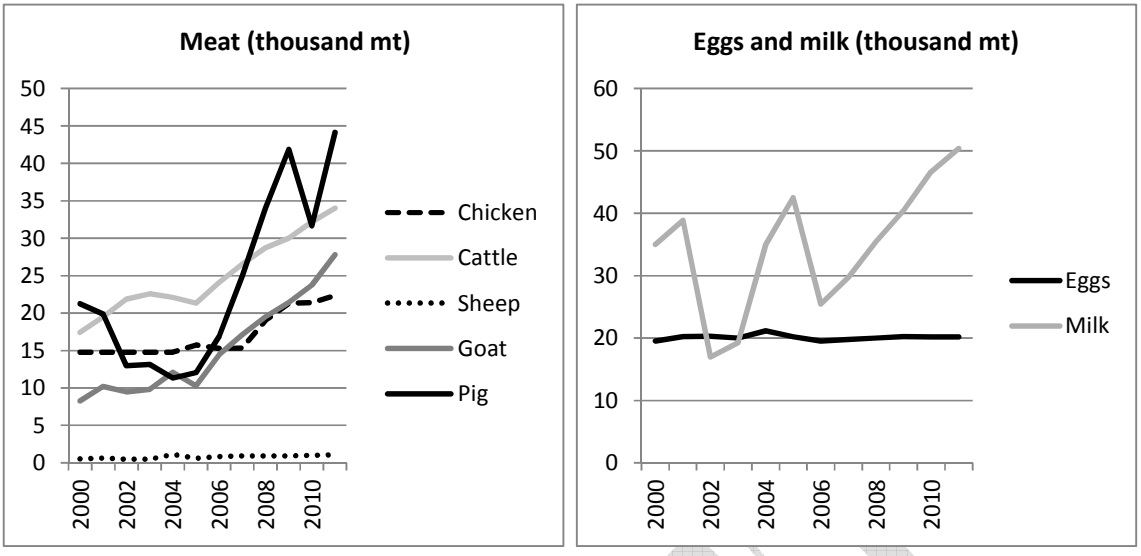


Source: FAOSTAT http://faostat3.fao.org

Figure 9: Variations in cultivated area, yield and production for the main agricultural commodities other than maize, 2000-2011




Fruit
250
200
150
100
50
0
6
5
4
3
2
1
0
mt/ha
2000
2002
2004
2006
2008
2010
Area harvested (thousand ha)
Production (thousand mt)
Yield (mt/ha)
Vegetable
250
200
150
100
50
0
7
6
5
4
3
2
1
0
mt/ha
2000
2002
2004
2006
2008
2010
Area harvested (thousand ha)
Production (thousand mt)
Yield (mt/ha)
Tobacco
250
200
150
100
50
0
1.2
1.0
0.8
0.6
0.4
0.2
0.0
mt/ha
2000
2002
2004
2006
2008
2010
Area harvested (thousand ha)
Production (thousand mt)
Yield (mt/ha)
Sugarcane
30
25
20
15
10
5
0
110
108
106
104
102
100
98
mt/ha
2000
2002
2004
2006
2008
2010
Area harvested (thousand ha)
Production (hundred thousand mt)
Yield (mt/ha)
Tea
60
50
40
30
20
10
0
3.0
2.5
2.0
1.5
1.0
0.5
0.0
mt/ha
2000
2002
2004
2006
2008
2010
Area harvested (thousand ha)
Production (thousand mt)
Yield (mt/ha)
Cottonseed
60
50
40
30
20
10
0
2000
2002
2004
2006
2008
2010
Production (thousand mt)



Source: FAOSTAT http://faostat3.fao.org

2. LEVEL OF PUBLIC EXPENDITURE IN AGRICULTURE

2.1. Data availability and reliability issues

38. **Reporting on budget execution was weak and inconsistent over the study period.** Recent Public Expenditure and Financial Accountability (PEFA) assessments (EU 2011) indicated that Malawi performed relatively poorly over the past decade in terms of budget execution and control, accounting and reporting, and external scrutiny and audit. To a great extent, this was due to the incomplete implementation of the Integrated Financial Management Information System (IFMIS) that has been deployed in all ministries since 2001 and is now being introduced in local governments: a MoF commissioned review of the IFMIS carried out in 2012 evidenced that it operated primarily as an improved budget preparation and payment system but lacked several core areas of functionality normally associated with an IFMIS, including commitment control, procurement management, accounting and reporting (World Bank 2013). As a result, the extent to which on-Budget actual expenditures, when available, reflect the reality is not clear, and for the years in which detailed actual expenditures were not reported, revised estimates (adjusted during the mid-year Budget review process) had to be used as the only available approximation for actual expenditures.

Recommendation:
Proceed with development and full implementation of IFMIS in all public institutions in order to get comprehensive and real-time budget execution data allowing effective public expenditure planning and management; in upgrading the IFMIS particular attention should be given to measures that will facilitate bringing donor project financing on Budget.

39. **The irrigation subsector changed umbrella ministries several times over the study period, with limited memory kept on both institutional arrangements and budgets, which seriously hampers precise public expenditure analysis for this subsector.** Responsibility for supervising irrigation and water development was successively entrusted to the ministry in charge of agriculture and a dedicated ministry and this changed several times over the study period. Tracking public expenditures in irrigation across institutions proved tedious and did not yield fully reliable results. The same occurred to a lesser extent for fisheries and aquaculture that moved from the ministry in charge of natural resources and environment to MoAFS in 2007.

40. **Despite repeated attempts, forestry expenditures could not be obtained.**

41. **As will be seen in section 2.3, off-Budget expenditures represent a very high proportion of public expenditures in the agriculture sector.** The bulk of off-Budget expenditures considered in this study consists of DP project financing that is not registered in GoM Budget. Much less important in value, off-Budget revenues of MoAFS/DARS used to finance public agricultural research and the expenditures in agricultural research of the CGIAR centres that are present in Malawi were also estimated.

42. **Off-Budget DP project financing has increased recently due to tightened Budget inclusion criteria imposed by MoF that facilitate budget execution reporting but undermine Budget comprehensiveness and transparency.** As noted in the broader PER conducted at the same time as this study (World Bank 2013), one reason for the high level of off-Budget expenditures is that the MoF has recently tightened requirements for determining which DP funded projects qualify for inclusion in the Budget. Only projects for which the Government directly manages all project activities and financing may now be included in the Budget. Previously, many projects that were implemented outside of Government financial systems, but managed by Government were included in the Budget. However, problems in securing timely expenditure details and entering them into the Government's accounting system led to a tighter definition being adopted. In practice, even projects for which financing is provided through special government bank accounts held in commercial banks rather than through the Reserve Bank are in many cases not included in the Budget, and this is true as well for some loan financed projects. The present arrangements while addressing one problem has resulted in a substantial share of Government development expenditure falling outside of the Budget thereby undermining Budget comprehensiveness and transparency.

43. **Overall, off-Budget expenditures are thought to have been satisfactorily captured in this study.** To estimate the substantial off-Budget component within agricultural public expenditures, DPs' disbursements in the sector were compared to the external resources registered in GoM Budget. DPs' disbursements over the 2007/08-2011/12 period were obtained from two sources: (i) with major DPs or Project Implementation Units (PIUs); and (ii) with MoF's Aid Management Platform (AMP). Overall both sources were found to be relatively consistent (table 1). Part of the differences between DPs and AMP data may be explained by the difference of scope between the AgPER and AMP's work (for example, AMP figures may include expenditures in the environment sector that are not taken into account in this study). Major discrepancies were, however, observed for a limited number of DPs (IFAD, India). Further investigation would be required to determine the causes of these discrepancies and possibly improve AMP's monitoring of DPs contributions to the agriculture sector.

Table 1: Donors disbursements in the agriculture sector, AMP and donors figures, 2007/08-2011/12, USD million

	AMP	DPs/PIUs	Variation (DP/PIUs over AMP)	Figure used in AgPER
AfDB	84.7	67.0	-21%	67.0
Arab Bank for Economic Development in Africa[1]	10.2	-	-	10.2
DFID	66.6	70.4	6%	70.4
EU	140.9	137.6	-2%	137.6
FAO[1]	16.0	-	-	6.8[2]
FICA	14.2	17.0	20%	17.0
Iceland International Development Agency[1]	1.1	-	-	1.1
IFAD	25.2	14.6	-42%	14.6
India	30.0	50.0	67%	50.0
Ireland	31.1	31.1	0%	31.1
Japan[1]	0.1	-	-	-
JICA	60.6	52.7	-13%	52.7
KFW[1]	0.5	-	-	-
Norway	82.3	76.9	-7%	76.9
UN Programme on HIV and AIDS[1]	0.0	-	-	-
UNDP[1]	11.9	-	-	1.2[3]
UNIDO[1]	2.9	-	-	2.9
USAID	41.6	42.9	3%	42.9
WB	93.5	95.0	2%	95.0
TOTAL	**713.4**	**655.2**		**677.4**

Notes:
[1] For these DPs, actual disbursements could not be not obtained.
[2] For FAO, AMP figure of USD 16 million was reduced to USD 6.8 million excluding interventions financed by other DPs and already accounted for elsewhere in this table (e.g., projects financed by Norway and FICA and implemented by FAO) and regional projects (for which only Malawi's share was considered).
[3]For UNDP, only 10% of AMP figure was taken into account, the rest being considered to relate to interventions outside the agriculture sector.
Source: authors on the basis of data provided by AMP (MoF) and DPs.

44. **Although Malawi's agriculture sector parastatals (SFFRFM, ADMARC, NFRA and MRFC) are clearly engaged in Government social functions such as serving remote areas and poorer farmers or playing a role in price stabilization, their expenditures were not taken into account in this study, in accordance with NEPAD guidelines.** NEPAD guidelines (AU/NEPAD 2005) specify that only net transfers to public enterprises operating in the agriculture sector on a commercial basis should be taken into account in AgPERs. This would be the case for example of transfers to these companies to compensate their operational losses or service their guaranteed debt. It should be noted, however, that as pointed out by the broader PER being conducted at the same time as this study (World Bank 2013), contingent liabilities generated by parastatals are not captured by the Budget and Government accounts. GoM arrears were estimated at MKW 88.8 billion in December 2012, out of which about 28% were liabilities accumulated by parastatals operating in the agriculture sector (table 2). Although these liabilities may create substantial issues in the future and could be assimilated to public expenditures in the agriculture sector, they were not taken into account in this AgPER.

Table 2: Structure of GoM arrears, December 2012, MWK billion

	Arrears MWK billion	% of total
SFFRFM	16.2	18%
ADMARC	4.9	6%
NFRA	2.2	2%
MRFC	1.9	2%
Total agriculture sector parastatals	25.2	28%
Other parastatals	26.3	30%
Total parastatals	51.5	58%
Procurement of goods and services by Ministries[1]	30.4	34%
Pensions and salaries	5.2	6%
Compensation for court cases	1.7	2%
Total	**88.8**	**100%**

Note: [1] No arrears accumulated by MoAFS and MoIWD.
Source: World Bank 2013.

2.2. Total agricultural expenditure and the Maputo target

45. **Due to the difficulties encountered in data collection, analysis of the total agricultural expenditure was limited to the period 2007/08-2011/12.**

46. **Over that period, in addition to the expenditures executed by the MoAFS and the Department of Irrigation, other public expenditures in the agriculture sector included:**

i. **Agricultural projects and programmes carried out by other ministries or GoM bodies:** this study identified a number of agricultural programmes that were or are being implemented under the responsibility of other ministries than MoAFS, with very variable degrees of MoAFS involvement in programme design and implementation:

   a. **Agriculture-based programmes implemented by the Ministry of Local Government and Rural Development (MoLGRD)**, namely the IFAD funded Rural Livelihood Support Programme (RLSP, started in 2004 and coming to an end this year) and Rural Livelihoods and Economic Enhancement Programme (RLEEP, started in 2009) and the EU funded Rural Infrastructure Development Programme (RIDP);

   b. **Agricultural programmes carried out under the direct supervision of the Office of President and Cabinet (OPC):** in the 2007/08-2011/12 period, this concerned only the Green Belt Initiative with a loan of USD 50 million from the Republic of India in 2010/11 used to purchase tractors and accessories, other farming implements (sprayers, maize shellers) and equipment for three cotton ginneries;

   c. **The World Bank financed Community Based Rural Land Development Project implemented until 2011/12 by the Ministry of Lands, Housing and Urban Development;**

   d. **Agricultural interventions under the World Bank funded Malawi Social Action Fund (MASAF III) implemented under MoF:** agriculture-related expenditures were estimated at 10% of total programme costs.

ii. **Transfers to District Councils:** in the decentralization process, District Councils appeared as votes in the national Budget effective from 2005/06 with seven sectors devolved as of 2006/07 (health, agriculture, education, water, rural housing, trade and gender and community services); fisheries started receiving an individualized allocation in 2009/10 and

irrigation in 2010/11. The amounts transferred for agriculture, fisheries and irrigation remain very limited (about MWK 600 million per year in total, i.e. USD 3-4 million, for the 28 districts together) and are used exclusively for financing operational costs of agricultural services at district level;

iii. **Off-Budget expenditures, comprising:**

   a. **Predominantly donor funded projects:** they accounted for 92% of total off-Budget agricultural expenditures over the period of study;

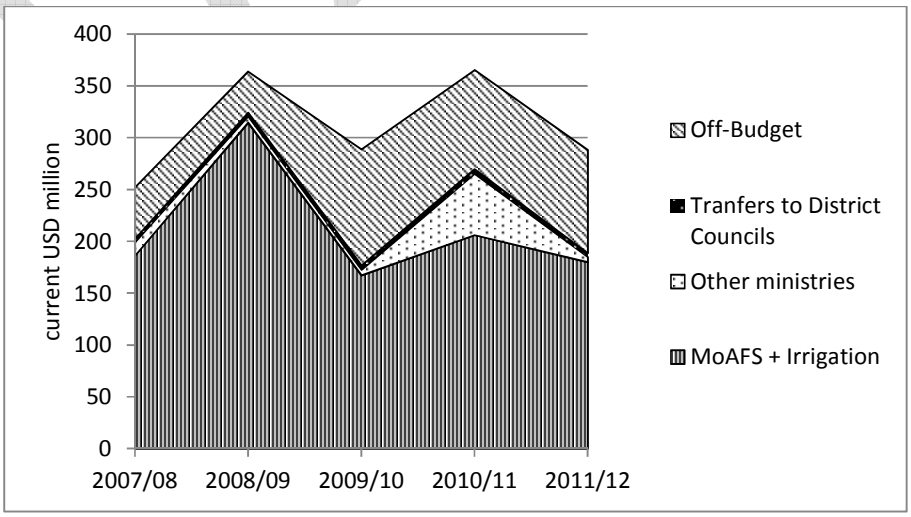
   b. **To a lesser extent, research programmes implemented by the CGIAR centres present in Malawi** (8%);

   c. **To date almost negligible, expenditures financed by DARS from its off-Budget revenues** (agreements with CGIAR centres, foundations and donors outside the country, proceeds generated by contracts with seed companies for certification, etc.): these revenues have been increasing steadily (from less than USD 0.1 million in 2007/08 to USD 0.6 million in 2011/12) but are still very limited.

47. **Over the 2007/08-2011/12 period, the expenditures executed by MoAFS and the Department of Irrigation represented 68% of total agricultural expenditures, off-Budget expenditures 25%, expenditures incurred by other ministries 6% and the transfers to District Councils 1% (table 3).**Total agricultural expenditures oscillated between USD 250 million and USD 365 million over the period. Off-Budget expenditures more than doubled as of 2009/10 to stabilize at around USD 100 million per year thereafter, and as a result their share in total agricultural expenditure rose (figure 10), representing 35% of total agricultural expenditure in 2011/12.

48. **Malawi is one of the few African countries that comply with the Maputo commitment of devoting at least 10% of national public spending to agriculture.** Notwithstanding the fact that forestry expenditures could not be obtained and included in the calculation as they should, agricultural expenditures ranged between 17 and 21% of total national expenditures over the period (19% on average). Malawi therefore largely exceeded the Maputo objective of 10% support to agriculture.

Figure 10: Trends in the distribution of actual agricultural expenditure by institutional status, 2007/08-2011/12, current USD million



Source: authors' calculations.

Table 3: Distribution of actual agricultural expenditure by institutional status and share in total national expenditure, 2007/08-2011/12, current USD million[20] and %

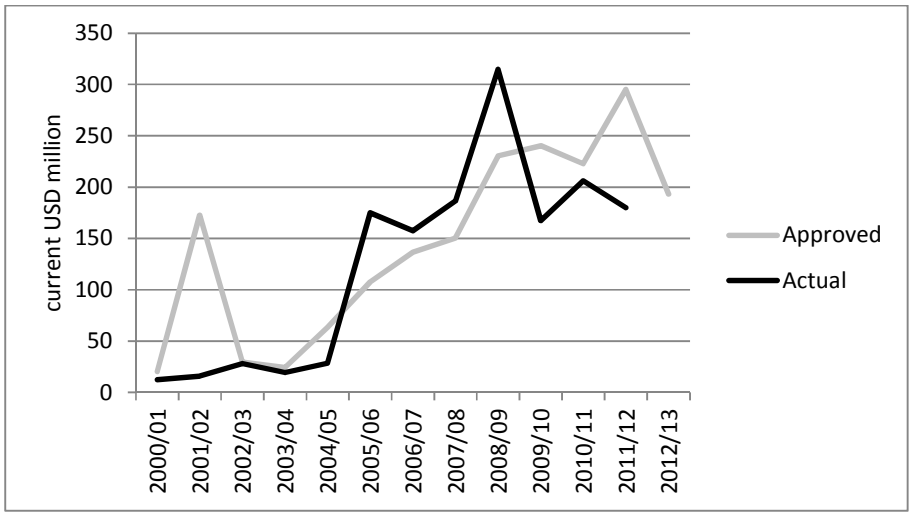
		2007/08	%	2008/09	%	2009/10	%	2010/11	%	2011/12	%	Total	%
Agricultural expenditure	MoAFS + Irrigation	186	74%	315	86%	167	58%	206	56%	180	62%	1,057	68%
	Other ministries	13	5%	6	2%	5	2%	59	16%	5	2%	88	6%
	Tranfers to District Councils	4	1%	4	1%	4	1%	4	1%	4	1%	20	1%
	Off-Budget	50	20%	40	11%	112	39%	96	26%	100	35%	397	25%
	Total agricultural expenditure	252	100%	364	100%	289	100%	365	100%	288	100%	1,562	100%
Total GoM expenditure		1,285		1,901		1,813		1,957		1,459		8,415	-
Share of agricultural in total		20%		19%		16%		19%		20%		19%	-

Sources: authors' calculations for agricultural expenditure, IMF/World Bank for total GoM expenditure.

[20] Conversion of agricultural expenditure into constant terms was not attempted because ideally, to adequately reflect the purchasing power of the resources available to the sector, one would have to distinguish three components to which different deflators would apply: to the FISP component that has represented about 70% of MoAFS expenditure since 2005/06 an international fertilizer price deflator should be applied; for the other imported goods and services international inflation should be used whereas for local costs the local consumer price index would prevail; applying only one of these deflators to the total expenditure would produce distorted results.

49. **Approved and actual expenditures executed by MoAFS and the Department of Irrigation increased about tenfold over the period, from about USD 20 million in 2000/01 to about USD 200 million in 2011/12, with a peak at USD 315 million in 2008/09 (figure 11).** While it had remained at about USD 20-30 million up to then, agricultural expenditure executed by MoAFS and the Department of Irrigation skyrocketed to USD 175 million in 2005/06 with the launching of the FISP. In that year and the next three ones, actual expenditures exceeded the approved budgets, by 36% in 2008/09 due to the surge in fertilizer and fuel prices. For the following three years, 2009/10 to 2011/12, actual expenditures were again contained within approved budgets.

Figure 11: Trends in approved and actual expenditures of MoAFS and the Department of Irrigation, 2000/01-2012/13, current USD million

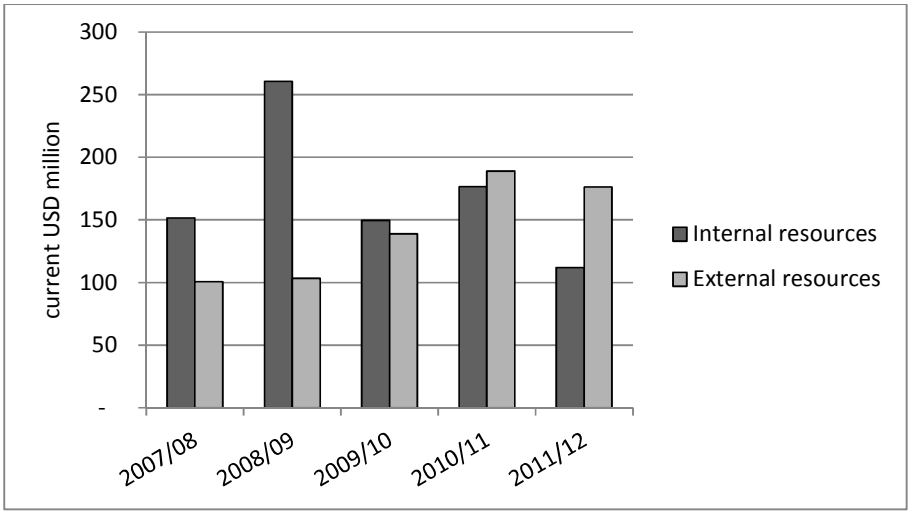


Source: authors' calculations from MoAFS and MoF data.

2.3. Sources of financing

50. **Agricultural expenditures are increasingly donor financed.** On average over the 2007/08-2011/12 period, agricultural expenditures were financed at 55% by local resources and 45% by external resources. However, a change in trends was observed as of 2009/10 with the share of external resources growing to become slightly bigger than that of internal resources in 2010/11 and reach just over 60% of total expenditure in 2011/12 (figure 12). In absolute terms donor support to agriculture kept increasing throughout the period while internal financing dropped by more than 35% in 2011/12. This shows that while the agriculture sector was affected by the freeze in donor support to Malawi in 2010 and 2011 through the reduction in general budget support, paradoxically this was more than offset by donor direct financing that had started increasing as of 2009/10, especially off-Budget.

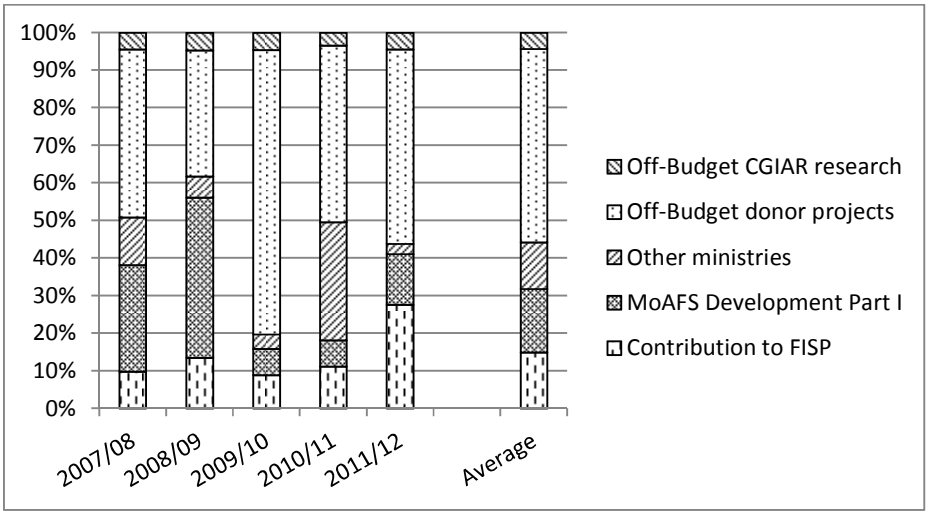
Figure 12: Distribution of actual agricultural expenditure by source of funding, 2007/08-2011/12, current USD million



Source: authors' calculations.

51. **On average, over 50% of donor financing was spent on off-Budget projects and programmes, while the share of donor financing that was registered in MoAFS accounts was split almost equally between contribution to FISP (15%) and part I of the Development account (17%, figure 13).** As already said, the share of off-Budget financing in total donor contribution rose sharply starting in 2009/10. An increase to 28% of the share of the contribution to FISP is also observed in 2011/12, when donors that had traditionally been involved in supporting the programme more than doubled their contribution to help GoM overcome the foreign exchange shortage crisis.

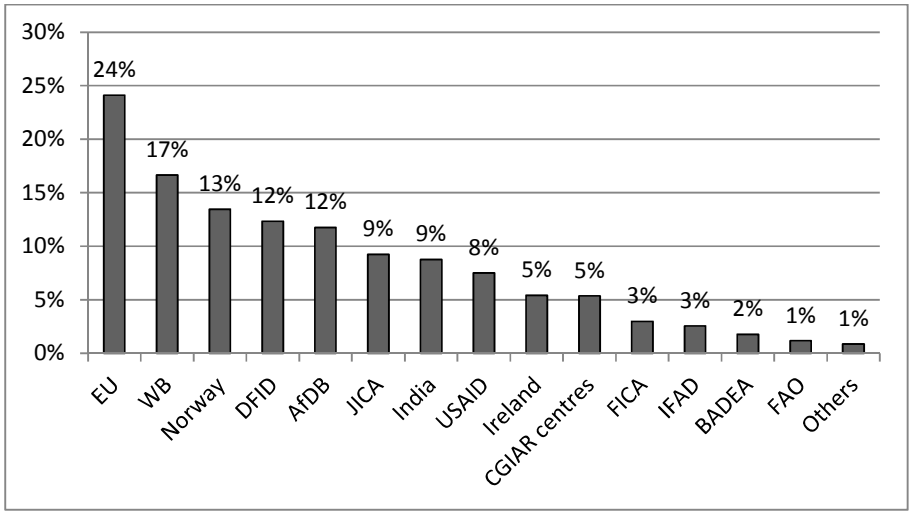
Figure 13: Trends in distribution of donor financing by institutional status, 2007/08-2011/12, %



Source: authors' calculations.

52. **Donor financing in the agriculture sector in Malawi is extremely fragmented (figure 14 and box 1), which poses a serious challenge in terms of linkage between policy framework and expenditure (see section 4.2).**

Figure 14: Distribution of external financing by source, 2007/08-2011/12, %



Source: authors' calculations from DP data.

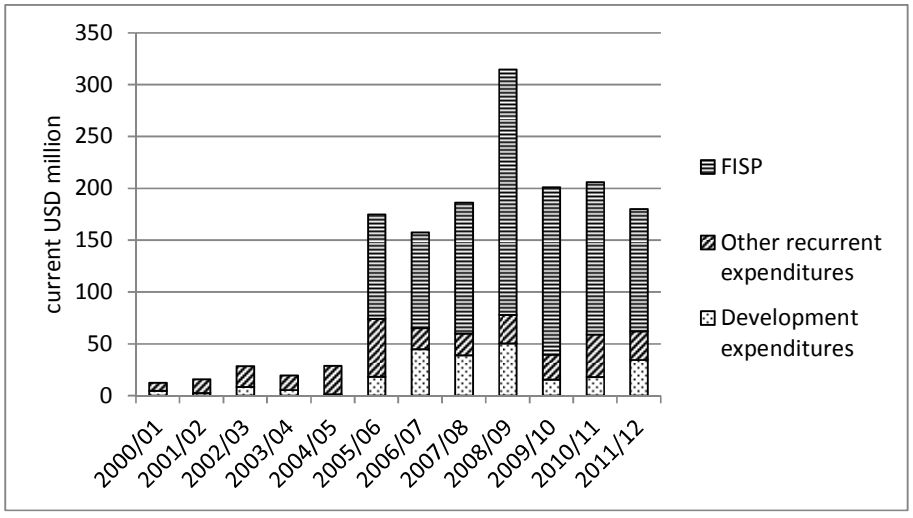
3. COMPOSITION OF EXPENDITURE ON AGRICULTURE (ALLOCATIVE EFFICIENCY)

3.1. Economic composition of Government agricultural expenditure

3.1.1. Shares of recurrent and development expenditures

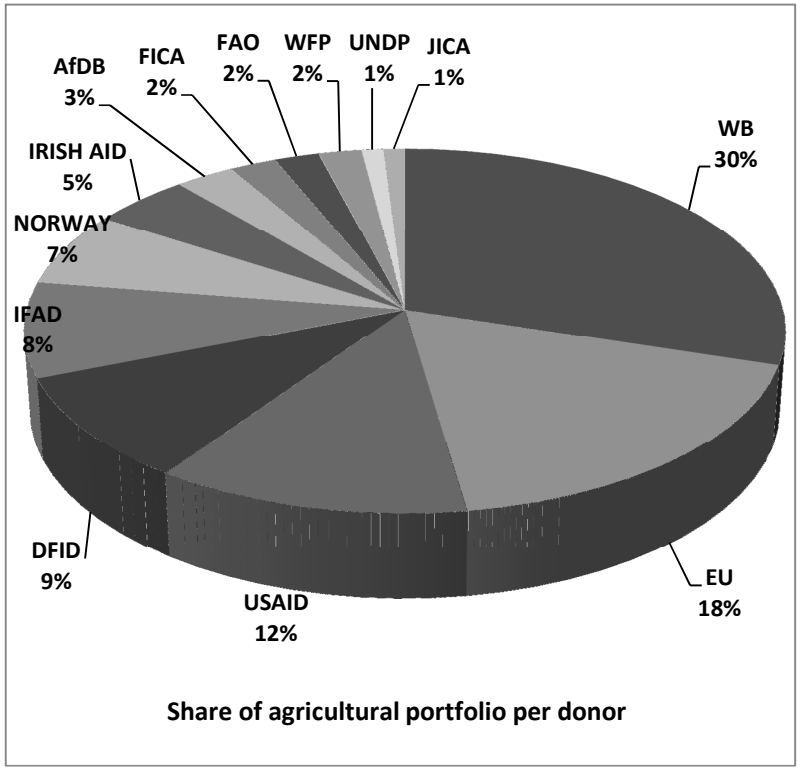
53. **First of all, it must be noted that the introduction of FISP in 2005/06 was not at the expense of the other components of MoAFS budget that also experienced a dramatic increase, by 160%, in the same year (figure 15).** Even in 2008/09 when the budget of FISP had to be raised due to the surge in fertilizer and transport prices, the other components of MoAFS budget were not affected and even saw their actual expenditures increase respect to previous years.

Figure 15: Shares of FISP, other recurrent and development spending in MoAFS and Department of Irrigation actual expenditures, 2000/01-2011/12, current USD million

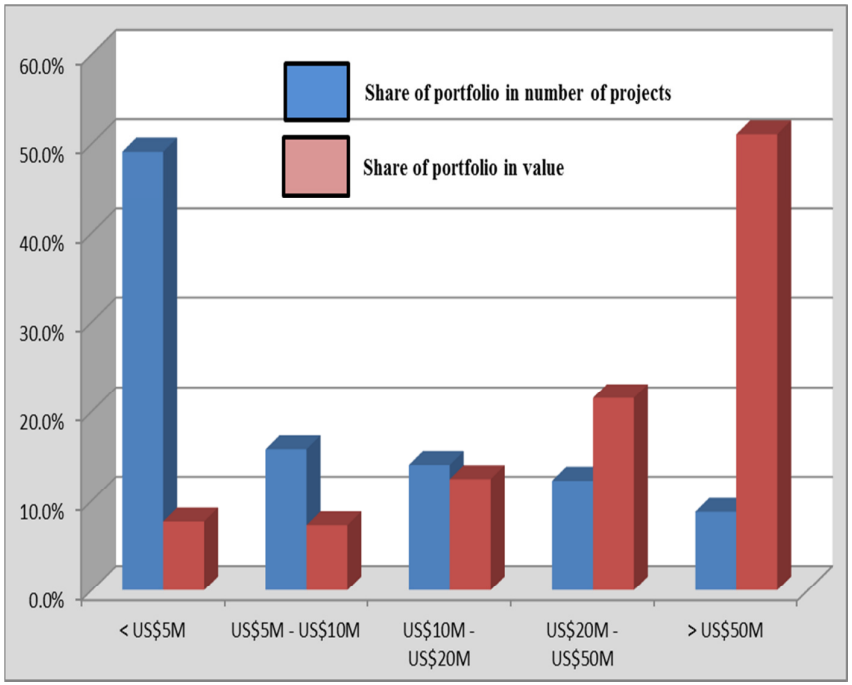


Source: authors' calculations from MoF and MoAFS data.

Box 1: Fragmentation of aid and projects in 2012



Share of agricultural portfolio per donor



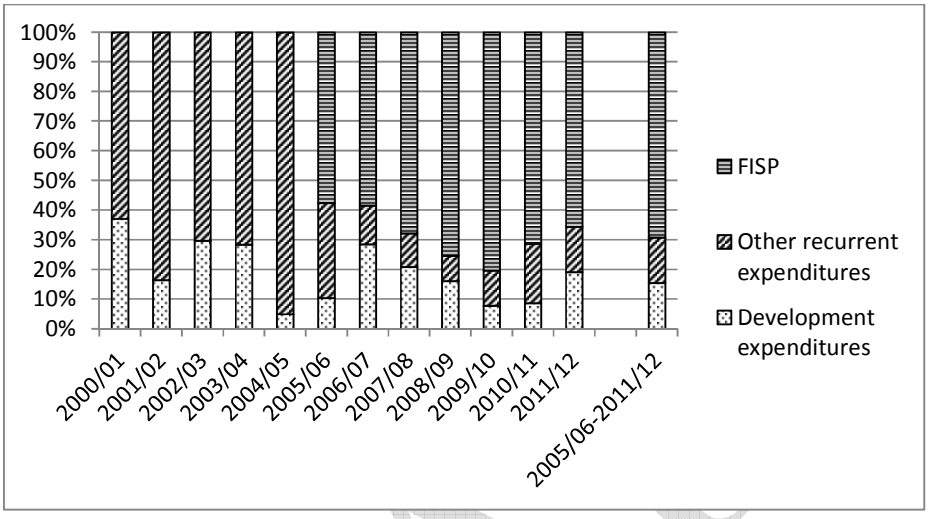
- Currently 84 projects representing close to USD 1 billion of on-going investments;
- On average USD 12 million / project.

- 50% of the projects represent less than 10% of the total portfolio;
- less than 10% of the projects represent 50% of the portfolio.

Source: DCAFS.

54. **Since its introduction in 2005/06, the FISP has mobilized 69% of MoAFS budget on average, the rest being equitably split between other recurrent and development expenditures (figure 16).** While other recurrent expenditures were entirely financed on internal resources, donors contributed to FISP (13% on average over the 2007/08-2011/12 period with a peak at 41% in 2011/12) and to development expenditures (79% on average over the 2000/01-2011/12 period).

Figure 16: Shares of FISP, other recurrent and development spending in MoAFS and Department of Irrigation actual expenditures, 2000/01-2011/12, %



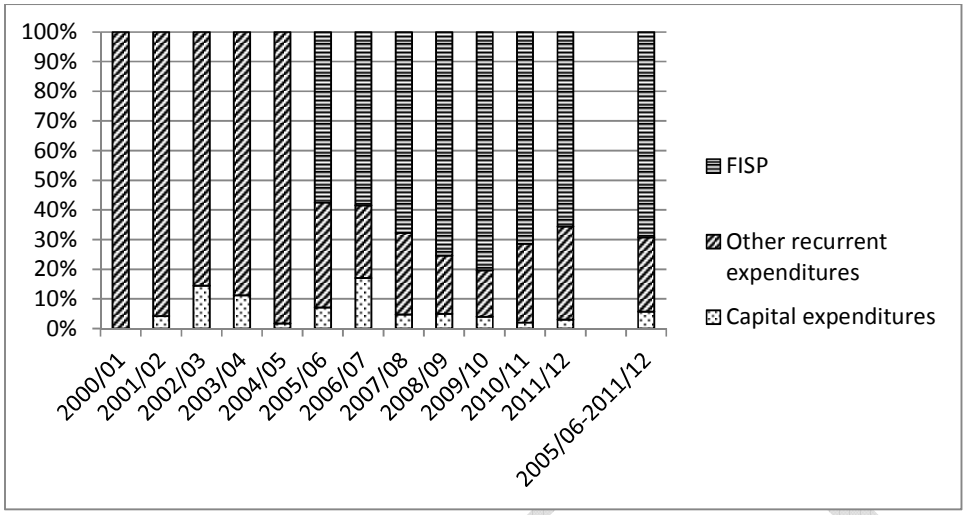
Source: authors' calculations from MoF and MoAFS data.

3.1.2. Shares of recurrent and capital expenditures

55. **Capital expenditure[21] has been extremely low over the period.** As in many other Subsaharan-Africa countries, Government development accounts in Malawi "hide" substantial amounts of salaries and other recurrent costs. This is an important issue as it reduces budget transparency and precludes ministries from adequately planning and monitoring both recurrent and capital expenditures and in particular, from ensuring that sufficient provision is made for operation and maintenance beyond the investment phase. Over the 2000/01-2011/12 period the non-capital element in development actual expenditures has been estimated at 63% (of which 4% salaries and 59% other recurrent expenditures), leaving only 37% for real capital expenditure. As a result real capital expenditure was very low over the period and rarely exceeded 5% of MoAFS actual expenditures (figure 17).

[21] Intended as one-time investments that will bear fruit and be amortized over a period of time (could be physical infrastructure, equipment, training, but also salaries and consumables necessary to put in place these investments) as opposed to expenses related to regular day to day administration, operation and maintenance activities.

Figure 17: Shares of FISP, other recurrent and capital spending in MoAFS and Department of Irrigation actual expenditures, 2000/01-2011/12, %



Source: authors' calculations from MoF and MoAFS data.

Recommendations :

Capital spending should be increased, and the level at which it is incurred (public infrastructure, infrastructure handed over to beneficiaries, Government or non-Government support services) should be recorded through adequate budget coding.

A new budget presentation should be adopted allowing better accounting and thus better planning and monitoring of both capital and recurrent spending and adequate provisions for operation and maintenance costs.

3.1.3. Shares of wage and non-wage expenditures

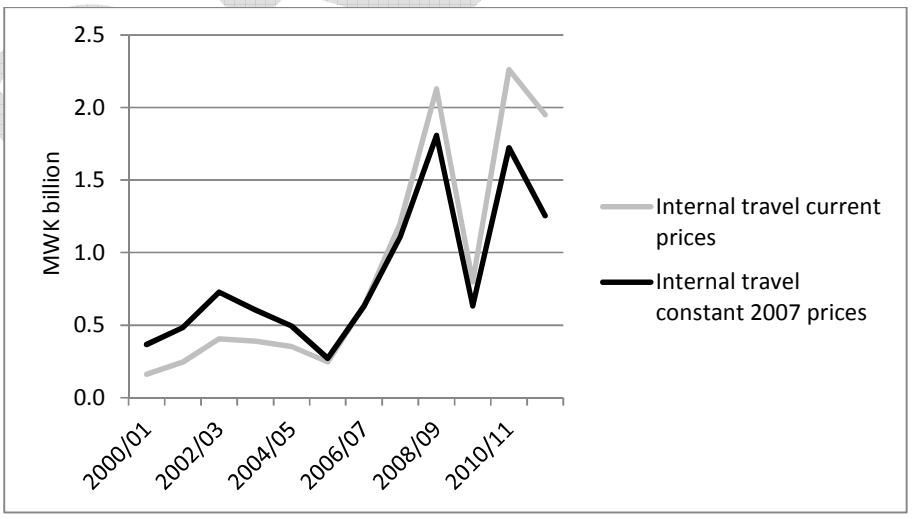
56. **The wage bill in the agriculture sector administration has increased more than elevenfold in current terms and more than threefold in constant terms (figure 18) from 2000/01 to 2011/12, in line with the tendency observed for the civil service as a whole, as a result of an effort by the GoM to improve civil servants' salaries and motivation.** The broader PER being conducted at the same time as this AgPER (World Bank 2013) has shown that the strong increase in GoM wage bill in the past five years (28.5% p.a. over December 2007-November 2012) was due more to a high growth of civil servants' salaries (23.0% p.a. in nominal terms, or 11.5% p.a. in real terms) than to an increase in civil servants' numbers (4.5% p.a., slightly above population growth during that period). More recently, in February 2013, in an effort to ease social tensions generated by the on-going reforms, the GoM granted again wage increases to striking civil servants ranging from 60% for the lowest pay grades to 5% for the highest grades. This latest increase amounted to an increase in the average civil servant wages of 19% in nominal terms. However, whether it allowed offsetting the recent surge in inflation that followed the Malawi Kwacha devaluation and free floatation remains to be checked.

Figure 18: Trends in MoAFS wage bill, 2000/01-2011/12, MWK billion

Source: authors' calculations from MoF and MoAFS data.

57. **Another finding consistent with observations made for the civil service as a whole is the very high cost of internal travels.** A study commissioned in 2010 by the GoM with assistance of Common Approach to Budget Support (CABS) group of donors[22] found that over the period 2006/07 to 2009/10, travel costs had represented 12-14% of total GoM expenditures and 4-5% of GDP (while in Uganda and Tanzania travel costs amount to less than 2% of GDP), and that over 70% of these travel costs were domestic travel (external travel and vehicle maintenance accounting for the remaining 30%); the same study evidenced that subsistence allowances amounted to 31% of total domestic travel costs and represented 22% of salaries. In MoAFS internal travel costs have dramatically increased since 2005/06 (figure 19). They amounted to 60% of salary expenditures over the 2000/01-2011/12 period.

Figure 19: Trends in internal travel expenditures in MoAFS, 2000/01-2011/12, MWK billion



Source: authors' calculations from MoF and MoAFS data.

[22] See World Bank 2013.

58. **As already pointed out in the MPRS more than ten years ago (box 2), the culture to regard travel allowances as a salary supplement generates malpractices and inefficiencies and must be changed.** This culture that does not affect only Malawi but also other African countries (generally to a lesser extent though). Its development has been favoured by the lack of control over expenditures (limited implementation of IFMIS as seen in section 2.1), DPs' competition for GoM staff scarce resources, and the erosion of senior civil servants' salaries compared to their private sector counterparts (see below). It leads to widespread malpractices (collecting allowances without travelling, collecting multiple per-diems for a single day, etc.) and inefficiencies (unnecessary travel, large delegations, needless time-consuming workshops, choice of people to attend meetings based on "turn" rather than expertise, etc.), aggravated by the fact that unnecessary travel also increases fuel consumption (estimated at 23% of domestic travel costs) and thus the pressure on scarce forex reserves. In an attempt to limit abuses, a ceiling of five days of travel per month per person had been established, which as a blind measure was not necessarily an optimum solution in terms of efficiency either, but that ceiling was lifted in February 2013 as part of a package to respond to civil servants' concerns about the erosion of their purchasing power, which again confirms that travel allowances are first and foremost regarded as a salary supplement.

59. **The erosion of senior civil servants' salaries compared to their private sector counterparts should be corrected in order to increase motivation and accountability, improve staff retention, particularly for middle level professional positions, and effectively start resolving the issue of abusively high travel costs.** Nevertheless, while for staff holding lower educational qualifications and for the civil service as a whole, the average civil servants' salaries are found to be higher than their private sector counterparts (by 60% for under-MSCE staff and 17% for the entire staff), senior civil servants earn about 58% lower salaries than their counterparts in the private sector (table 4).

Table 4: Average wages (MWK '000) and employment (%) in private company sector and the civil service

Educational qualifications acquired	Private company employees		Civil servants		Difference in wages (civil servants / private sector employees
	Average wages	% in total number of staff	Average wages	% in total number of staff	
MSCE and below	11.0	90	17.6	77	**+60%**
Non-university diploma and above	125.8	10	52.9	23	**-58%**
All levels	22.1	100	25.8	100	**+17%**

Note: MSCE: Malawi Secondary Certificate of Education
Source: World Bank 2013 (based on IHS3 2010-2011 data).

Box 2: MPRS about "the issue of wrong mindset in the public service"

The issue of exaggerated use of travel allowances was already pinpointed in the MPRS more than ten years ago: "The existing incentive structure in the public service is characterized by low basic salaries, lack of performance monitoring, lack of sanctions against poor performance and rewards for good performance, and promotion systems based on regionalism, tribalism, seniority and political affiliation rather than merit. In this context, an elaborate structure of allowances has emerged as effective salary support that is ripe for abuse and distorts management priorities. (…) Government should introduce stronger accountability mechanisms and increase salaries whilst simultaneously removing all but essential allowances from the system."

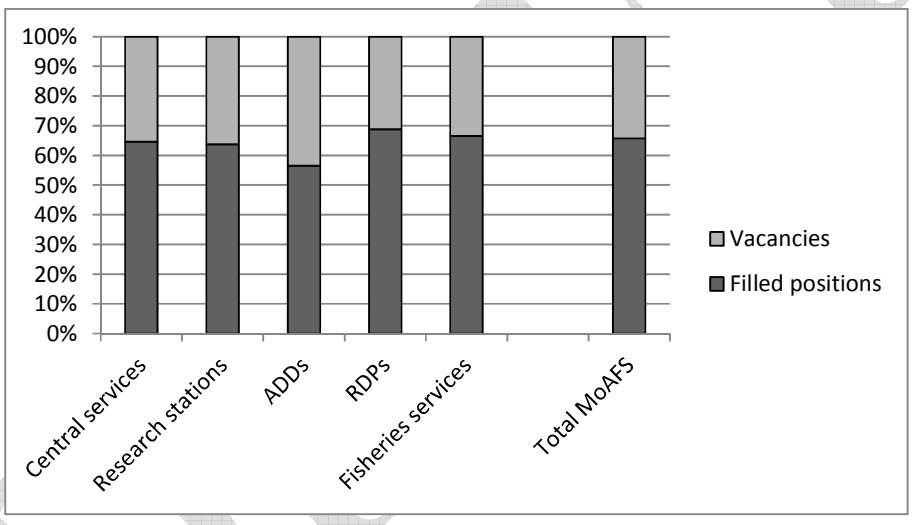
Source: GoM 2002.

Recommendation:
Correct the erosion of senior civil servants' salaries compared to their private sector counterparts, strengthen performance assessment mechanisms and put an end to the widespread perception of travel allowances as mere salary supplement.

3.2. Administrative distribution of Government agricultural expenditure

60. **Staff establishments are fairly equally filled across the various levels of the agricultural administration (figure 20).** Vacancy rates as of mid-2013 varied in the range of 31 to 36% for all levels except for ADDs where 43% of positions were vacant at that date. Overall vacancy rate for the Ministry was 34% (8,426 positions filled out of 12,824 establishments). Deeper analysis into vacancy levels across grades (MoAFS 2012) suggests that intermediary grades (J to F, i.e. from Chief Supervisor to Assistant Head of Department) are the most badly hit by staff shortages, with vacancy rates ranging between 42 and 74%.

Figure 20: Shares of staff allocations and vacancies at the various levels of the agricultural administration, May 2013, %



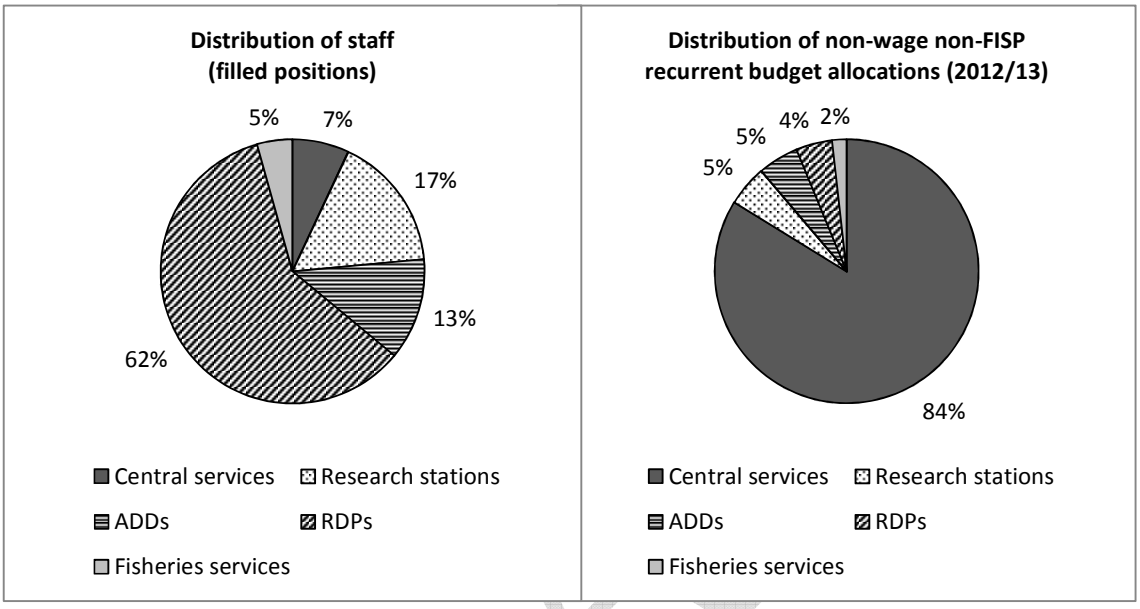
Note: Central services include PCB, DARS, DAHLD and DLRC; Reseach stations include ranches and farms; Fisheries services include fisheries headquarters, regional offices, research centre and college; RDPs still figure as such in MoAFS budgets and staff listings but have now become District agricultural services.
Source: MoAFS.

61. **Budget control remains highly centralized which penalizes frontline work.** While they represent only 7% of filled staff positions, central services control the entirety of capital and FISP spending and 84% of non-wage non-FISP recurrent spending (figure 21). At the other end, District agricultural services (former RDPs) represent 62% of filled staff positions but in budgets, they are allocated only 4% of agriculture sector non-wage non-FISP recurrent expenditure provisions, in the form of MoLGRD transfers to District Councils exclusively. ADDs, research centres and fisheries services get an ORT and also a "capital" allocation[23] in MoAFS budgets, the latter essentially from the World Bank financed ASWAp-SP and the AfDB financed Agriculture Infrastructure Support Project (AISP). District agricultural services do not get any ORT or capital allocation in MoAFS budgets and according to the national Budget, are supposed to rely entirely on the agriculture/fisheries/irrigation components of the transfers to District Councils from MoLGRD for their non-wage recurrent

[23] As seen in section 3.1, this "capital" allocation mostly covers recurrent expenditures.

expenditures; District agricultural services do however receive financial support from donor financed projects but although this support largely outweighs the MoLGRD funding, its level and continuity are not fully predictable. Insufficient operational means, along with staff vacancies[24] and high turnover and the heavy workload imposed on field agents by the FISP, probably account for most of the low outreach of extension services that has been evidenced by various studies (box 3).

Figure 21: Distribution of staff (filled position) and non-wage non-FISP recurrent budget (approved 2012/13 budget) across the various levels of agricultural administration, %



Notes:
- Central services include PCB, DARS, DAHLD and DLRC; Reseach stations include ranches and farms; Fisheries services include fisheries headquarters, regional offices, research centre and college; RDPs still figure as such in MoAFS budgets and staff listings but have now become District agricultural services.
- Non-wage non-FISP recurrent budget allocations comprise ORT and capital (acquisition of fixed assets excluded) budgets and for RDPs, MoLGRD transfers to District Councils.

Source: MoAFS.

62. **As with budget allocation, decision making appears to be also highly centralized, with little space given so far, at least in Government-based interventions, to demand-driven initiatives; these could be encouraged by matching grants programmes whereby agricultural deconcentrated services would act as technical assistance to local communities and private promoters.** The fact that farmers are not represented at the District Agricultural Extension Committee (DAEC) and District Executive Committee (DEC) levels and that their views are supposed to be somehow conveyed in these committees by extension officers, seem to suggest a rather top-down approach to development, actually driven by the grand national development strategies and donor-funded vertical projects (Chinsinga 2008). A greater implication of local communities is necessary for achieving faster replicable and sustainable progress. Programmes based on matching grants to finance demand-driven initiatives by local communities or local promoters with the technical support

[24] A recent human resource survey by MoAFS indicated that AEDO vacancy rates differ greatly across ADDs, with the greatest vacancy rate observed in Shire Valley ADD (58%) and the lowest in Mzuzu ADD (8%); the consequences of such vacancies are the utilization of staff that is not qualified for the existing position, for example some enumerators work as extension officers, and in some instances the assignment of more than one section to an AEDO, which results in work overload (MoAFS 2012).

of the deconcentrated administration have proved powerful tools to support decentralization in other countries (e.g. Burkina Faso).

Recommendations:

Foster the decentralization process that will be revived in 2014 with the election of the District Councils, through a greater involvement of local stakeholders (District administration, local communities, farmers' organizations, NGOs and private operators) in decision making.

Increase on-Budget recurrent expenditure allocations to District agricultural services to allow them to expand their outreach.

Make a greater use of matching grants to finance demand-driven initiatives by local communities or local promoters with the technical support of the deconcentrated administration.

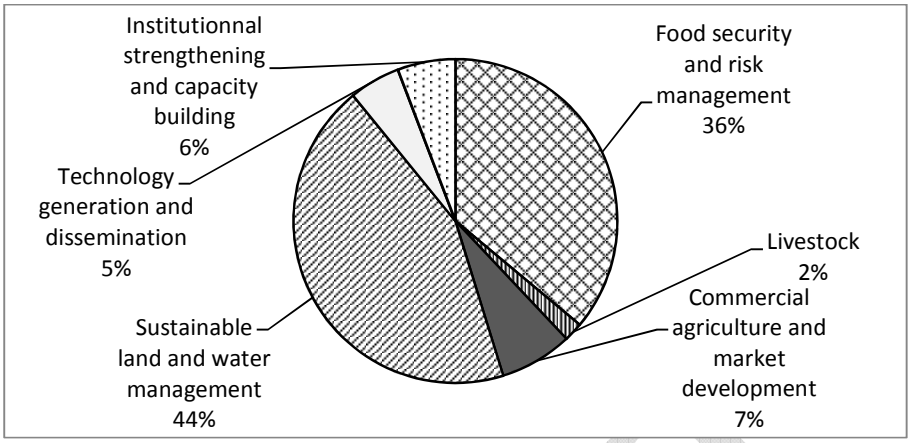
3.3. Functional composition of overall agricultural expenditure and alignment with national strategy

63. **Comparing the functional classification of total actual agricultural expenditures, including off-Budget expenditures and other ministries agricultural expenditures, over the 2007/08-2011/12 period (figure 23) with ASWAp intentions for 2011/12-2014/15 (figure 22) reveals substantial discrepancies between what is presently being done and what is aimed at.** The current predominance of FISP (73% of MoAFS budget over the 2007/08-2011/12 period, figure 24) does not leave room for developing the sustainable land and water management and commercial agriculture and market development components to the levels planned in ASWAp. It is clear that unless additional resources are raised or shifted from FISP, some crucial components of ASWAp will not receive sufficient support and are highly likely to fail to achieve their objectives.

64. **Furthermore, one could question whether the resources planned in ASWAp for technology generation and dissemination (5%) and for livestock development (2%) will be sufficient for these subsectors to express their potential in terms of growth stimulation.** Technology generation and dissemination (box 3) and livestock development currently get in actual expenditures the share they were allocated in ASWAp budget, but this may prove insufficient, all the more since the annual resources currently available for support to agriculture total only about half the resources that were expected when ASWAp was launched (USD 250 to 300 million instead of USD 500 to 600 million in ASWAp initial budget).

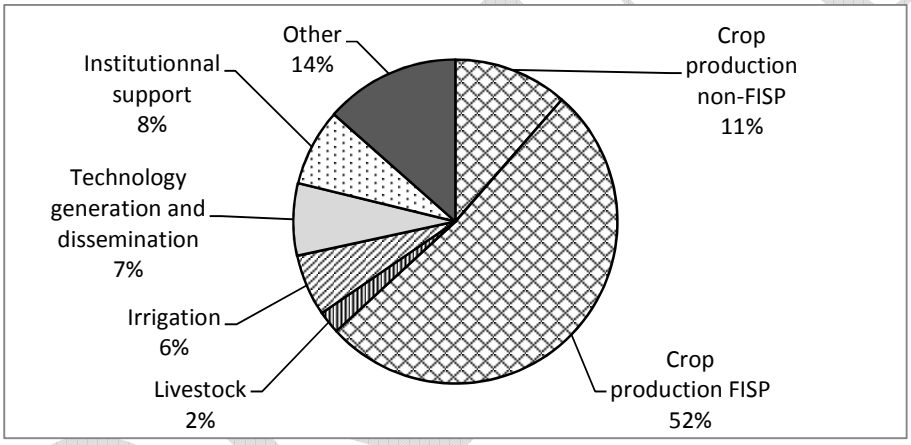
Recommendation:
Current imbalances in agricultural public expenditures have to be corrected in favour of land and water sustainable management, agriculture commercialization and market development (including rural finance), technology development and dissemination and livestock development.

Figure 22: Respective shares of focus areas in ASWAp budget, 2011/12-2014/15, %



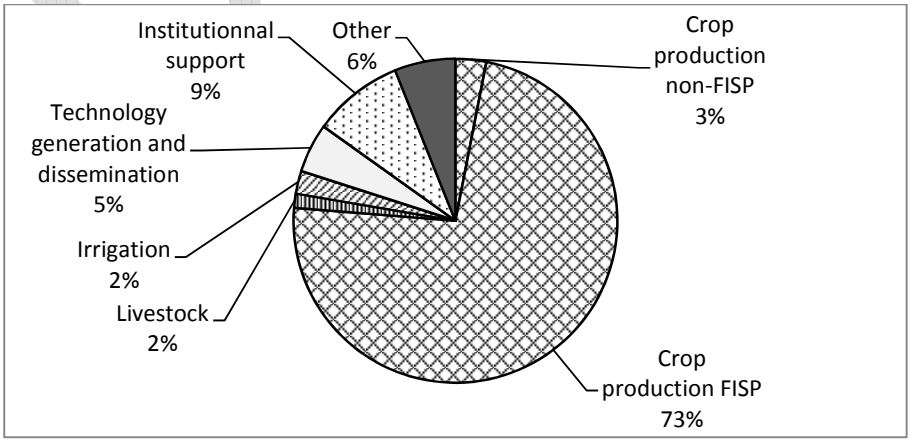
Source: MoAFS 2011a.

Figure 23: Functional classification of total actual agricultural expenditures, 2007/08-2011/12, %



Source: authors' calculations from DPs and GoM data.

Figure 24: Functional classification of MoAFS and Department of Irrigation actual expenditures, 2007/08-2011/12, %



Source: authors' calculations from MoAFS and MoF data.

Box 3 : Public expenditure on agricultural non-cash crop research and extension

Agricultural non-cash crop research (including livestock and fisheries)

Only expenditures on research on food crops, livestock and fisheries are reviewed here. As already mentioned earlier (section 1.2), the country's main cash crops, tobacco, tea and sugarcane, have their own non-Government-based research centres that were not covered by this study.

Government national resources account for less than 40% of non-cash crop research funding. A study by Phiri et al. (2012) found that research activities in DARS still largely depended on donor funded projects. This is confirmed by the present AgPER (figure 25). On average over the past five years, Government funds channelled through DARS have represented 38% of total non-cash crop research funding and even less than 20% in 2010/11 and 2011/12.

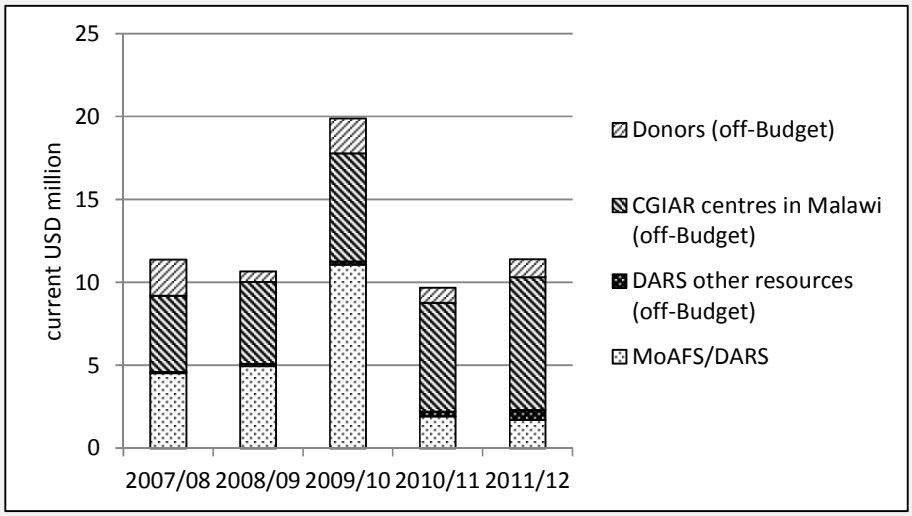
External support to non-cash crop research falls into three categories:

i. **The budgets of the CGIAR centres present in Malawi**; they represented 49% of non-cash crop research resources on average over the period;

ii. **The contributions from donor financed projects implemented in Malawi** that have an agricultural research component; they represented 11% of non-cash crop research resources on average over the period; and

iii. **To a much lesser extent, off-Budget revenues generated by DARS** through agreements with research centres, foundations and donors not present in the country, contracts with seed companies for certification, etc.; these revenues have been increasing steadily but are still very limited (USD 0.6 million in 2011/12, i.e. 2% of food crop research funding on average);

Figure 25: Sources of funding of non-cash crop research, 2007/08-2011/12, current USD million

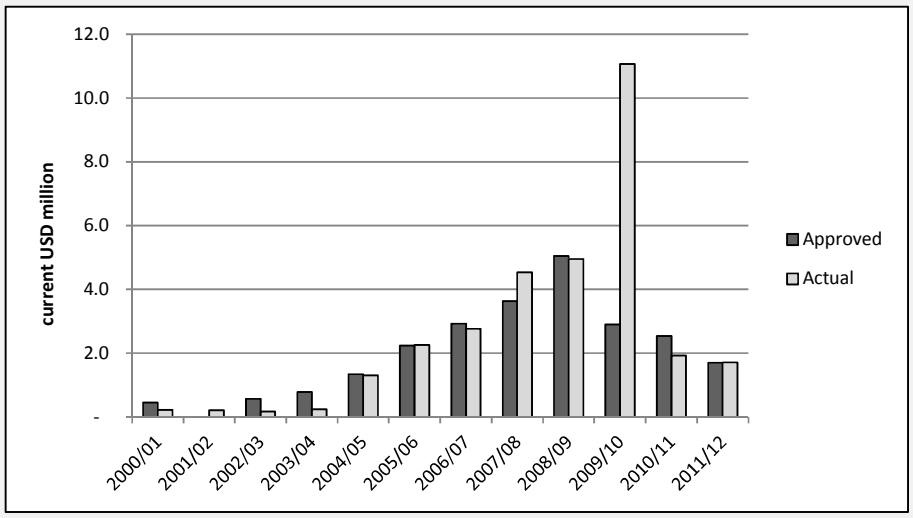


Source: authors' calculations from data provided by MoF, MoAFS/DARS, ICRISAT, CIAT, IITA, CIP and DPs.

Box 3 : Public expenditures on agricultural research and extension (continued)

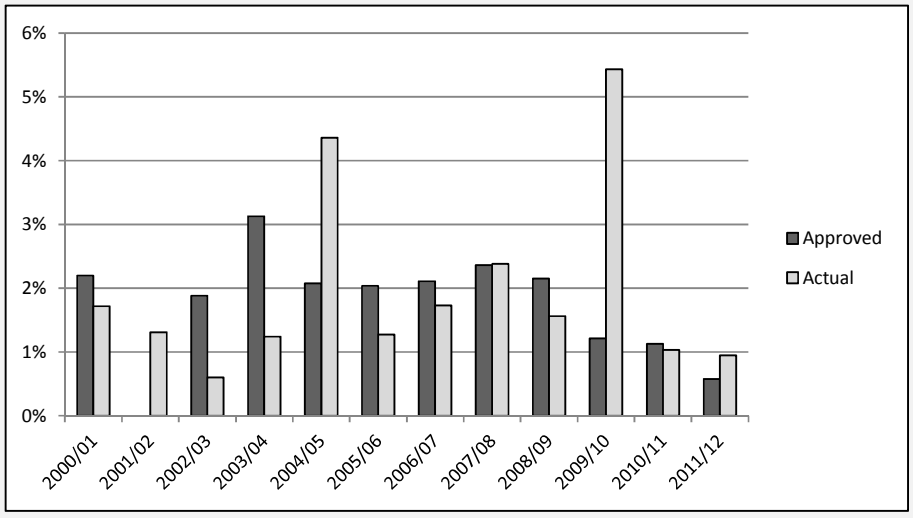
The limited resources dedicated to non-cash crop research in MoAFS budget (less than 2.5% for much of the period) have largely been spent on salaries with little allocated to funding of other research costs. The analysis shows that consistently, non-cash crop research has received less than 2.5% of the total MoAFS budget for much of the period except during 2004/05 and 2009/10 FYs when research exceeded 4 and 5% of MoAFS actual expenditures respectively (figure 27). It is noted however, that the amount of funding to research consistently increased in nominal terms since the beginning of the study period and reached the peak during 2008/09 FY but has tended to decline since then (figure 26). As would be expected of spending mainly on programmed salaries, during most years of the period actual expenditures have been either closely equal to or just slightly lower than the approved budget for the sub-sector.

Figure 26: Trends in MoAFS budget allocation to research, 2000/01-2011/12, current USD million



Source: authors' calculations from data provided by MoF and MoAFS.

Figure 27: Percentage of research in MoAFS budget, 2000/01-2011/12, %



Source: authors' calculations from data provided by MoF and MoAFS.

Box 3 : Public expenditures on agricultural research and extension (continued)

The fact that the bulk of non-cash crop agricultural research funding comes from off-Budget external sources, puts research prioritization, coordination and continuity at risk. This is a major concern as it means that in the absence of CGIAR and donor support, there would be no research going on in public research institutions. Such discontinuity already occurred at the beginning of the 2000s when two important World Bank supported projects arrived to an end (the National Agricultural Research Project (NARP) that ran from 1986 to 1993 and totalled about USD 60 million, followed by the Agricultural Services Project (ASP) that ran from 1994 to 1999 and disbursed about USD 6.5 million under its research component). Most of the achievements of these two projects got quickly lost due to lack of funding for subsequent operation and maintenance of the investments realized and failure to retain the researchers that had been trained (ASTI 2004). In addition, the paper by Phiri et al. argues that unless Government increases its financial contribution to R&D and efficient coordination mechanisms are put in place, the agricultural research agenda in Malawi will remain largely donor-driven.

However, although insufficient, the level of spending in food crop research in Malawi appears to be relatively high by Sub-Saharan Africa standards. Based on the assumption that non-cash crops account for 50% of agricultural GDP in Malawi, total spending in non-cash crop research expressed as a percentage of non-cash crop GDP is estimated to have reached 1.6% over the 2007/08-2011/12 period, which is well above the ratios observed for agricultural research in most Sub-Saharan Africa countries (table 5).

Table 5: Public agricultural research spending as percentage of agricultural GDP

Countries	**IFPRI 2008 or 2009 % of Ag. GDP**
Botswana	4.32
South-Africa	2.02
Namibia	1.96
Kenya	1.35
Uganda	1.21
Burundi	1.06
Senegal	0.87
Congo, Republic of	0.85
Malawi all agric. research	0.71
South-Saharan Africa	**0.60**
Ghana	0.60
Tanzania	0.58
Mali	0.57
Rwanda	0.57
Côte d'Ivoire	0.54
Nigeria	0.43
Mozambique	0.37
Burkina Faso	0.36
Zambia	0.29
Ethiopia	0.26
Niger	0.17
	AgPER 2007/08-2011/12
Malawi cash crops excluded	1.64

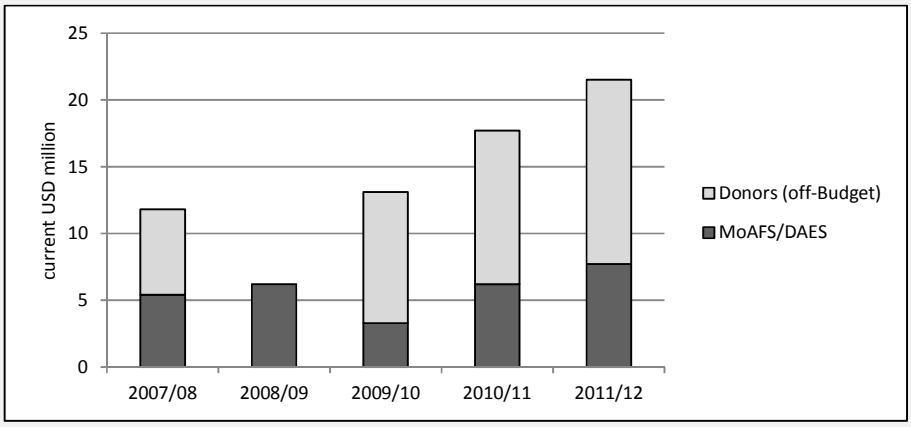
Source: IFPRI 2013, authors' calculations for Malawi non-cash crop agricultural research.

Box 3 : Public expenditures on agricultural research and extension (continued)

Agricultural extension

As with non-cash crop research, off-Budget externally financed extension activities outweigh DAES activities in terms of spending and the degree of coordination among the various initiatives would require further investigation. It is interesting to note that off-Budget donor financed projects report fast growing extension spending that outweighs by far MoAFS expenditures in that sub-sector (figure 28). The extent to which these efforts are coordinated among themselves and with MoAFS extension system so as to avoid contradictions and redundancies and achieve economies of scale, would be worth analysing further.

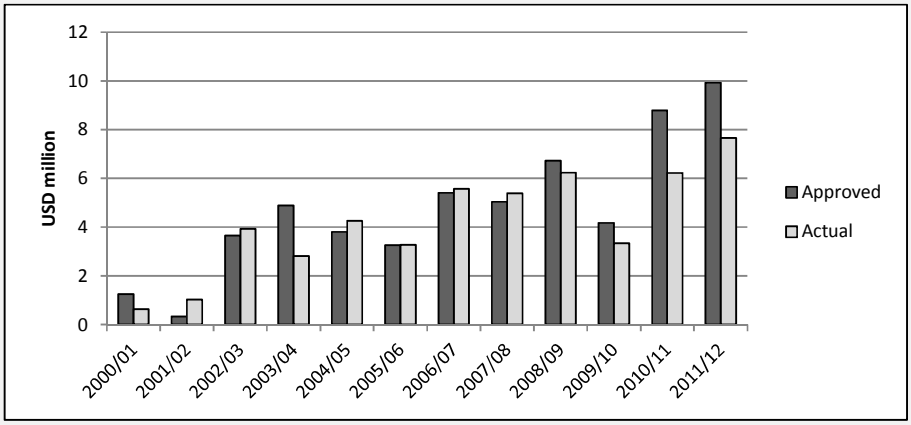
Figure 28: Sources of funding of extension activities, 2007/08-2011/12, current USD million



Source: authors' calculations from data provided by MoF, MoAFS and donors.

MoAFS funding of agricultural extension has increased in absolute terms but dramatically decreased as a share of total MoAFS budget. The results of the AgPER show that the allocation of MoAFS budget to agricultural extension has tended to increase over the whole study period, even if actual expenditures have tended to be lower than approved in recent years (figure 29). However, due to FISP increasingly taking the lion's share of MoAFS budget as of 2005/06, spending on extension expressed as a percentage of actual MoAFS expenditures decreased from a peak at almost 15% to less than 5% in 2011/12 (figure 30).

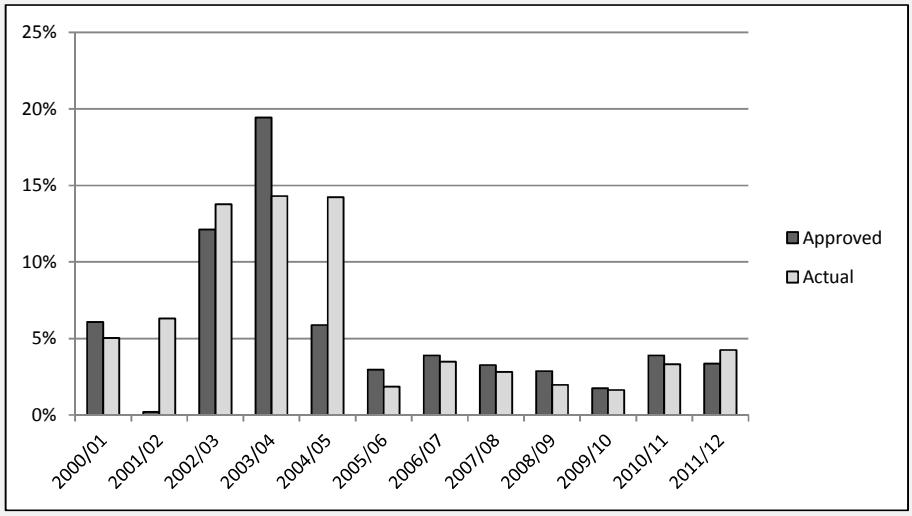
Figure 29: Trends in MoAFS budget allocation to extension, 2000/01-2011/12, current USD million



Source: author's calculations from data provided by MoF and MoAFS.

Box 3 : Public expenditures on agricultural research and extension (continued)

Figure 30: Share of extension in MoAFS budget, 2000/01-2011/12, %



Source: authors' calculations from data provided by MoF and MoAFS.

The impact of the increasing resources dedicated to extension by both MoAFS and donors is not clearly ascertained and in any case, extension incidence remains low. Based on IHS3 results, Benfica (2013) evidenced an increase in participation in extension activities from 13% in 2005 to 23% in 2011, with incidence reported to have increased among all rural population revenue groups. However, in their recently issued evaluation of 2012/13 FISP, Dorward et al. (2013) suggest a completely opposite trend, with the percentage of household survey respondents reporting receipt of technical advice in the 2012/13 season (11%) halved compared to that of the 2006/07 season (22%). In any case, extension incidence remains low.

Recommendations:

Increase local resources dedicated to non-cash crop research in order to strengthen and ensure continuity of research programmes.

Strengthen coordination/prioritization mechanisms across internal and external funding of research activities.

Continue increasing the resources allocated to extension and their effectiveness in order to achieve greater impact, possibly involving alternative service providers (farmer associations, NGOs) where deemed relevant, as advocated by the national extension strategy that was developed in 2000 (*pluralistic, decentralized and demand-driven agricultural extension service in Malawi*).

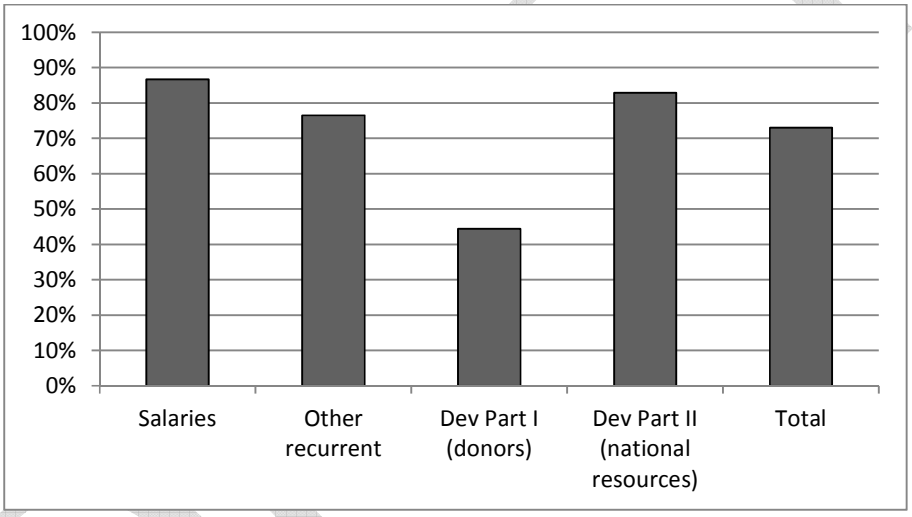
Strengthen coordination mechanisms across internal and external funding of extension activities.

4. TECHNICAL EFFICIENCY OF EXPENDITURE ON AGRICULTURE

4.1. Efficiency of Government agricultural expenditure planning and execution

65. **Execution rates of on-Budget donor financed expenditures are very low, well under the execution rates for the expenditures financed on national resources, which speaks in favour of more resources to be spent by Government under national procedures.** Execution rates have been highly variable for all categories of expenditure throughout 2000/01-2011/12 and no clear tendency can be brought out, except that execution rates for donor funded development activities appear to be consistently lower than those of the other categories of expenditures, all financed on local resources (figure 31). This is an issue frequently encountered in Sub-Saharan Africa countries that is largely accounted for by deficiencies of communication between the donors and the national administration and the difficulty for the latter to master the myriad procedures of the development partners. In some cases the execution rate may also turn out to be low only because planned expenditures were not correctly entered and/or actual expenditures not fully recorded.

Figure 31: Execution rates of MoAFS expenditures by type, 2009/10-2011/12, %



Source: authors' calculations from MoAFS and MoF data.

66. **Although the difficulties of data collection did not allow for a thorough analysis of the expenditure cycle, anecdotal evidence highlighted the weakness of the national procurement mechanisms that ought to be streamlined.**

67. **Also, one could question the relevance of a fiscal year from July to June in a country whose economy is largely agriculture-based with a rainy season extending from November to March.** A fiscal year matching the civil year would allow for about three months after the Budget is passed to prepare all activities and then make full use of the dry season to implement infrastructure works, etc. whereas in the current situation fiscal year activities barely get prepared and underway with implementation when they get disrupted by the onset of the rains. In the case of FISP, a fiscal year starting in January would give nine months to procure the fertilizers at the best prices on international markets instead of having to rush to get the fertilizers in the country in three months before the start of the cropping season with the risk, often verified, of paying a premium to access already regionally available fertilizers and getting very late deliveries for the rest of the tender.

Recommendations:

Streamline the expenditure cycle and in particular procurement mechanisms.

As MoAFS fiduciary capacities increase, donors should consider bringing more and more resources on-Budget for implementation under national procedures.

Consider changing the fiscal year to the civil year.

4.2. Link between policy framework and budgeting

68. **Substantial progress remains to be made in strengthening the link between policy framework and budgeting in the agriculture sector, in spite of the adoption – more in theory than in practice so far - of an Agricultural Sector Wide Approach (ASWAp) in 2010.** Although Malawi was one of the first countries in Sub-Saharan Africa to introduce a medium-term expenditure framework (MTEF) in the late 1990s and adopted an output-based Budget presentation and a new Budget programme classification in 2010/11, the budgeting process is still very much input-based, incremental in approach and little policy-led, despite agriculture having adopted a SWAp (World Bank 2013). In addition to cross-cutting public finance management issues, such as the limited implementation of IFMIS that does not allow policymakers to get real-time budget execution data and the still dual budgeting process (separate mechanisms for recurrent and development budgets elaboration), three inter-related factors explain the slow progress achieved in integrating policy and budget planning in the agriculture sector:

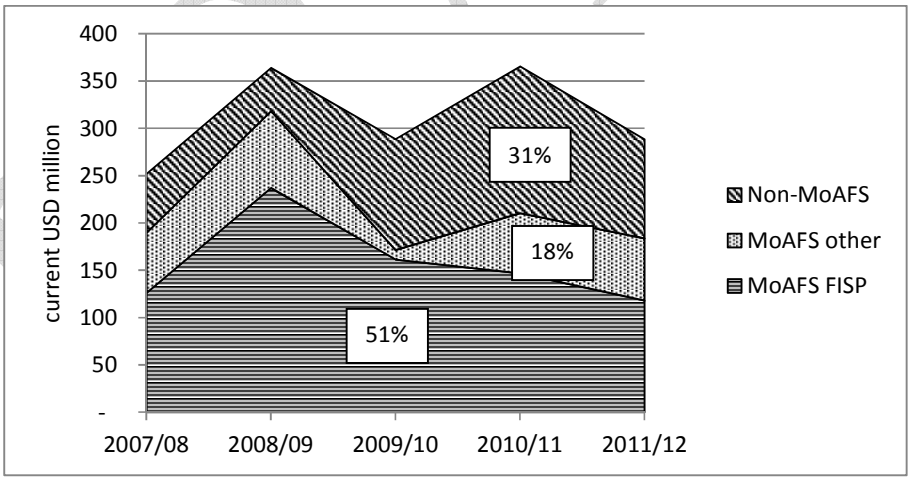
i. **Insufficient capacities to organize a strategic thinking phase prior to budget planning:** capacities at MoAFS Department of Agricultural Planning Services (DAPS) are inadequate in all units (Policy Analysis, Programme Development, M&E) and further weakened by an important staff turnover; the fact that the Department had no Director for several years until recently is symptomatic of the neglect from which strategic planning suffers. A strategic thinking phase upstream from budget planning would allow MoAFS, in collaboration with all stakeholders, to take stock of the progress made in ASWAp implementation, update strategies and re-establish priorities and allocate budgetary resources accordingly. Planning and M&E capacities must be strengthened at all levels.

ii. **Inadequate organizational arrangements, resulting in low levels of ownership and accountability:** this is a frequent weakness of policy reform attempts in Sub-Saharan African countries: new policies are prepared but the organizational aspects of their implementation are overlooked. The need for revisiting existing procedures and organizational arrangements is not assessed, and this very often results in a "business as usual" behaviour amongst the various stakeholders under which the new policy is most likely to remain rhetoric. In the case of ASWAp, only the apex oversight bodies for a programme approach have been put in place so far in the form of Technical Working Groups (TWGs) for each key area. However, in the absence of clearly designated programme coordinators having authority on all activities implemented in their sub-sector, including projects and other initiatives (e.g. presidential initiatives), there is a high risk that levels of ownership and accountability within the administration remain low, discussions within the TWGs inadequately concrete, and stakeholders other than public services and DPs little interested in participating. Representatives of the private sector and civil society who are essential to associate in order to guarantee the relevance, sustainability and fast replication of public interventions, will only participate actively and durably when they feel that TWGs are fora where concrete and important decisions for the future of their constituency are taken, which requires that they

can interact with civil servants who are fully empowered and accountable. Adjustments in MoAFS organizational chart and budget are also likely to be required for a greater consistency with ASWAp architecture (managing a programme approach is much easier if programme perimeters (ASWAp key areas), managers' responsibility areas and budget classification match, which is not the case at present).

iii. **Lack of fiscal space:** with the highly politicized FISP that takes the lion's share of MoAFS budget on one hand and highly fragmented and often off-Budget DP financed projects (box 1) on the other hand, it is clear that MoAFS fiscal space to achieve a greater linkage between policy framework and budgeting is currently rather limited, at 18% of total agricultural expenditure ("MoAFS other" area in figure 32). Nevertheless, apart from possible savings on the FISP, the discretionary funding at MoAFS disposal could be increased through the inclusion in the budget of all DP financed activities, which would also enable greater comprehensiveness of strategic planning's link to budget implementation, and the greater use by DPs of both Government systems and common financing mechanisms (pooled funds, basket funding, sectoral budget support, etc.), which would also help reducing the currently exorbitant aid transaction costs. In this respect the new trust fund that major DPs[25] are currently pulling together to finance the ASWAp-SP is a welcome initiative, provided it becomes a pool of resources available to stimulate a proper annual strategic planning process and not an additional project with pre-set and hardly changeable activities[26]. Finally, substantial fiscal space can also be brought about through a change of mindset: the budgeting process as currently implemented overly focuses on new spending initiatives and fails to address the possibility of a better use of existing resources through the reorientation of those expenditures failing to produce valuable outcomes, which sends back to the issue of M&E capacities.

Figure 32: Level of MoAFS control over public spending in agriculture, 2007/08-2011/12, current USD million



Notes: Transfers to District Councils were included in MoAFS resources. Non-MoAFS resources comprise off-Budget expenditure and agricultural expenditure under the supervision of other ministries.
Source: authors' calculations.

[25]Norway, EU, DFID, USAID, Irish Aid and FICA, for a total amount of USD 125 million.

[26]During discussions with various MoAFS civil servants it was observed that the ASWAp-SP is currently perceived as a project-type initiative, implemented by MoAFS services rather than a PIU, but with the same rigidity in terms of pre-established activities; this seems to result in a rather widespread perception that there are "the lucky ones" that benefit from the "project" and the "unlucky" that are left out, while the whole Ministry, and even the whole sector, should feel part of ASWAp as a policy framework and hence potentially supported by ASWAp-SP.

69. **Although DPs claim that their interventions are aligned with ASWAp, alignment remains very theoretical.** The only criteria that appears to be used to support DPs' alignment claim relates to whether or not the field of intervention of their projects belongs to one of ASWAp key areas, but given that ASWAp broadly covers the whole agriculture sector it would be difficult for a project not to be declared aligned. Vetting project proposals at TWG level in view of their fit into ASWAp under-served priorities and providing orientation to project design at the conceptualization stage would be the first step of effective alignment but such mechanism is not in place yet.

70. **The issues discussed above of insufficient attention paid to strategic planning, inadequate organizational arrangements, poor alignment and harmonization of donor funded activities, etc., have been recurrently pointed out in policy documents over the past decade (box 4), which also calls for a better follow-up on validated recommendations of policy documents.**

Recommendations:

Fully operationalize ASWAp, through:

- **Strengthening planning and M&E capacities at all levels;**
- **For each programme of ASWAp and ASWAp as a whole, introduction of a strategic thinking phase to annual budget planning;**
- **Establishment of ASWAp programme coordinators with full authority on all activities in their respective subsectors, including projects; these programme coordinators will be accountable to their hierarchy and TWGs for progress achieved in their subsectors;**
- **Adjustments in MoAFS organizational chart and budget so as to make them consistent with ASWAp architecture thus facilitating ASWAp management;**
- **Inclusion in the Budget of all DP financed activities in order to facilitate strategic planning and increase fiscal space;**
- **Greater use by DPs of both Government systems and common financing mechanisms (trust funds, basket funding, sectoral budget support, etc.) as MoAFS fiduciary capacities increase, in order to further increase fiscal space and reduce aid transaction costs;**
- **Vetting project proposals at TWG level in view of their fit into ASWAp under-served priorities and providing orientation to project design at the conceptualization stage;**
- **Use of the ASWAp-SP as a pool of resources available to stimulate a proper integrated strategy and budget planning process and not as an additional project with pre-set activities;**
- **Focusing on spending better rather than spending more, through the constant reallocation of resources from unsuccessful initiatives to more promising ones.**

For all validated policy documents or studies, including the present one, better follow-up of recommendations and monitoring of identified risks through the elaboration of precise roadmaps, scorecards, etc., so as these documents become effective factors of change and progress.

Box 4: Examples of past policy texts having already drawn the attention of Government and DPs on the necessity of fostering strategic planning, implementation effectiveness and donor financing alignment

Malawi Poverty Reduction Strategy Paper (MPRS, GoM 2002): "There has been an apparent lack of political will on all sides to make and implement the hard prioritisation decisions required to improve the effectiveness of Government activities. (…) There are several reasons for the observed behaviour. Firstly, the dominance of patronage politics is a result of historical experience, and the lack of education and short-term focus of the poor. (…) The political leadership is often not fully briefed on the negative consequences of its actions and the benefits of alternative actions, since those advising the political leadership depend on those leaders for their careers. (…) In the short to medium term, leaders and technicians should ensure that the design of reform programmes includes short-term benefits, so that the reforms have broad-based support. In addition, the timing of reforms should be linked to the electoral cycle, so that unavoidable short-term costs of reform do not have a disproportionate political impact. Reforms should also be flexible and country-owned so that there is broad commitment to their full implementation. (…) Finally, efforts must be made to restore the neutrality and professionalism of the public service. (…) In the long term, the strategy consists of strengthening parliament and civil society so that they are able to play their role of providing checks and balances on the executive. In addition, it is important that the people participate in decision-making processes through decentralisation. (…) There is often an underlying assumption on the part of development partners that because they are benevolent donors, everything they do is in the best interests of Malawians. (…) Efforts to build Malawian ownership of programmes, employ more local staff, move from loans to grants, and shift from project to programme funding have begun to improve the situation. However, to a large extent, these shifts are limited to rhetoric – ultimately, donor Governments still make the crucial decisions on funding, and pressure is still put on Government to conform. The MPRS offers an opportunity to move beyond the rhetoric – donors should buy in to the MPRS and genuinely only fund programmes and projects within it."

Malawi Agricultural Sector Wide Approach (ASWAp, MoAFS 2010): "The main lessons learned from neighbouring countries (e.g. Tanzania and Mozambique) which adopted similar programmes and sector-wide approaches during the last decade are: (i) ownership is a key element of the process; (ii) slow institutional reform process and lack of leadership tend to impede adoption; (iii) tensions between sector vertical programme and decentralization especially with regard to planning and financial management complicates implementation; (iv) little involvement of the private sector and civil society constitutes a challenge for a public sector programme when agriculture is mainly a private 'enterprise' activity; (v) the need for an initial focus on financial management, fiduciary aspects, setting up systems, processes, software, procedures and guidelines at the expense of programme implementation at field level; (vi) the needed changes in the Ministry leading a sector wide programme require strong involvement with cross-sectoral activities, such as public service reform, decentralisation, economic planning and public finance management; and (vii) transaction costs do not go down in the short run."

5. EFFECTIVENESS OF EXPENDITURE ON AGRICULTURE: THE CASE OF FISP

5.1. Incidence and impact of FISP

71. **While the range of crops covered by FISP has varied over time since the program inception in 2005/06, the focus of the program has mainly been on the subsidization of fertilizer and seed for maize production and to a lesser extent, legume production.** FISP started with a fertilizer and seed package for maize growers and a fertilizer package for tobacco growers. In 2007/08, legume seeds and cotton pesticides were added and maize storage pesticides and tea fertilizers in 2008/09. From 2009/10, cash crop farmers were dropped from the programme. In 2012/13, for the eighth consecutive year of implementation of the programme, each selected farmer was to be given two vouchers for fertilizer, one for a 50 kg bag of NPK (base fertilizer) and one for a 50 kg bag of urea (top dressing); a maize seed voucher, to be exchanged for either 5 kg of hybrid or 8 kg of open pollinated variety (OPV) maize seed; and a legume seed voucher to be exchanged for either 2 kg of beans, cow peas, pigeon peas or groundnuts or 3 kg of soya certified seed. Farmer contribution was maintained at MWK 500 per 50 kg bag of fertilizer, which was less than 5% of the market price of fertilizer in the country[27]. To obtain the maize seed of their choice, farmers had to surrender their voucher with the possible addition of a discretionary top-up by the retailer that was not to exceed MWK 150 (representing 5 to 6% of the maize seed package value). In practice these possible top-ups were seldom applied by distributors and, when applied, limited to MWK 20 to 75 per pack (Dorward et al. 2013).

72. **The amount of fertilizer made available under FISP decreased over time, from more than 200,000 mt in 2007/08 and 2008/09 to just over 150,000 mt in 2012/13, as the cost of the programme, almost entirely born by GoM, was increasing due to rising fertilizer and transport prices (table 1).** The overall cost of the programme went up from less than USD 40 million in 2005/06 to about USD 150 million recently, with a peak at about USD 280 million in 2008/09 due to very high international fertilizer prices exacerbated by poor control of voucher distribution. Fertilizer procurement consistently represented 80 to 90% of this cost. Donor funding rarely exceeded 10% of the total programme cost and mostly concentrated on support to the seed component. Only in 2011/12 was donor support more important (37% of total cost) and almost equally shared on the fertilizer and seed components, as donors that had been traditional supporters of FISP (DFID, Norway and Irish Aid) accepted to more than double their contribution and extend it to fertilizers to help GoM overcome the acute foreign exchange shortage the country was facing.

73. **Although officially set at a number oscillating around 1.5 million each year, the actual number of FISP household beneficiaries is not known with precision, due to not fully quantified, but deemed substantial, coupon redistribution and fertilizer reselling processes.** FISP eligible population (box 5) has varied in the range of 1.4 to 1.8 million households (table 6) and was set at 1.5 million for the 2012/13 campaign, which represents over half of the rural households as recorded by NSO but only 35% of farm families as recorded by MoAFS[28]. However, various recent studies

[27] Mapila (2013) gives a market price of MWK 13,000 for a 50kg bag of fertilizer in January 2013; Dorward et al. (2013) give slightly higher average market prices for the 2012/13 campaign, at MWK 14,241 for the 23:21:0+4S basal dressing and MWK 13,850 for urea top dressing.

[28] There is a controversy in Malawi over the number of rural households. Very rapid increases were observed in MoAFS farm family registrations from 2005/06 to 2009/10, especially in the Central region (9.1% annual average growth compared to 2.2% in the Southern region), with both these figures higher than the 1% average annual growth in NSO rural household estimate (Dorward et al. 2012). As a result MoAFS national farm family estimate (4.4 million in 2012) is 66% higher than NSO rural households estimate (2.7 million). This difference is lower in the Northern and Southern regions (64 and 60% respectively) and highest in the Central region (73%) and MoAFS figures show about equal numbers of farm families in the Centre and in the South, whereas according to NSO rural Southern region is more populated and has a smaller average household size

(Chirwa et al. 2011, Dorward et al. 2012, Benfica 2013, Dorward et al. 2013) have evidenced that the coupon redistribution mechanisms in place at village level, with village headmen eager to spread the programme benefits as much as possible, result in the subsidy being spread across a much wider population than originally intended: the latest evaluation of FISP (Dorward et al. 2013) has estimated that coupon receipts by recipients averaged 1.82, 1.08 and 1.21 in the Northern, Central and Southern regions respectively in 2012/13 (while each registered beneficiary was supposed to receive two fertilizer vouchers) and that these averages have been decreasing in all three regions since the inception of the program, evidencing a generalization of coupon redistribution probably correlated to the combined effects of the fall in the total quantity of fertilizer distributed under the program and rising population. Finally, although this is not sufficiently documented, it is thought that important quantities of fertilizers, after having been redeemed by poor smallholders, are resold to better-off farmers in order to generate immediate cash income particularly needed at a time that also corresponds to the lean period.

Box 5: FISP objective and targeted beneficiaries

According to its founding principles, the objective of FISP is "to increase resource poor smallholder farmers' access to improved agricultural inputs" in order "to achieve food self-sufficiency and increased incomes" and the program is targeted at "fulltime smallholder Malawian farmers that are resource poor of all gender categories", with special attention to "vulnerable groups: elderly, HIV positive, female, child, orphan, and physically challenged headed households" (MoAFS 2011b).

(4.3 people against 4.8 and 4.7 in rural Centre and rural North respectively). These discrepancies probably result from strong incentives for households to split on MoAFS listings in order to increase eligibility for coupon receipt and, as pointed out by Dorward et al. (2013), there is an urgent need to resolve this issue not only for the purpose of FISP monitoring but as part of a wider need to improve accuracy of agricultural and national information.

Table 6: FISP implementation indicators 2005/06 – 2012/13

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Targeted households (million)	1.4	1.8	1.5	1.8	1.6	1.6	1.4	1.5
Households as % of total registered by MoAFS (%)	not avail.	not avail.	not avail.	not avail.	38%	37%	34%	35%
Households as % of total registered by NSO (%)	not avail.	not avail.	60%	70%	not avail.	not avail.	not avail.	56%
Fertilizer vouchers distributed (million)	not avail.	4.0	3.4	3.9	3.2	3.2	2.8	3.1
Amount of fertilizer procured (mt)	145,000	188,000 [1]	189,000 [2]	186,000 [3]	77,000	160,000	140,000	154,000
Fertilizer carryover stocks (mt)	n/a	2,000	32,000	33,000	84,000	0	0	0
Total fertilizer available (mt)	145,000	190,000	221,000	218,000	161,000	160,000	140,000	154,000
Subsidised fertilizer sales (mt)	131,000	175,000	217,000	202,000	161,000	160,000	140,000	154,000
Share of fertilizer sales handled by ADMARC and SFFRFM (%)	100%	72%	76%	100%	100%	100%	100%	100%
Share of fertilizer sales handled by private retailers (%)	0%	28%	24%	0%	0%	0%	0%	0%
Price paid by farmers for fertilizers (MWK/bag 50kg)	not avail.	950	900	800	500	500	500	500
% of subsidy on fertilizer (approximate)	65%	75%	80%	90%	90%	90%	>95%	>95%
Maize seed vouchers distributed (million)	not avail.	2.0	1.9	1.5	1.6	1.6	1.4	1.5
Quantity maize seed distributed (mt)	not avail.	4,524	5,541	5,365	8,652	10,650	8,244	8,645
- of which Hybrid (mt)	*not avail.*	*2,767*	*2,944*	*4,532*	*7,619*	*8,521*	*5,643*	*5,978*
- of which OPV (mt)	*not avail.*	*1,757*	*2,597*	*833*	*1,033*	*2,129*	*2,601*	*2,667*
Quantity legume seed distributed (mt)	not avail.	n/a	neglig.	neglig.	1,551	2,727	2,562	2,973
Share of seed sales handled by ADMARC and SFFRFM (%)	not avail.	not avail.	not avail.	not avail.	not avail.	not avail.	6%	not avail.
Share of seed sales handled by private retailers (%)	not avail.	not avail.	not avail.	not avail.	not avail.	not avail.	94%	not avail.
Total programme cost (USD million)	30-40	89	116	283	117	155	132	153
Donor funding (USD million)	0	0	10	14	12	21	48	17
Donor funding as % of total programme cost (%)	0%	0%	9%	5%	10%	13%	37%	11%
Gross cost of fertilizers procured (USD million)	52	79	102	234	55	116	104	129
Cost of fertilizer as % of programme total cost (%)	n/a	89%	88%	83%	47%	75%	79%	85%
Total Government expenditure (USD million)	973	1,160	1,285	1,901	1,813	1,957	1,459	1,459
Share of FISP in total Government expenditure (%)	4%	8%	9%	15%	6%	8%	9%	10%
Government revenues, grants and loans excluded (USD million)	394	595	901	1,031	1,260	1,377	924	912

Share of FISP national funding in total Government revenues, grants and loans excl. (%)	9%	15%	12%	26%	8%	10%	9%	15%
GDP (current USD million)	3,117	3,647	4,277	5,034	5,397	5,614	4,174	3,683
Share of FISP in GDP (%)	1%	2%	3%	6%	2%	3%	3%	4%
Share of agricultural GDP in GDP (%)	32%	32%	31%	32%	30%	30%	30%	30%
Share of FISP in agricultural GDP (%)	4%	8%	9%	18%	7%	9%	11%	14%

[1] In 2006/07 139,000 mt were commissioned by GoM and 49,000 mt were sold by private operators within FISP.
[2] In 2007/08 138,000 mt were commissioned by GoM and 51,000 mt were sold by private operators within FISP.
[3] In 2008/09 GoM also commissioned 24,500 mt of fertilizer for flood relief at a cost of about USD 30 million (not included in this table).
Sources: Authors' calculations from MoAFS Logistics Unit Programme Implementation Reports, AfDB 2011, Dorward et al. 2013, IMF/World Bank, NSO and MoF data.

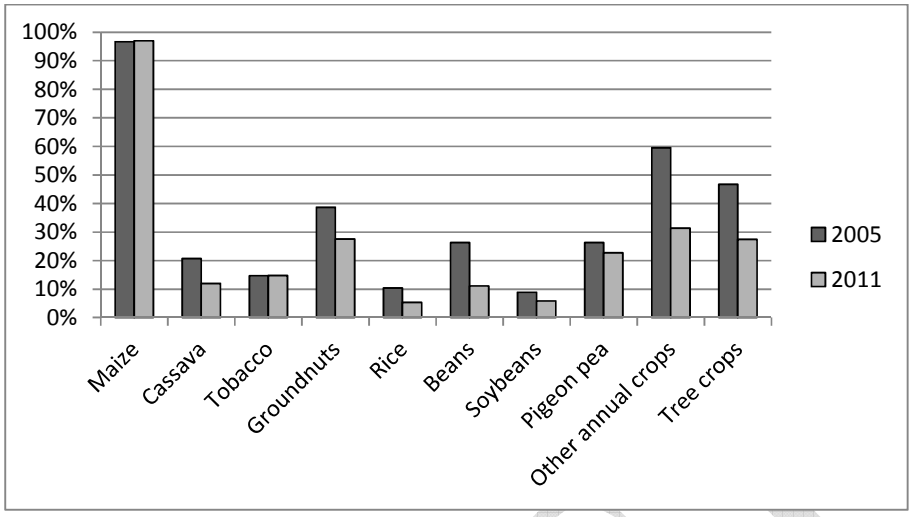
74. **As already described in section 1.3, the impact of FISP on agricultural productivity and national food self-sufficiency has been spectacular, as its introduction during the crop season 2005/06 sparked a series of bumper maize harvests induced to a limited extent (5%) by an increase in the area cultivated and to a much larger extent (95%) by a surge in yields (figure 4 in section 1.3).** The average harvest during the 2005/06-2010/11 period reached 3.2 million tons, representing an augmentation by about 80% over the average harvest during the preceding six year period (1.8 million tons). Ninety-five percent of this increase was accounted for by an increase in yields that went up from 1.2 tons/ha to over 2.0 tons/ha, the remaining 5% being imputable to a slight increase in the area under maize (6%). As a result, the country that had been chronically affected by food shortages in the decade preceding the introduction of FISP, with particularly dramatic episodes in 2002 and 2005, became self-sufficient[29] and could even export maize in 2007 and 2008. However, persistently high maize prices and continued importations over the past few years raise questions about the accuracy of the country's agricultural statistics regarding cultivated areas, production and surpluses (Jayne et al. 2008, Douillet et al. 2012[30]); this is again the case in 2013 as the country needs to import maize while the 2012/13 harvest was announced to have produced a surplus of about 700,000 mt (Dorward et al. 2013).

75. **Although FISP has undoubtedly had a positive effect in terms of greater maize self-sufficiency, it has failed to bring about structural transformation in the agricultural sector; in particular diversification is thought to have declined over the period of FISP implementation.** One could have expected the FISP to have permitted a reallocation of agricultural resources to a wider range of crops due to intensification of maize production. However, Benfica (2013), comparing IHS2 and IHS3 data, evidenced a significant reduction in crop diversification among agricultural households, with less households growing other crops than maize (figure 33). The same study suggested that while all wealth levels saw reduced crop diversification between 2005 and 2011, the better-off households still show greater diversification than the poorest. Kankwamba et al. (2012) have shown that although crop diversification has deteriorated nationally, beneficiaries of the subsidy programme have indeed become more diversified. They suggested this might point at an increase in maize cultivation among non-beneficiaries households so that they may become eligible for the subsidy. In any case, the greater diversification needed to combat malnutrition and promote the structural shift towards higher value agricultural commodities and commercialization called for by the ERP has not taken place yet.

[29] On the basis of a population of about 16 million and annual maize per capita consumption of about 193kg, the annual national maize needs are estimated at about 3.1 million tons (Dorward et al. 2013).

[30] In particular, Jayne et al. (2008) estimated that the 2007 maize harvest may have been over-estimated by as much as 25 to 35%.

Figure 33: Proportion of agricultural households growing crops, IHS2 and IHS3



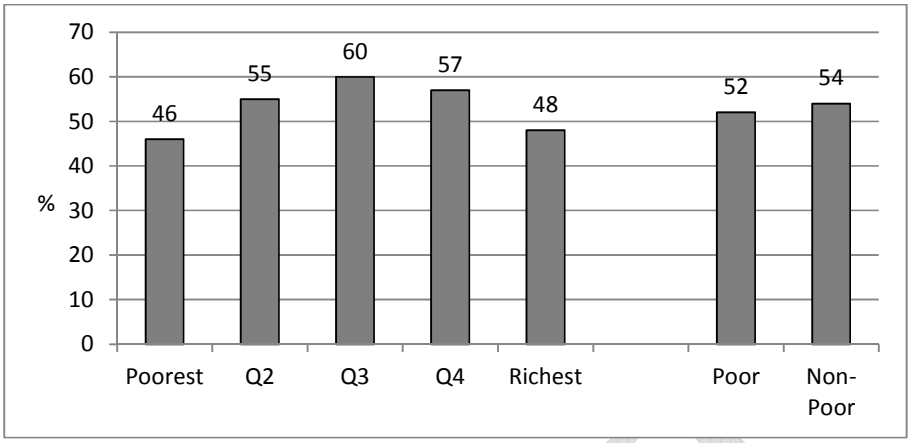
Source: Benfica 2013.

76. **In addition, while the FISP continues to be a highly politically sensitive issue given that it is currently GoM's biggest programme to reach the rural poor, there is growing consensus around the fact that it is not an effective pro-poor instrument.** Amongst the various so-categorized social safety net instruments currently in place to reach the poor and vulnerable, the FISP mobilizes over 80% of the financial resources available[31]. However, Benfica (2013) has evidenced that the coupon redistribution mechanisms described earlier result in the subsidy being quite equitably spread across the rural population (figures 34 and 35). It was also evidenced that although access to FISP coupons is relatively high among all income groups, there is a higher likelihood of receiving coupons among households with larger landholdings – a 25 percentage point difference between the land poor and the land rich (figure 36). This confirmed the findings of previous studies (Holden et al. 2010). In addition, there is no clear evidence that the changes to targeting processes that were introduced to enhance coupon allocation transparency (open meetings, etc.) increased the likelihood of the poor being targeted (Dorward et al. 2012).

77. **Adding the effects of coupon redistribution and undocumented fertilizer reselling, it can be reasonably assumed that the distribution of the subsidy across the rural population is most probably significantly biased towards the better-off income groups.** Secondary markets for subsidised fertilizer have been largely overlooked by FISP evaluation studies up to date (Holden et al. 2010). Whether they are the fact of coupon recipients in search for cash during the lean period or come from leakages higher up in the system, they contribute to displace the subsidy towards better-off income groups.

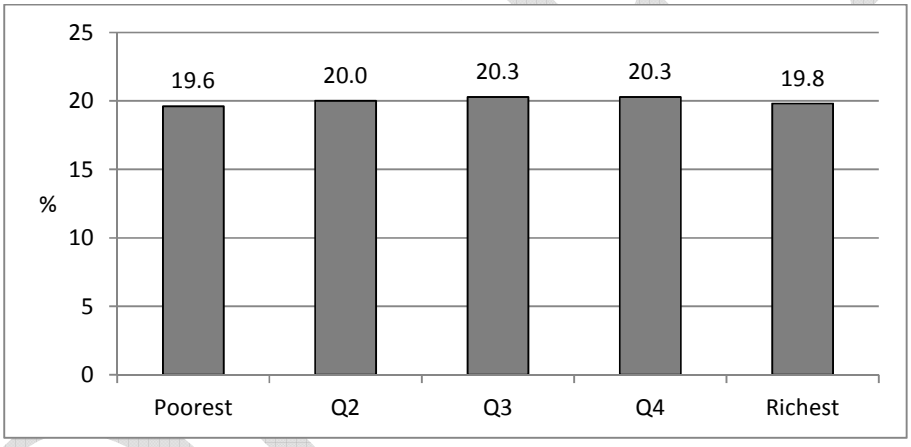
[31] The broader PER carried out by the World Bank at the same time as this AgPER estimated that in 2012/13, the other safety net instruments targeted to the poor and vulnerable (cash transfers, public work programmes, etc.) would mobilize MWK 12.8 billion whereas MWK 54.9 billion were earmarked for FISP (World Bank 2013).

Figure 34: FISP coupon recipients by wealth and poverty status, 2011, %



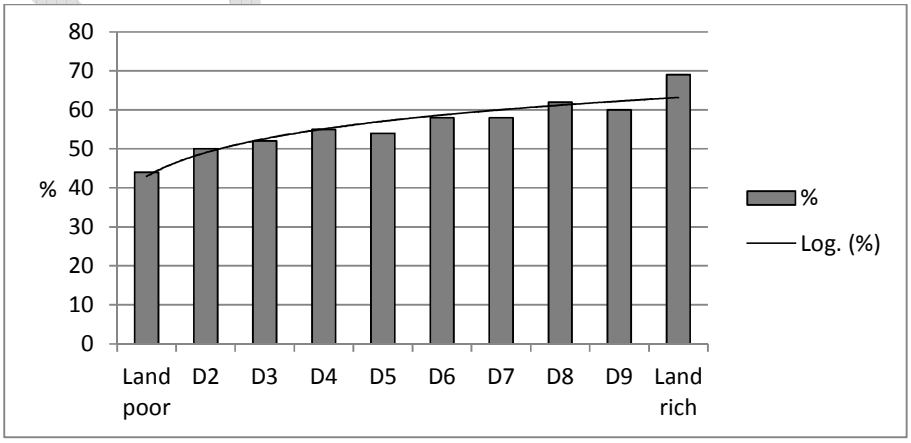
Source: Benfica 2013.

Figure 35: FISP net subsidy share (based on coupon receipt) by income group of rural population, 2011, %



Source: Benfica 2013.

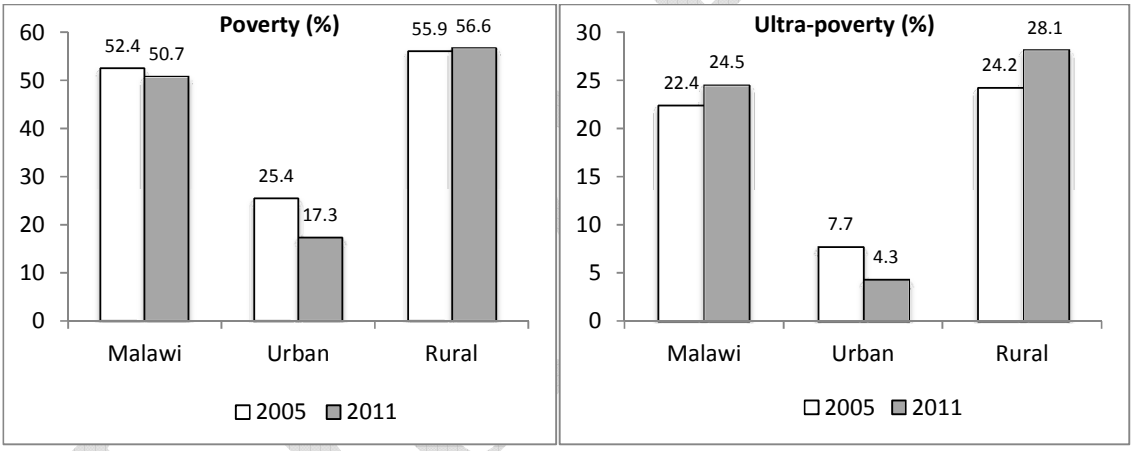
Figure 36: Agricultural households receiving FISP by total land area decile, 2011, %



Source: Benfica 2013.

78. **Moreover, despite its large scale and share in public expenditure, FISP has had no significant impact on rural poverty and some income groups and areas are still affected by chronic food insecurity.** The latest Integrated Household Survey (IHS3, based on 2010-2011 data) established that rural poverty[32] has stagnated at about 56% since IHS2 (2004-2005), while urban poverty has declined from 25.4 to 17.3% (figure 37). Nationally the poverty headcount has not varied significantly, from 52.4 to 50.7% (Ecker et al. 2012, Benfica 2013). Ultra-poverty has increased both nationally and in rural areas. As a result, inequality has increased both in rural areas, especially in Central and Southern regions, and nationally, while it remained high but stagnant in urban areas (table 7). The IHS3 also established that only 58% of the population enjoy high food security while 33% has very low food security[33]. These observations from IHS3 confirm the findings of several studies (amongst which Chirwa et al. 2011) which had evidenced that the impact of FISP on its direct beneficiaries in terms of food security, food consumption, self-assessed poverty and overall welfare was weak and that only some positive impact on primary school enrolment, under-5 illness and exposure to shocks could be demonstrated. There is also evidence that FISP has stimulated *ganyu* wage rate increases in the past, for the benefit of the poor since *ganyu* is an important component of coping strategies for food-deficit households. However, real wage rates fell during 2012/13 as a result of rising maize prices. The extent to which FISP may have contributed to reduce this fall in wages cannot be estimated (Dorward et al. 2013).

Figure 37: Poverty and ultra-poverty headcount, IHS2 and IHS3



Source: Benfica 2013.

[32]The poverty line, comprised of a food (62%) and non-food (38%) element, was set at MK 37,002 per person per year in 2011. The population that had total consumption below MK 37,002 per person per year was deemed poor and the population with total consumption below the food component was considered ultra-poor. Source: NSO 2012.

[33]High food security households do not report any concern about accessing enough food; at the opposite, very low food security households experience multiple indications of disrupted eating patterns and reduced food intake during the year; in between, marginal food security and low food security households have concerns about adequacy of the food supply and may occasionally reduce the quality and variety of the food consumed but not its quantity. Source: NSO 2012.

Table 7: Growing inequality

	Gini Coefficients	
	IHS2 (2005)	IHS 3 (2011)
Malawi	0.39	0.45
Urban	0.48	0.49
Rural	0.34	0.38
Rural-North	0.34	0.34
Rural-Centre	0.32	0.37
Rural-South	0.35	0.38

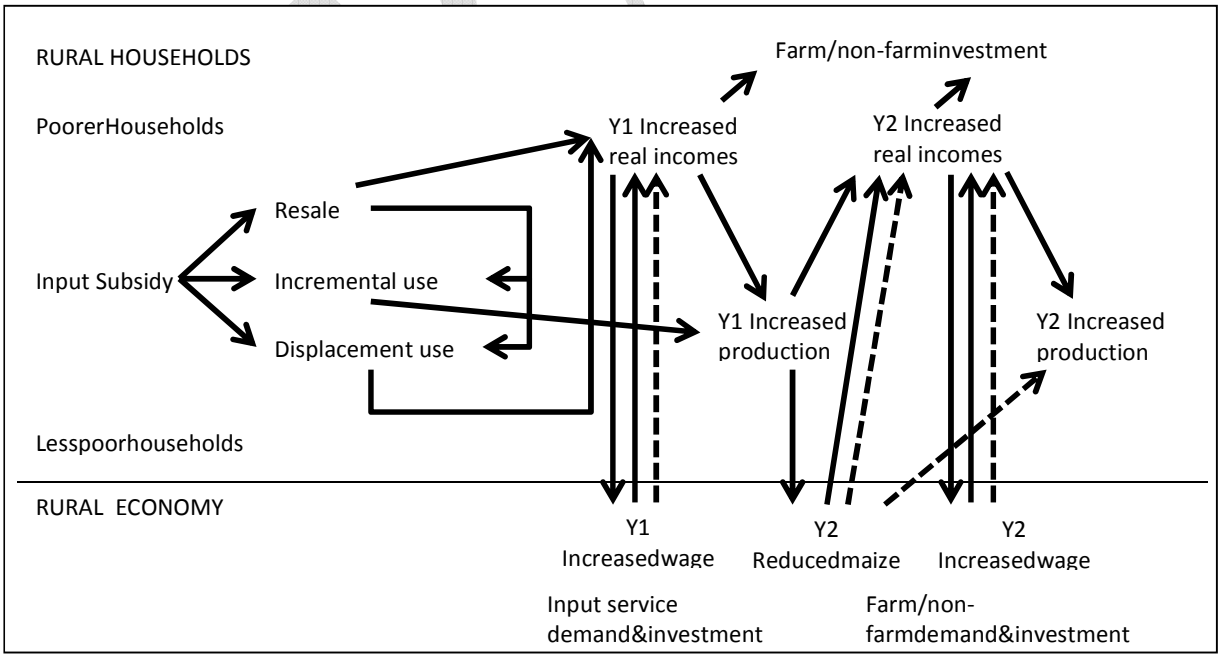
Source: Benfica 2013.

79. **There is also increasing evidence of FISP having a negative impact on rural social fabric.** As revealed by Dorward et al. (2013) and anecdotal evidence, there are increasing concerns that competition for and arguments over access to coupons and inputs, including incentives for communities to split and form separate villages in order to possibly increase their coupon allocations, lead to tensions within communities and sours relations in various ways.

5.2. Mechanisms at work in FISP impact

80. **Direct effects of FISP on coupon recipients have clearly been of two types: immediate cash income for the most vulnerable smallholders that resell their fertilizer allocation and lower average cost and hence higher profitability of fertilizer for the more productive farmers that effectively use their own allocation and/or buy their neighbours' (figure 38).** As mentioned in the previous section, other indirect important benefits for the poorest have arisen from strong economy-wide impacts owing to the scale of the programme, such as lower food prices induced by the more abundant harvests and higher off-farm (*ganyu*) wages (Chirwa et al. 2011).

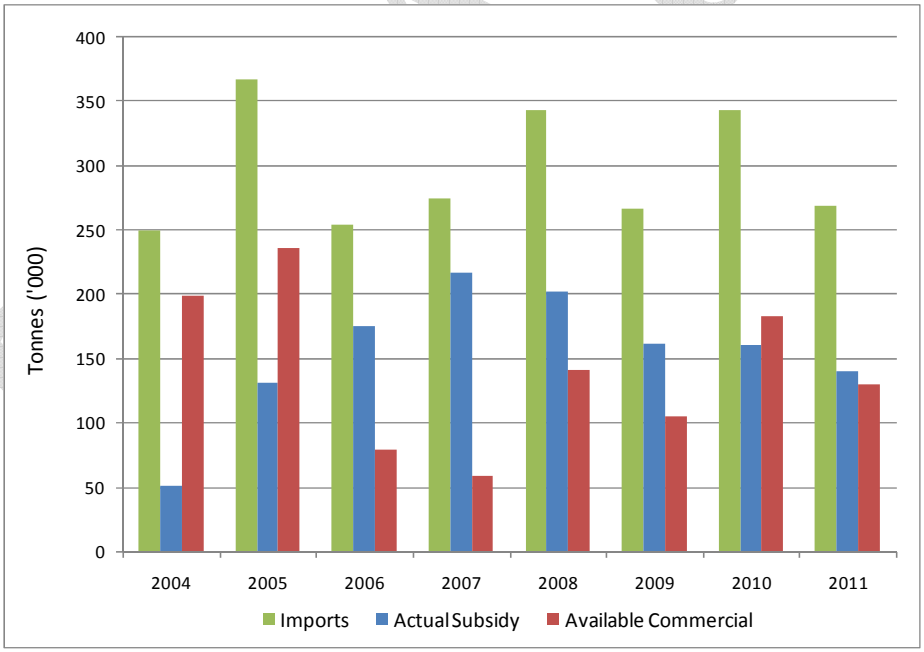
Figure 38: Household and local economy impact of FISP



Note: Dotted lines represent negative effects for less poor maize surplus producer households.
Source: School of Oriental and African Studies et al. 2008.

81. **Although the FISP has most probably induced some displacement of commercial sales, total fertilizer use has increased and commercial fertilizer purchases are on the rise amongst FISP participants.** Ricker-Gilbert (2011) has calculated that on average one additional kilogram of subsidized fertilizer crowds out 0.22 kilograms of commercial fertilizer, with crowding out ranging from 0.18 among the poorest farmers to 0.30 among relatively non-poor farmers. Chirwa et al. (2011) compared the quantity of subsidised and commercial fertilizer purchased by a sample of poor and non-poor farmers during the 2009/10 and 2010/11 cropping seasons with the quantities they used to buy before the introduction of FISP (table 8). They found that in both groups commercial purchases, although at lower levels than before FISP, increased during the participation in FISP, eventually resulting in greater fertilizer use than before the FISP (by about 40% amongst the poor and 20% amongst the non-poor). This seems to suggest that some initial crowding out of commercial fertilizer sales was later partly compensated by additional demand for commercial fertilizer stimulated by improved productivity and profitability of farming activities. The analysis of overall fertilizer imports and use in Malawi over the period confirms that commercial sales of fertilizers although lower than the pre-subsidy levels have been increasing suggesting that the programme has in the medium-term stimulated demand for fertilizers in Malawi (Chirwa et al. 2012, figure 39). Displacement of commercial fertilizer sales, however, are difficult to ascertain with precision since commercial fertilizer prices increased substantially over the study period (from MWK 37/kg in 2004/05 to MWK 97/kg in 2010/11, i.e. 162%), which, irrespective of FISP, would most probably have dampened the demand for commercial fertilizers as indicated by the sharp decline of fertilizer use amongst non FISP participants in the sample (table 8).

Figure 39: Fertilizers imports and fertilizer use, 2004/05 – 2011/12



Note: Official imports data used in this figure include fertilizers for both estates and smallholder farmers and for all crops, including tobacco. Commercial sales were extrapolated as the difference between total imports and FISP sales. Further analysis would be required to get a more accurate picture of fertilizer imports and use per type of farm and per commodity.
Source: Chirwa et al. 2012.

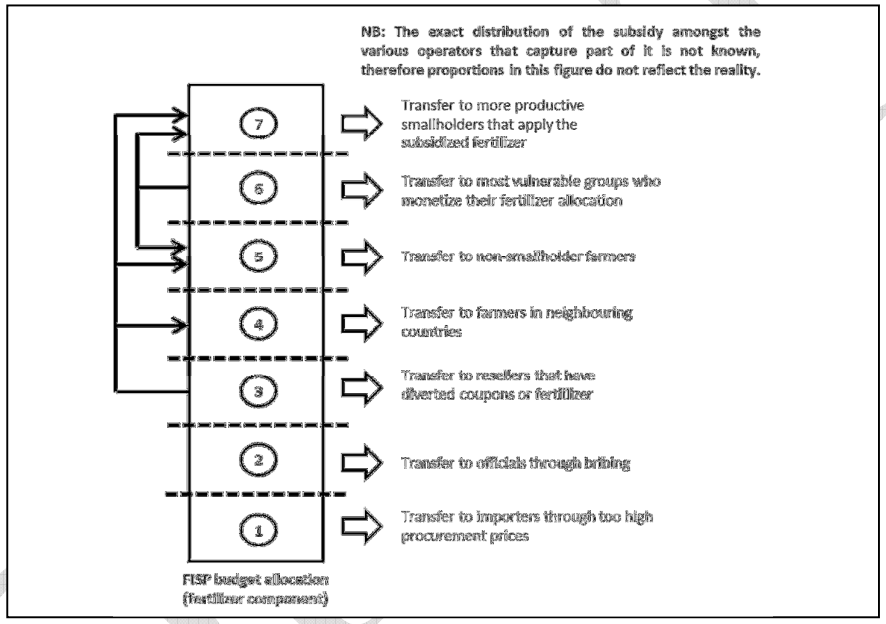
Table 8: Evolution of the quantity of commercial and subsidised fertilizer used by poverty status, kg

Times of Subsidy Access	Number farmers	Commercial (kg)			Subsidized (kg)		Total consumption (kg)			% subsidized
		2004	2009	2010	2009	2010	2004	2009	2010	
Poor Households in IHS2										
0	4	82	58	55	0	0	82	58	55	0%
1	17	37	61	79	3	12	37	64	91	13%
2	15	176	126	92	44	20	176	170	112	18%
3	18	68	29	80	52	36	68	81	116	31%
4	22	130	54	70	59	50	130	113	120	42%
5	37	52	31	51	51	38	52	82	89	43%
6	114	72	40	51	70	66	72	110	117	56%
All poor participants	223	78	46	60	57	50	78	104	110	45%
All poor	227	78	48	61	54	47	78	102	108	44%
Non-Poor Households in IHS2										
0	11	691	132	128	0	0	691	132	128	0%
1	18	123	246	250	10	17	123	256	267	6%
2	13	221	157	181	32	17	221	189	198	9%
3	23	174	98	99	35	44	174	133	143	31%
4	22	79	141	151	49	39	79	190	190	21%
5	37	162	72	102	54	40	162	126	142	28%
6	112	116	61	63	75	74	116	136	137	54%
All non-poor participants	225	133	95	103	57	54	133	152	158	34%
All non-poor	236	165	100	109	53	49	165	153	158	31%
All										
All participants	448	106	71	82	57	52	106	128	134	39%
All	463	122	75	85	53	48	122	128	133	36%

Source: authors from Chirwa et al. 2011.

82. **Overall the programme has been marred by inefficiencies, fraud, corruption and distortions.** Although impossible to quantify, it is clear that a substantial proportion of the amount dedicated to FISP every year does not reach FISP intended beneficiaries (figure 40). Inefficiencies include: (i) too high prices paid at procurement stage (box 6); (ii) mobilization of most MoAFS human resources for several months for monitoring a targeting process that eventually proves ineffective; (iii) late delivery of fertilizers due to late signing of procurement contracts, etc.; and (iv) since the 2008/09 cropping season, exclusion of private operators from subsidised fertilizer retailing, which is a major disincentive for private investments in the input market and renders pointless the costly voucher system in place[34]. Corruption includes the sometimes requested payment of a "tip" for coupon redemption at ADMARC and SFFRFM depots[35]. Fraud includes the theft or diversion of coupons or fertilizer for use by non-smallholders or reselling within the country or abroad[36]. Finally, given the scale of the programme and its economy-wide impacts, important distortions are generated at the expense of farmers that do not access subsidised fertilizer but face increased *ganyu* wage rates and depressed produce prices.

Figure 40: Actual end-beneficiaries of the fertilizer subsidy



Source: authors.

[34] The main advantage of using vouchers in an input subsidy scheme is to allow private sector's participation in the distribution of the subsidized input (Minot et al. 2009). In Malawi, private retailers were excluded from 2008/09 onwards on the basis of anecdotal claims in the media that some of the farmers were obtaining iron sheets in exchange of fertilizer coupons in some of the private sector input outlets (Chirwa et al. 2012).One can therefore question the opportunity of keeping on spending resources on voucher printing, distribution and further management while both extension agents in charge of coupon distribution and ADMARC and SFFRFM depots in charge of coupon recovery are in possession of the same list of beneficiaries.

[35] Dorward et al. (2013) estimated that during the 2012/13 cropping season 9% of coupons were affected by this problem with tips varying between MWK 30 and 4,500 per coupon, with a median of MWK 1,050 obtained from their household surveys and MWK 1,500 from their community surveys. The latter surveys suggested a greater occurrence of the need for farmers to pay tips in the Centre (problem reported in nearly 50% of communities) than in the North (30%) and the South (10%). Source: Dorward et al. 2013.

[36] When they multiply the average number of coupons that households declared to have received by the total number of rural households, Dorward et al. (2013) find that 37% of fertilizer coupons, 32% of maize seed coupons and 48% of legume seed coupons that were distributed are not accounted for, suggesting that a significant number of coupons did not reach rural households. These estimates are broadly similar to those obtained in previous surveys. Source: Dorward et al. 2013.

Box 6: Streamlining FISP procurement

A World Bank internal analysis of 2012/13 FISP estimated that savings on fertilizer procurement (150,000 tons) could have reached over USD 9 million that year, i.e. 6% of programme total cost, and made the following recommendations:

i. **Better planning and anticipation are required**: starting the procurement process in March for finalization in July when the budget is approved would avoid the rush to buy expensive fertilizer in September;

ii. **ADMARC and SFFRFM have to bid with the private suppliers**: there is no economic justification for ADMARC and SFFRFM to continue receiving separate allocations as the two parastatals are not the best performers neither in financial nor in logistical terms;

iii. **Pre-qualification criteria for both fertilizer suppliers and transporters have to be tightened**: without closing the FISP to new entrants or local companies, the tender process should select the most competitive operators both on price and efficiency criteria, and contribute to increased professionalism of the whole industry. Tightening the pre-qualification criteria would help eliminate enterprises which are not real fertilizer trade or transport specialists. Managing many contracts with many suppliers for small quantities is also costly and time-consuming for MoAFS;

iv. **A bid evaluation scorecard should be introduced** to decrease the current perception of subjectivity in awarding contracts and tonnages. A scorecard would raise the professionalism profile of the evaluation and avoid further criticisms and complaints. More importantly, it would lead to a more efficient allocation of fertilizer tonnage to suppliers. The evaluation criteria and their respective weight in the scorecard should be clearly advertised in the bidding documents.

v. **Penalties for late delivery should be strengthened and really enforced**.

vi. **There is a need to clarify payment modalities:** since the liberalization of the exchange rate in May 2012 importers have been facing fast-changing exchange rate conditions. Awarding contracts and paying the fertilizers in dollars would reduce the high risks suppliers bear and thus probably result in better prices offered by bidders.

In addition, related to point (i) above, the Logistics Unit of MoAFS has repeatedly highlighted the cost overruns and delays caused by frequent changes in programme design in the course of the preparation phase (cancellation and republishing of tenders, changes in quantities to be procured, changes in number of beneficiaries, etc.).

Sources: World Bank 2013a and MoAFS/Logistics Unit Implementation Reports.

Recommendations:

In the short run, FISP implementation must be streamlined in order to avoid delays and cost overruns due to poor planning and low professionalism of a certain number of operators. However, this will allow only marginal efficiency gains as the major flaws of the current system will most likely persist, in the form of: ineffective targeting with widespread coupon redistribution and fertilizer reselling; fraud, corruption and distortions; heavy toll on over-stretched MoAFS human resources; huge opportunity cost in terms of under-financed public good provision activities (extension, research, etc.).

In the medium term, the subsidization system should be rethought capitalizing on the experience gained since 2005/06 in terms of incidence, impact and mechanisms at work. In particular, FISP reform, for which further analysis beyond the scope of this AgPER is needed, should aim at:

i. **Streamlining and enhancing the two core elements that have underpinned FISP success so far: (i) direct cash income for the poorest (currently realized through fertilizer reselling); and (ii) lower average price and thus greater profitability of fertilizer for the more productive farmers. The first step should be to revisit FISP objective and targeted population that have proved ambiguous: FISP objective of increasing food self-sufficiency requires to design a programme clearly targeted at the more productive farmers who can effectively and efficiently use improved inputs, while FISP target group (the most vulnerable, often land and labour constrained) would be better catered for by other type of support such as social safety nets (Ellis et al. 2013, Douillet et al. 2012);**

ii. **Reducing/eliminating the above mentioned flaws of the current system. In particular, a greater involvement of the private sector and the release of part of the substantial MoAFS human resources that are currently involved in the programme and could be re-directed to agriculture support public goods provision, would be expected to generate important multiplier effects.**

iii. **Freeing public resources to finance currently underserved subsectors and fund social safety nets for the most vulnerable.**

6. CONCLUSIONS AND RECOMMENDATIONS

83. **Malawi agricultural policy orientations have produced mixed results in the past decade. On one hand public expenditure in agriculture was considerably increased to reach about 20% of total national expenditure and the launching of FISP in 2005/06 induced an impressive turnaround in maize productivity and production allowing the country to recover food self-sufficiency at national level.**

84. **On the other hand, the country now finds itself somehow blocked in a situation in which its Ministry of Agriculture and Food Security has very little space to promote any further contribution of agriculture to growth and poverty alleviation.** This is because on one side, MoAFS major programme, FISP, absorbs the lion's share of its financial and human resources (69% of MoAFS financial resources since FISP inception in 2005/06, 51% of total public spending in agriculture over the 2007/08-2011/12 period) and is not likely in its current form to contribute any further to growth and poverty reduction, since maize production is unlikely to grow further and it has been shown that it is a weak driver of growth due to low multiplier effects; and on the other side, a substantial share of agricultural spending is not under MoAFS direct oversight (off-Budget expenditure and agricultural expenditure under the supervision of other ministries accounted for 31% of total agricultural spending over the 2007/08-2011/12 period). MoAFS is thus left with a very little share of the resources dedicated to agriculture (18% of total agricultural spending over the 2007/08-2011/12 period) to both maintain a minimum level of activity in its traditional missions and possibly promote new high growth potential orientations called for by ASWAp and ERP (irrigation development, agriculture diversification and commercialization). Yet the very positive, and widely unknown, response of other crops such as roots and tubers and pulses, to limited public support focusing on research and dissemination demonstrates the relevance and growth potential of re-balancing public resources to benefit a larger range of crops.

85. **In addition, this study has evidenced that agricultural spending in Malawi is penalized by numerous inefficiencies that greatly reduce its impact.** These include:

i. **FISP inefficiencies,** in the first place a cumbersome targeting process that takes a heavy toll on MoAFS staff resources and eventually proves ineffective, aggravated by substantial fraud, corruption and distortions. It should also be pointed out here that the very strong signals that the current FISP conveys in favour of heavy State intervention in the sector does not contribute to a conducive environment for private sector expansion in agriculture and agribusiness as called for by ASWAp and the ERP;

ii. **A very weak linkage between policy framework and budget planning,** compounded by the high fragmentation of aid and the high proportion of expenditures off-Budget (25% over the 2007/08-2011/12 period) that entail limited oversight and ownership by the Government and high transaction costs;

iii. **Low efficiency of budget planning and implementation,** penalized by heavy procedures, low level of expenditure control, weak monitoring and evaluation and low motivation of staff owing to salary erosion;

iv. **The high level of centralization of agricultural policy making and implementation**, with insufficient involvement of deconcentrated administrations and non-State actors.

86. **In order to remedy these imbalances and inefficiencies and revive the sector's capacity to produce and sustain robust growth, the following areas of reform are proposed:**

i. **Improve technical efficiency,** through the full rolling out of IFMIS to generate comprehensive and real-time budget execution data; greater use of national procedures for the execution

and recording of on-Budget externally funded expenditures; the introduction of a more precise analytical accounting (better distinction ORT/capital, level at which capital spending is incurred: at beneficiary or public service level ?, etc.); the streamlining of procurement procedures; the strengthening of M&E at all levels and the correction of the erosion of civil servants' salaries combined with strengthened performance assessment mechanisms and the discontinuation of the use of travel allowances as salary supplement. Using the civil year as the fiscal year could also be worth-considering;

ii. **Operationalize the ASWAp investment framework for which only the apex oversight bodies are in place at the moment (TWGs), in order to increase ownership and accountability and establish a stronger linkage between policy framework and budget planning.** In particular, MoAFS organizational chart and budget should be adjusted to become consistent with ASWAp architecture; ASWAp programme coordinators should be established with full authority on all activities in their respective subsectors, including projects, and would be accountable to the TWGs for the progress achieved in their subsector; the TWGs should be effectively used as the space where the link between policy framework and project/budget planning is established, through the introduction of a strategic thinking phase to annual budget planning, projects and activities vetting, etc.; all DP financed activities should be brought into MoAFS budget in order to facilitate strategic planning and increase MoAFS fiscal space; as MoAFS fiduciary capacities increase, DPs should make greater use of both Government systems and common financing mechanisms (pooled funds, sectoral budget support, etc.) in order to further increase fiscal space and reduce aid transaction costs; ASWAp-SP should be seen as a pool of resources available to stimulate a proper integrated strategy and budget planning process and not as an additional project with pre-set activities; finally, financial resources should be constantly reallocated from unsuccessful initiatives to more promising ones with the objective of spending better rather than spending more. The vision is that agriculture will play its part in reaching the objectives of MGDS II and ERP (commercialization of agriculture) only if the sector as the whole, MoAFS, donors, farmers and private sector, change their approach to agricultural development and depart from a system characterized by lack of accountability and ownership to a real ASWAp whereby MoAFS, with the support of donors and the full involvement of non-State actors, would recover its central policy-making, regulatory, M&E and public good provision role;

iii. **Re-visit FISP objective and targeted population and re-design FISP in order to serve the more productive farmers, who can make an effective and efficient use of improved inputs, in a market-smarter way, while at the same time reducing/eliminating the numerous flaws of the current system (fraud, corruption and distortions; heavy toll on MoAFS human resources; exclusion of private sector in fertilizer distribution) and freeing public resources to finance currently underserved subsectors and fund social safety nets for the most vulnerable;**

iv. **Re-balance spending towards currently under-funded subsectors (research and extension, irrigation, livestock, agriculture commercialization) and capital investment at beneficiary level (rural infrastructure);**

v. **Foster the decentralization process that will be revived in 2014 with the election of the District Councils, through greater on-Budget resources devolved to frontline services (District agricultural services) and greater involvement of local stakeholders (District administration, local communities, farmers' organizations, NGOs and private operators) in decision making.** Matching grants to finance demand-driven initiatives by local communities or local promoters with the technical support of the deconcentrated administration have proved powerful tools to support decentralization in other countries (e.g. Burkina Faso);

vi. **Ensure that validated recommendations of policy documents, including this one, are implemented and in particular, translate into changes in processes and organizational arrangements and DP alignment.** Recent Malawi's history shows that a number of important strategies, among which MPRS and MGDS I, had very valid (and still so) objectives based on solid analysis but failed to induce transformation and achieve progress due to lack of operationalization and lack of buy-in from donors. In the case of this AgPER in particular, it is proposed that the validated recommendations be incorporated in the ASWAp roadmap with clearly defined implementation responsibilities, timeframe and indicators.

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